



The Newsletter



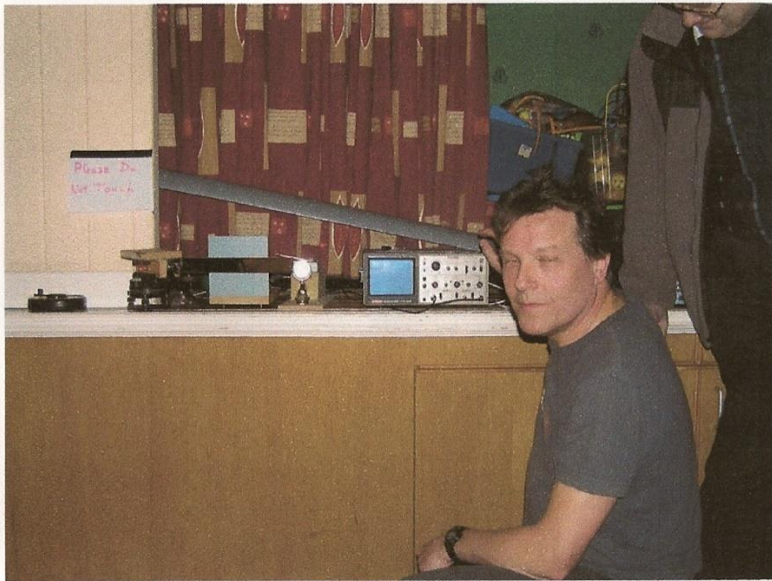
of the
Orwell Astronomical Society (Ipswich)

2011
MARCH

Registered charity no. 271313

www.oasi.org.uk

No 461



Mike Whybray with some of the equipment he used to measure the speed of light at his excellent workshop.
More information and write up inside.

Society News (Roy Gooding)

1 Committee Meeting Saturday 19th March

All members are invited to attend the next Committee meeting, on Saturday 19th March. Start time 20:00. Venue Methodist Church Hall

PLEASE NOTE CHANGE OF DATE

The CHURCH HAS A MEETING on the 26th

2 Access into the School Grounds and Observatory Tower

Please use the third gate into the school grounds, this is the gate behind the Gym. If the Black door entrance at the base of the observatory tower is locked, you will have to phone someone in the observatory to let you in. My mobile number is [REDACTED] (Roy Gooding) alternatively the Observatory mobile is [REDACTED] during meeting hours. The gate code is on the back of your membership card

3 Welcome to New Members

Colin & Jenny Booker	Robert Stopp
Lee Meek	Norman Emeny
Tom Sanderson	Michael Sampson
Iain & Michelle Monteath	John Sweeney
Andrew Sawyer	James Clarke
Susan Garland	Lynn Hodgson

4 Events Programme for 2011

This provisional event list will be updated through out the year

Meeting	Venue	Date
SPA Convention 2011	Institute of Astronomy Cambridge	Saturday 5 th March 10:00 to 17:30
BAA one day meeting	UEA Norwich	Saturday 7 th May
Summer Barbecue	Newbourne Village Hall	Saturday 25 th June
Autumn Equinox Sky Camp 2010 Organised by Loughton Astronomical Society with the support of the SPA	Kelling Heath, Norfolk	19 - 30 September
FAS Convention		TBA
Open Weekend		TBA
Lecture Meeting Telescopes from Hell: (what to watch out for	Methodist Church Halls, Blackhorse Lane	Friday 14 th October 20:00

when buying a telescope) by Martin Mobberley		
Lecture Meeting Are We Star Dust or Nuclear Waste? (Stellar Evolution) by Robin Catchpole	Methodist Church Halls, Blackhorse Lane	Friday 4 th November 20:00
Ipswich Beer Festival		TBA
Christmas Meal	Venue TBA	Wednesday 14 th December

5 Observational Out Reach Meetings 2011

Spring Star Party: Chantry Park New Venue

Ipswich Parks department have asked us if we could change the event to Chantry Park. They presumably, would like more events to be held here. I have surveyed the park, and have found a suitable site.

Directions:

- **Enter Chantry Park from the Hadleigh road entrance. It is the drive way to the Sue Rider home.**
- **This drive dose not have any gates so access is always open**
- **At the top of the drive take the left hand road. There are about 3 speed humps along here.**
- **At the end of this road, which is about 200 yards long , there is a small car park.**
- **The observing site is adjacent to this car park**

Hopefully this area is at a sufficient distance from the lighting on London road. There are a few large trees here, but there is enough room between to find a clear view of the sky. Equipment will not have to moved any further than on Christchurch park

Meeting	Venue	Date
Chantry Park "Star Party" 1 st Option	Chantry Park , car park	Saturday 12 ^h March Members arrive at 18:30 Visitors arrive at 19:00 Ends at 21:00
Chantry Park "Star Party" 2 nd option if 1 st is cloudy	Chantry Park, car park	Saturday 9 th April Members arrive at 19:30 Visitors arrive at 20:00 Ends at 22:00

Astronomy in the Park: Spring Event

Meeting	Venue	Date
Astronomy in the Park "Observing the sun" 1 st option	Christchurch Park Reg Driver Centre	Saturday / Sunday 21 st / 22 nd May 11:00 to 16:00
Astronomy in the Park "Observing the sun" 2 nd option if 1 st is cloudy	Christchurch Park Reg Driver Centre	Saturday / Sunday 28 th / 29 th May 11:00 to 16:00

Night Sky (March)

All times GMT

Moon

New Moon	1 st Quarter	Full Moon	3 rd Quarter
4 th	12 th	19 th	26 th

Object	Date			Mag	Notes
		Rise	Set		
Sun	1	06:43	17:36		
	31	05:35	18:28		
Mercury	1	07:01	17:51	-1.1	Mercury will be visible in the evening twilight sky this month. This will be its best evening appearance this year.
	31	05:39	19:56		
Venus	1	05:08	13:43	-3.9	Venus is still visible low down in the pre-dawn sky
	31	04:42	15:01		
Mars	1	06:42	16:59		Mars is too close to the Sun, in the sky, for observing this month
	31	05:23	17:16		
Jupiter	1	07:38	20:05	-1.9	Jupiter is now moving into the western sky, but can be still be observed in the early evening sky
	31	05:51	18:47		
Saturn	1	20:39	08:09	0.7	Saturn is becoming more prominent in the evening sky. The planet is presently in Virgo.
	31	18:29	06:08		
Uranus	1	07:21	19:18		Uranus is too close to the Sun, in the sky, for observing this month
	31	05:26	17:29		
Neptune	1	06:27	16:24		Neptune is too close to the Sun, in the sky, for observing this month
	31	04:31	14:32		

OCCULTATIONS DURING MARCH

The table lists lunar occultations which occur during the month under favourable circumstances. The data relates to Orwell Park Observatory, but will be similar at nearby locations.

Date	Time (UT)	D R	Lunar Phase	Sun Alt (d)	Star Alt (d)	Mag	Star
11 Mar	22:04:09	D	0.39+	-35	27	7.0	V1142 Tau
11 Mar	23:07:17	D	0.39+	-40	17	4.3	upsilon Tau
12 Mar	00:02:48	R		-42	9		
11 Mar	23:48:55	D	0.39+	-41	12	5.5	72 Tau
12 Mar	00:10:00	R		-42	9		
13 Mar	21:14:52	D	0.59+	-29	49	3.3	eta Gem
	22:14:31	R		-36	41		
13 Mar	22:34:57	D	0.59+	-37	38	7.4	Hip 29867
14 Mar	22:57:01	D	0.70+	-38	41	7.4	Hip 35126
15 Mar	00:59:22	D	0.71+	-39	22	7.2	ZC 1109
15 Mar	22:04:56	D	0.80+	-34	50	7.3	Hip 40133
15 Mar	22:42:37	D	0.80+	-37	47	6.0	ZC 1238
15 Mar	23:53:54	D	0.80+	-40	37	7.3	Hip 40410
16 Mar	01:33:44	D	0.81+	-37	23	6.4	ZC 1246
16 Mar	21:39:04	D	0.88+	-31	50	7.3	Hip 44843
16 Mar	22:47:10	D	0.88+	-37	47	6.5	ZC 1364
18 Mar	19:17:37	D	0.99+	-12	20	5.9	55 Leo
18 Mar	23:05:35	D	0.99+	-37	38	5.9	62 Leo

James Appleton

Astronomy Workshops

Doors open at 7:30pm.

Workshops START at 7:45pm

Venue: NACTON VILLAGE HALL IP10 0EU

If you are a new OASI member, or haven't been to one of these workshops before – they are a mixture of events of different characters including beginners talks, interactive workshops, hands-on observing sessions, 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!

I ran the last workshop, on Measuring the Speed of Light. Here's what our chairman Neil Morley had to say, by email:

Special thanks to Mike Whybray for hosting an excellent and informative workshop last evening covering measuring the speed of light. I never knew retiring from BT involved so much fun, I can't wait! Mike's talks featured the efforts of the early pioneers right up to modern times, with increasing accuracy.

The talk was backed up by practical demonstrations of how to measure the speed of light using easily available equipment and the length of Nacton Village Hall. Equipment was largely "cobbled together" in Mike's garage using laser pointers, photodiodes, rotating mirrors, motors from discarded CD drives, and an oscilloscope he'd bought off Ebay. I wonder if his wife noticed the departure of any mirrors strategically placed around the house?

Particularly memorable was Mike's description of a microwave oven being used to heat cheese slices. The distance between the heated areas on the cheese slices are related to the wavelength of the magnetron oscillator and hence the speed of light. If that wasn't enough Mike spun up an electrical drill motor to very high speed with a rotating mirror attached to the shaft! Fortunately Nacton Village hall and everyone in the audience remained standing!

Special thanks also to Nicky and Pete as well as some others who assisted with refreshments.

In summary a great evening.

Regards, Neil Morley, OASI Chairman.

Details of the last scheduled workshop this season below:

Date	Event	Run by...
9 th March	Asteroid Observing Project During 2011, James Appleton is encouraging members of OASI to observe asteroids. (Details are in OASI monthly Newsletters.) During the workshop, James will describe the current state of knowledge of the asteroids and introduce the observing project. If sky conditions are good, please bring a pair of binoculars/small telescope if you can and at the end of the workshop we will try to find the asteroids Juno and Massalia.	James Appleton

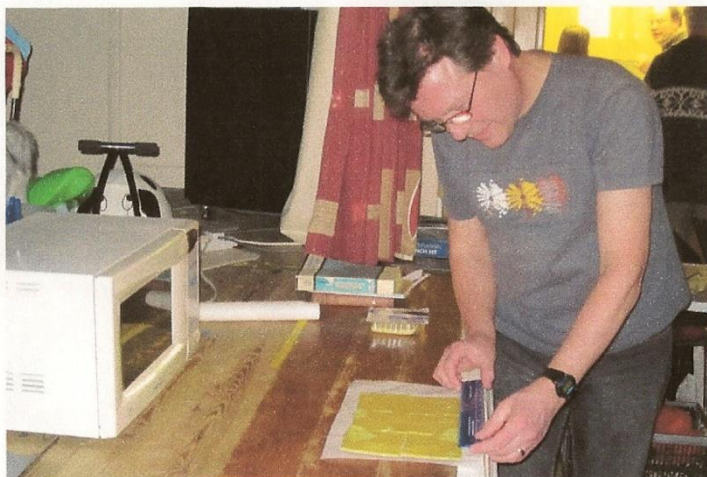
Mike Whybray

Workshops organiser

(Mobile)

(Home)

Below: Mike measuring the distance between melted spots on cheese slices to calculate the speed of light, during the workshop. Wavelength measured was 11.5cm. Microwave frequency 2450MHz. Hence speed of light = 0.115 times 2,450,000,000 = 282,000,000 m/s. (approx). (Accepted value of speed of light = 299,792,458 m/s).



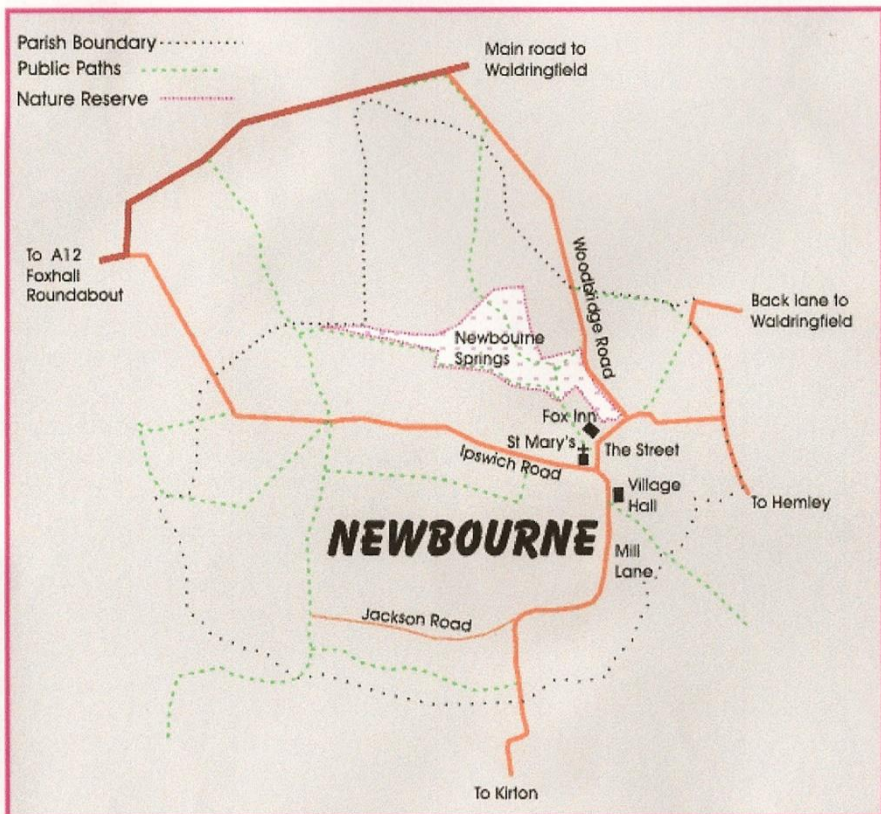
Open Field Observing – A New Format

Newbourne Village Hall - 28th March and 18th April '11 7:30pm

All the best ideas are born in pubs so it seems. Even the Royal Astronomical Society had its roots in such institutions. It was in the surroundings of the Levington Ship one Wednesday evening that I aired this idea with a few members, and John Wainwright, OASI Equipment Curator suggested a suitable name “Open Field Observing”. So what does it mean?

This is a new event format that is open to all Society members. The idea is to encourage more active observing at a dark site location and build up observing skills. The choice of a village hall like Newbourne also provides added benefits such as a suitable retreat for a break, refreshments, somewhere to foster some general banter and impromptu talks when the weather precludes observing.

I have booked Newbourne Village Hall on Monday 28th March and Monday 18th April 2011 from 7:30pm to 10:30pm. The location is shown opposite. Parking is in the field behind the Hall. Please bring along equipment whether it be binoculars, cameras, tripods, telescopes or otherwise. Even if you don't have any suitable equipment please do come along. Astronomy is a broad church and this is an opportunity to push observing skills at all levels. Ideally we should try to locate and observe some Asteroids after James Appleton's talk on 9th March. But maybe you are getting to know your way around the night sky and need help, or have an interest in particular classes of astronomical object. Alternatively, you might be looking for the right environment to get to know how to get the best out of your equipment.



If these events are judged to be a success, I will arrange further sessions. If you know of any other dark sky sites that might be suitable, or have any ideas about the running of our Society, please get in touch with me or any Committee member. At Mike Whybray's excellent talk last month measuring the speed of light, I counted 35 people, and around half were new members. This is very encouraging. Hoping to see many of you there and clear skies!

Words by Neil Morley

OASI LIBRARY

by Tina Hammond

I intended writing a report of Peter Hingley's much anticipated talk on Observatory Architecture this month, but his ill-health forces me to impose another book sale on you!













Please email me on [REDACTED] with your offer if you are interested in purchasing any. In the unlikely event that two people want the same book, it will go to the highest bidder. Otherwise the first person to contact me will be successful.

Title	Author	Format	Year	Pages	Notes	Comments
Microcomputer Control of Telescopes	Mark Trueblood; Russell Genet	pb	1985	377 pp		1st edition
Amateur Astronomer's Handbook	J B Sidgwick, FRAS	hb	1979	568 pp	Revised edition	No dust jacket
Experiments in Astronomy for Amateurs	Richard Knox	hb	1975	206 pp		1st edition
The Stars in Their Courses	James Jeans	hb	1945	176 pp	HM Forces edition	No dust jacket
Guide to the Moon	Patrick More FRAS	pb	1956	191 pp	Revised edition	Comet Books
Amateur Telescope Making, Book One	Albert G Ingalls (editor)	hb	1980	510 pp	24 th edition	Book 1 of a pair: to be sold together
Amateur Telescope Making, Book Two	Albert G Ingalls	hb	1978	650 pp		Book 2 of a pair: to be sold together

I intended writing a report of Peter Hingley's much anticipated talk on Observatory Architecture this month, but his ill-health forces me to impose another book sale on you!

Please email me on [REDACTED] with your offer if you are interested in purchasing any. In the unlikely event that two people want the same book, it will go to the highest bidder. Otherwise the first person to contact me will be successful.

OASI Committee Contacts & Responsibilities

Neil Morley	Chairman			Chair committee meetings. Represent OASI to external bodies.
Roy Gooding	Secretary			Respond to enquiries. Press & publicity. Observatory decoration. Open days.
Paul Whiting FRAS	Treasurer			Finance. Visits by outside groups.
James Appleton	Committee			Minutes of committee meetings. Web site.
Bill Barton FRAS	Committee			Safety & security.
Martin Cook	Committee			Membership. Tomline Refractor maintenance.
Tina Hammond	Committee			Librarian.
Peter Richards	Committee			Lecture meetings. Email distribution lists.
Eric Sims	Committee			Newsletter.
John Wainwright	Committee			Equipment curator.
Mike Whybray	Committee			Workshops.

Trustees

Mr Roy Adams
Mr David Brown
Mr David Payne

Honorary President

Dr Allan Chapman D.Phil MA FRAS

DIARY for MARCH

<p>Monday 7th STONS (Monday 28th at Newbourn Village Hall 7.30</p>	<p>SMALL TELESCOPES OBSERVING NIGHTS AT THE OBSERVATORY Main observing targets: M44 (bee-hive), M78, Leo, M108/109. Gamma Leonis. Asteroid IRIS, Saturn. ☎ Paddy O'Sullivan [REDACTED] ☎ Gerry Pilling [REDACTED]</p>
<p>Wednesdays From 8.00pm</p>	<p>OBSERVATORY CLUB NIGHTS Observing with the Tomline Refractor and other telescopes if skies are clear. ASTEROID OBSERVING PROJECT. ☎ Martin Cook [REDACTED], mobile [REDACTED] ☎ Roy Gooding [REDACTED], mobile [REDACTED]</p>
<p>Wednesday 9th March Doors open 7.30pm Start 7.45pm</p>	<p>OASI WORKSHOP Asteroids By James Appleton At Nacton Village Hall ☎ Mike Whybray [REDACTED]</p>
<p>Thursday 3rd 8.00pm 10th 7.00pm 17th 8.00pm 24th 7.30pm</p>	<p>OBSERVATORY VISITS BY LOCAL COMMUNITY GROUPS Westbourn Sports College Robert Hitcham Primary School Westerfield Scouts 31st / 9th Ipswich Cubs ☎ Paul Whiting FRAS [REDACTED]</p>
<p>Saturday 19th March 8.00pm</p>	<p>NEXT COMMITTEE MEETING Venue: The Methodist Church Hall Blackhorse Lane Ipswich</p>

TASTER EVENING TUESDAY 8th MARCH AT OBSERVATORY
 OPEN FIELD OBSERVING

Newbourn Village Hall
 28th March 7.30pm

STAR PARTY CHANTRY PARK

First option Saturday 12th March 18.30 for 19.00 start
IF CLOUDY

Second option Saturday 9th April 19.30 for 22.00 start

Society Contact Details

Observatory tel. no. (meeting nights only): [REDACTED]
 Secretary: Roy Gooding [REDACTED] (day) [REDACTED] (evening)
 E-mail queries: info@oasi.org.uk
 Chairman: Neil Morley [REDACTED]

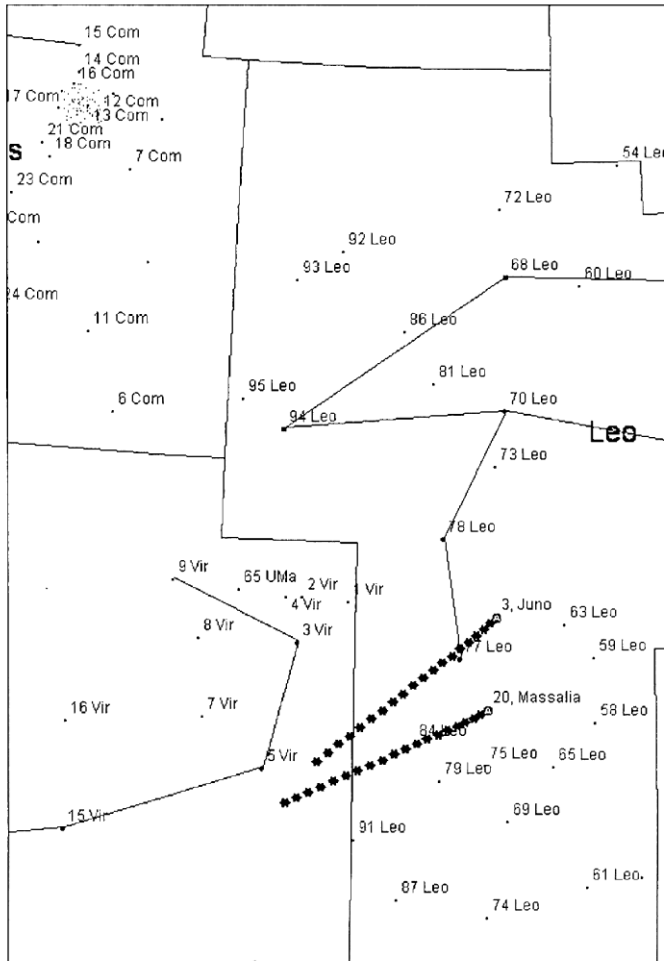
ASTEROID OBSE

The February 2011 *Newsletter* contains an introduction to the OASI Asteroid Observing Pr respectively, both at magnitude 8.8, both in Leo. During March and early April both are wel telescopes (weather permitting!)

The following finder charts show the position of the objects at 10.00pm every 2 days from 01 M leave for me to pick up in the club room at Orwell Park Observatory.

The next relatively bright asteroids to appear in the sky come to opposition in late summer and

James Appleton, 30 January 2011



RVING PROJECT

object. Asteroids (3) Juno and (20) Massalia come to opposition on 12 March and 14 March and are well placed for observation and brighter than magnitude 9.5 and so should be visible in modest

March to 10 April. Please send me any observing reports by email (redacted) or

I will provide finder charts for them starting in the July *Newsletter*.

