



The Newsletter



of the

Orwell Astronomical Society (Ipswich)

2012

Registered charity no. 271313

FEBRUARY

www.oasi.org.uk

No 471



Strong evidence that John Isaac Plummer branched out into industrial chemicals in his retirement.

Another photograph taken by
Tina Hammond while on holiday

Society News (Roy Gooding)

1 Committee Meeting Saturday 3rd March

Any members who are interested are invited to attend this meeting.
Start time 20:00 Venue: Methodist Church Hall.

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.

3 Welcome to New Members

Rachel Smith-Lyte Roger Barnes Colin Pratt
Michael Carpenter David Bingham Dr. William Loggie

4 2012 Subscriptions

Subscription are due for this year now. If you have not paid for this year please return the YELLOW form with your cheque, payable to OASI, to
Martin Cook

5 Events Programme for 2012

This provisional event list will be updated through out the year

Event	Venue	Date
Workshop Tides Joe Startin	Nacton village hall	1 st February 19:45
Woodbridge School have asked us to give them a talk	Rendlesham	February or March TBC
Astro Fest	Kensington Conference & Events Centre London	10 th & 11 th February
Workshop Waves the Harmony of the Spheres to the Higgs Boson Mike O'Mahony	Nacton village hall	14 th March 19:45
Lecture meeting The Faulkes Telescope Nik Szymanek	Methodist Church Halls, Blackhorse Lane	23 rd March 20:00
Quiz to raise money for the 582 restoration fund	TBC Tina Hammond has more details	1 st option 13 th April 2 nd option 30 th March

Workshop Constructing Dobsonian Telescopes and Equatorial Platforms John Wainwright & Martin Cook	Nacton village hall	11 th April 19:45 TBC
Yoxford Star Party	NEAS are holding a star party in the Yoxford area and have requested a visit to the observatory	Date TBC
Lecture meeting	Methodist Church Halls, Blackhorse Lane	18 th or 25 th May Still in planning
Summer Barbecue	Newbourne Village Hall?	TBC
The Autumn Equinox Sky Camp www.starparty.org.uk/	Kelling Heath Kelling Norfolk	Extended event 10 - 21 September Main Event Weekend 14 - 16 September
Lecture meeting	Methodist Church Halls, Blackhorse Lane	12 th or 19 th October Still in planning
Open Weekend Option 1	Orwell Park Observatory	20 th & 21 st October
FAS convention	Cambridge Institute Astronomy?	October TBA
Open Weekend Option 2	Orwell Park Observatory	17 th & 18 th November
Christmas Meal	TBA	5 th or 12 th December?

Other Observational Events 2012

Meeting	Venue	Date
Venus Transit	Orwell Park Observatory	6 th June
Jupiter occultation	North Norfolk coast	15 th July
Perseids provisional meeting	Behind the refreshment hut at "The Dip" Felixstowe	11 th August
Geminids provisional meeting	Behind the refreshment hut at "The Dip" Felixstowe	15 th December

6 Observational Out Reach Meetings 2012

Winter Star Party: Christchurch Park

Meeting	Venue	Date
Winter Star Party 1 st option	Christchurch Park On top of the hill	Saturday 28 th January 19:00 to 21:00
Winter Star Party 2 nd option if 1 st is cloudy	Christchurch Park On top of the hill	Saturday 25 th February 19:00 to 21:00
Winter Star Party 3 rd option if 2 nd is cloudy	Christchurch Park On top of the hill	Saturday 31 st March 20:00 to 22:00 (the clocks will have changed)

Note: Februarys Newsletter was printed before the 28th. If the meeting on the 28th January went ahead, the other 2 proposed meetings will be cancelled.

Directions

What entrance should we use	Meet at the Westerfield Road entrance at about 18:30. The park ranges will be at the entrance
Set up time.	If you plan to bring a telescope, and arrive at about 18:30. This will give you about 30 minutes to set up. If you would like to come along just to help, please do so. It may useful to have your member ship card to show the Park Rangers. The park gates will be closed at 19:30 and will not be re-opened until the end
Observing Location	On the hill
Start time	19:00 (20:00 for option 3)
End time	21:00 (22:00 for option 3) May be earlier if visitors have all left

If you are able to help either with or without a telescope please meet at the Westerfield Road entrance at 18:30.

To confirm if the event is on, please give me a call on IP 462977 on the Saturday afternoon.

Spring Star Party: Chantry Park

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 parking area.

Meeting	Venue	Date
Spring Star Party 1 st Option	Chantry Park	Saturday 21 st April 20:00 to 22:00
Spring Star Party 2 nd option if 1 st is cloudy	Chantry Park	Saturday 28 th April 20:00 to 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 19 ^h / 20 th May From 11:00 no time set to finish
Astronomy in the Park "Observing the sun" 2 nd option if 1 st is cloudy	Christchurch Park Reg Driver Centre	Saturday / Sunday 26 th / 27 th May From 11:00 no time set to finish

Small Telescope Observing Nights

Targets for February and March Venus, Jupiter, Mars, Saturn,
Gemini, Cancer Leo and close Messier Objects

Dates for February are MONDAY 20th and 27th

Dates for March are TUESDAY 20th and 27th

In March we will decide which days of preferable to hold these nights for the Autumn season. If anybody would like to suggest a different format for these events and are prepared to do the leg work their input would be quite welcome.

Gerry Pilling

Night Sky (February)

All times(GMT)

Moon

Full Moon	3 rd Quarter	New Moon
7 th	14 th	21 st

Object	Date			Mag	Notes
		Rise	Set		
Sun	1	07:38	16:40		
	29	06:43	17:34		
Mercury	1	07:43	16:01	-0.8	Mercury will be at superior conjunction on the 7 th . It will low down in the western sky at the end of the month
	29	07:09	19:12		
Venus	1	09:02	20:24	-4.1	Venus will be unmissable this month in the evening sky
	29	07:52	21:50		
Mars	1	20:16	09:31	-1.0	Mars is presently on Leo
	29	17:35	07:28		
Jupiter	1	10:15	00:23	-2.2	Jupiter is presently in Aries, and is still well placed to observe in the evening sky.
	29	08:28	22:51		
Saturn	1	10:26	10:26	0.8	Saturn is presently in Virgo. It will be better placed for evening viewing next month
	29	21:52	08:32		
Uranus	1	09:19	21:25	5.9	Uranus is presently in Pisces and will be observable in the early evening sky.
	29	07:27	19:39		
Neptune	1	08:24	18:23		Neptune is in conjunction with the sun this month, and will not be observable..
	29	06:32	16:35		

TRANSIT OF VENUS, 06 JUNE 2012

Wednesday 06 June 2012 is the date of the second and final transit of Venus (ToV) of the 21st century. Unfortunately, only the final hour and 10 minutes of the transit will be visible from the UK and the event will occur at very low altitude, which may result in atmospheric haze impeding observations. Because of its easterly longitude and height above ground level, Orwell Park is, in fact, the best placed major observatory in the UK to observe the event. Table 1 shows the circumstances of the event for the location of Orwell Park (differences will be minor for locations throughout East Anglia).

Event	Time (UT)	Altitude
Sunrise	03:38	Centre of disk on horizon
Venus rises	03:43	Planet on horizon
3 rd contact	04:37	7°
4 th contact	04:55	9°

Table 1. Circumstances of ToV, 06 June 2012.

The circumstances of the 2012 ToV contrast markedly with those of the 08 June 2004 event, for which the entire phenomenon was visible from Orwell Park at a good altitude (see the OASI web site www.oasi.org.uk/Observations/ToV/ToV.htm for observing reports.)

Despite the unfavourable circumstances of the 2012 ToV, OASI will open Orwell Park Observatory for the event. The balconies will not be well placed for observing and observations will therefore be via the Tomline Refractor.

James Appleton and Martin Cook will coordinate arrangements on behalf of the Committee. These are still under consideration, and are likely to be as follows:

- We will use the Tomline Refractor to project an image onto a projection screen mounted behind the eyepiece. The low altitude of the Sun and planet means that the projection screen will be high in the dome and not easy to watch directly. We will therefore rely on cameras mounted on the telescope tube to capture the image, possibly relaying it to a TV monitor at a more convenient viewing location within the Dome.
- The Tomline Refractor will be out of operation from the Wednesday prior to the ToV (i.e. for one week) to enable the projection screen, sun screen and video equipment to be set up and trialled. Visits to the Dome will not be possible during this period.
- As in 2004, we will estimate the times of 3rd and 4th contact and use these to estimate the length of the Astronomical Unit (historically, this was the motivation for many observations of the ToV). The Dome will be locked from approximately 15 minutes before 3rd contact until the end of the transit to minimise disturbance to observers during this critical period. Anyone wishing to observe the end of the transit will therefore need to be in the Dome by 05:20 BST (04:20 UT) at the latest.
- On the day of the transit, the Observatory will be open from circa 03:30 BST (02:30 UT). We will need to obtain permission from the School to enter the Observatory early and therefore will need to manage attendance. Please contact James or Martin if you wish to observe the event from Orwell Park.

Once the arrangements are firmed up, they will be publicised in the *Newsletter*.

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!

Date	Event	Run by...
1st February [Note – this is a change: Dobs and EQ platforms now in April]	Tides The tides are familiar, predictable, and pretty regular. But what is really happening? And why is the tidal effect so important to astronomers?	Joe Startin
14th March	Waves- Harmony of the Spheres to the Higgs Boson From Pythagoras's Harmony of the Spheres to the current hunt for the Higgs Boson waves have always been central to understanding the universe. On a less grand scale waves play an important role in our lives, they can be constructive in transporting the energy and information needed for daily life or destructive as experienced in the recent Japanese tsunami where unwanted energy is transported long distances to a vulnerable coastline. Although there are many different types of waves, for example those travelling through media such as water and air or electromagnetic waves it is fascinating (I hope!) that they exhibit many common characteristics. So for example the angular resolution of an optical telescope is governed by similar mathematical equations as the divergence	Mike O'Mahoney



	of a microwave beam or water exiting from a pipe. This talk is a general (i.e. simple !) introduction to waves and their properties touching on some historic and current ideas (e.g. string theory) on their nature and role.	
11 th April	<p>Constructing Dobsonian Telescopes and Equatorial Platforms.</p> <p>John will be showing some of the pitfalls of making a Dobsonian if you don't consider some of the engineering problems involved. Optics, materials, how big!, portable or not, designs, accessories etc.</p> <p>Martin will talk about Equatorial Platforms – a way to make a Dob or other telescope track the heavens.</p>	<p>John Wainwright and Martin Cook</p>

Mike Whybray
 Workshops organiser
 (Mobile)
 (Home)

Workshops venue: NACTON VILLAGE HALL IP10 0EU (next to the small village school, just below and left of the N in Nacton on the map).
 Please park on the same side of the road as the hall, but avoid parking on the white lines which mark clear spaces for various driveways and passing places. The police do occasionally check up on this!



BBC Stargazing Star Party

(Roy Gooding)

This was the 2nd year that the BBC have run a live series of programs under the banner of "Stargazing". This year they ran from the 16th to 18th January, hopefully you were able to watch some of them. A few weeks before last Christmas I was approached by the BBC to host a regional event. This would be one of many events taking place across the country under the auspices of the BBC. The event was advertised on the Stargazing web site. The principle aim of the Stargazing programme was to encourage members of the public to take a look at the night sky under the guidance of local experts, aka local Astronomical Society's.

The BBC would have liked to have held a live event at Orwell Park School, However, quite understandably, the School was not very keen on this idea. The fall back option was to stage the event in Christchurch Park. After a meeting with Sam Pollard, the Park Manager and Madeline Forrester, from the BBC, on 24th November, the arrangements for the event were put in place. As with our normal Out Reach Star Party meetings in the park, we would be hosting the event while the Park Ranger team would be looking after the public and showing them to the observing site .

Being an official BBC Stargazing credited observing site we were entitled to have access to a selection of various observing packs that were being issued for distribution to the visitors. Paul Whiting volunteered to be the contact point to receive these packs. Paul brought along a sample of the packs to the AGM on the 14th January, for members to see and comment on. The pack also included a large banner emblazoned with the word Stargazing and the BBC 2 logo in one corner, for displaying at the event site.

Paul Whiting had volunteered to set up the OASI exhibition and to give some talks in the Park's Reg Driver Centre. Paul and Bill Barton arrived early, at around 17:00 to set up the exhibition and arrange the room for the evening talks.

The event was scheduled to start at 18:00 and finish at 21:00. At the meeting held on the 24th I had told Sam that I thought that 18:00 would be too early for many people to arrive at the park and to set up telescopes,. Members had to get home from work and get a bite to eat before travelling to the park. I suggested that a time of 19:00 would be better, this is the time we usually start our Out Reach Star Party meetings.

The earliest members arrived before 18:00 to set up the exhibition and telescopes . These were Paul Whiting, Bill Barton , Mike Whybray and Ben Jarvis. Mike had set a telescope up outside the Reg Driver Centre, while Ben and Bill had assembled their telescopes about 200 yards away from the centre, near to the park's original refreshment hut. An area that was unfortunately floodlit by the park's toilet block. I arrived about 18:40 minutes with Eric Sims. By this time the park was already bustling with many visitors. A short time later Jenny Woods arrived and proceeded to follow Eric and me up the hill to our chosen observing site. We set up

our equipment at our usual Star Party site, on the top of the hill. This area gives the best uninterrupted view of the sky away from trees, and is also the furthest point from the surrounding street lights

The park staff had organised many activities to entertain the children, These included simulating meteors hitting the moon, star patterns on umbrellas, and a outside candle model of Orion. Paul Whiting began his talk in the centre at 20:00 .

This event was extremely well supported by members. I believe I have the definitive list of members.

Roy Gooding 120mm refractor and 11x80 binoculars

Matthew Leeks 15 x70 binoculars

Jennie Wood 100mm reflector

Bill Barton 150mm refractor

Ben Jarvis 80mm refractor

Nicky Richards 80mm refractor

Neil Morley 80mm refractor

John Wainwright 400mm dobsonian

Mike Norris 200mm dobsonian

Mike Whybray 100mm reflector

Gerry Pilling 200mm dobsonian

Mike O'Mahony 120mm refractor

Mike Whybray 100mm reflector

Many members also had the now ubiquitous green laser pointers

Other members present included

Martin Cook with laser pointer

Paul Whiting

Pete Richards

Rachel Smith-Lyte

Raj Patel

Roger Howells-Harris

If I have missed any body out I apologise, the evening was split over 3 locations in a very dark park. The group set near the refreshment hut were the busiest, with several hundred visitors queuing, to have a view through our impressive selection of telescopes. Not many visitors knew of the telescopes set up on the hill, which was about 150 yards away from the main group, but between 30 and 40 did find us.

It was estimated that over 300 visitors arrived for the event. The park manager, Sam Pollard, mentioned that he was very satisfied on the numbers. We were very lucky with the weather, with clear skies. The principle objects observed were Jupiter, M42 & M45. Visitors who arrived early were also able see Venus. This event was under the auspices of the BBC who unfortunately did not consult any astronomical society's before hand, on what was up in the sky during the 2nd week of January. I always organise Out Reach meetings near to 1st quarter and not 3rd quarter. However we have our own star party in the park on the 28th and the park staff did inform visitors about this meeting.

Our Star Parties have now become a regular part of the yearly activities in Christchurch Park, and they seem to be appreciated by the park staff, as much as by the visiting public. Sam Pollard mentioned that he was looking forward to the 28th. Sam also had the assistance of Nick Wilcox, the manager of Holywells Park

As a final item I would like to say well done to Ben Jarvis in getting one of his images displayed on the Wednesday's Stargazing programme.

2011! That Was the Year That Was
 {or are We Meeting Wise, the Most Active AS in the Country?}
 (Roy Gooding)

2011 was probably the busiest year OASI has ever had. We are in the fortunate position that many active members are willing to organise their particular areas of interest. So the burden of event organising does not fall on too one person. This can be broken down as follows

Roy Gooding	Out Reach observational meetings
Pete Richards	Lecture meetings
Mike Whybray	Workshop meetings
Neil Morley	Open Field meetings
Paul Whiting	Out Reach talks
Paul Whiting	Visit coordinator (group & taster)
Gerry Pilling Paddy O'Sullivan	STONS (small telescopes observing nights) meetings
Martin Cook Roy Gooding	Weekly Wednesday meetings at Orwell Park Observatory
Roy Gooding Neil Morley	Open Weekends
James Appleton	Occultation meetings

Many other members give up their free time to host these events. With out their help

the number events we stage would be much reduced. Some Astronomical Society's do not have a permanent base so can only hold monthly meetings at a convenient venue. I would like to believe that the number of official meetings, that in OASI ran last year, may be the largest of any Astronomical Society in the country. Unless you know any different!

For those unable to attend the AGM in January, here is a break down of our programme of meetings in 2011.

Observatory Opening

The observatory was opened 100 times in the year. This is five more than in 2011. We were the hosts to 22 visiting outside groups, with numbers that totalled 493. Taster evenings for perspective new members numbered 5.

Dark Field Observing

A new venture for the year has been observing from a dark sky site. Neil Morley organised 4 meetings at Newbourne village hall. These meetings are proving very popular.

Public Outreach observational meetings

These events are now firmly established on our events calendar.

The first Star Party was held Christchurch Park on 8th January

The second was in Chantry Park on 9th April

The third was in Holywells Park on 11th June

The Astronomy in the Park to observe the sun was again held in May, and for the 3rd year running the weather gave us two perfect spring days on the 21st & 22nd May

Lectures

Peter Hingley: Observatory Architecture Friday 18th February

Unfortunately Peter was unable to make this date so Paul Whiting stepped in at short notice

Martin Mobberley: Telescopes from Hell: Friday 14th October

Robin Catchpole: Are We Star Dust or Nuclear Waste? (Stellar Evolution)

Friday 4th November

Committee Meetings

2011 AGM Saturday 29th January

Committee Meeting Saturday 19th March

Committee Meeting Saturday 18th June

Committee Meeting Saturday 10th September

Astronomy Workshops

6 workshop meetings were held in the year.

Out Reach Lecture Meetings

Paul Whiting has continued his public Out Reach lecture meetings, he gave 10 talks to local schools and adult groups during the year.

Open Weekend

The Open weekend was held on 1st & 2nd October. A total of 174 visitors arrived over the two evenings.

Field trips

There was only one field trip to observe a graze occultation, that was scheduled for Saturday 17th September, but had to be cancelled due to bad weather

Society Social Events

These are now firmly established in OASI's yearly diary. The Summer Barbecue was held again at Newbourne Village Hall on Saturday 11th September. The year's last event was the Christmas meal, which was held at the Ski Lodge on December 7^h.

In 2011 we held 133 meetings, of various types. This works out to just under 2.6 meetings a week. [Can any other A.S. beat this?]

Events attended by members not included in the above statistics

Meetings and Conventions

SPA convention Institute of Astronomy, Cambridge in February

North Essex AS Starfest

Astrofest

BAA meetings in Piccadilly and Norwich

Greenwich Observatory

Mallorca Observatory

Norman Lockyer Observatory

Kelling Star Camp

FAS Cambridge Convention Institute of Astronomy, Cambridge Saturday 15th October

Overseas Trips

Paul Whiting has continued to be the society's jet setter. In 2011 he travelled to Germany for a lunar eclipse in June

Spizbergen in September to observe the radio effects of aurora

Norway in December for a lunar eclipse.

Finally, Neil Morley has a short monthly astronomy slot one of Ipswich's local radio stations.

Newsletter Articles

Our Society is always on the lookout for newsletter articles! If you would like to submit an article, please email it in Microsoft word format <e.g.A5 landscape 12 point font> to the editor, Eric Sims at [REDACTED] by the third Wednesday of each month to ensure it appears in the next month's newsletter. If you don't have access to a computer, please phone me at the number published inside the back page of the newsletter.

Eric Sims

14

ASTEROID OBSERVING PROJECT 2011

The OASI Asteroid Observing Project ran throughout most of 2011, having been publicised by an article in the February *Newsletter* and a Workshop in March. Several members of OASI made observations of the following asteroids from various locations in and around Ipswich with a variety of telescopes and binoculars: (1) Ceres, (3) Juno, (4) Vesta, (7) Iris, (15) Eunomia, (20) Massalia, (29) Amphitrite and (192) Nausikaa. Positive identification of the bodies was obtained using detailed star atlases (e.g. *Uranometria*) and specialised finder charts provided by the website www.heavens-above.com. In several cases, plotting the position of the body on a star atlas at times a few days apart revealed a motion through the heavens, providing further confirmation. For many observers, the observation of an asteroid in 2011 was their first sight of one of the bodies.

Unfortunately, despite several observations being made, the project singularly failed to fire the imagination of members of OASI as a whole. Perhaps it was too specialised, or perhaps not well enough publicised, or perhaps we are not, in the main, a Society which undertakes a lot of observing? If you have any ideas or requests for future observing projects, please get in touch with any member of the Committee.

James Appleton

OCCULTATIONS DURING FEBRUARY

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
03 Feb	02:34:55	D	0.76+	-44	12	7.3	Hip 22947
03 Feb	19:18:29	D	0.82+	-24	56	6.9	ZC 843
03 Feb	20:51:20	D	0.83+	-37	60	6.4	ZC 851
04 Feb	02:33:18	D	0.84+	-44	19	7.3	Hip 27486
06 Feb	23:43:26	D	0.99+	-53	52	5.9	29 Cnc
17 Feb	05:58:20	R	0.23-	-11	10	5.7	ZC 2595
27 Feb	19:47:29	D	0.29+	-22	36	7.3	AM Ari
27 Feb	20:17:19	D	0.29+	-26	31	6.4	36 Ari
28 Feb	21:42:41	D	0.39+	-37	27	7.5	ZC 520
29 Feb	21:15:17	D	0.48+	-33	40	7.4	Hip 20712

James Appleton

DIARY for FEBRUARY

<p>STONs Monday</p> <p>20th & 27th</p>	<p>SMALL TELESCOPES OBSERVING NIGHTS AT THE OBSERVATORY</p> <p>Main observing targets: Venus, Jupiter, Mars, Saturn, Gemini, Cancer, Leo and close Messier Objects.</p> <p>☎ Paddy O'Sullivan [REDACTED] ☎ Gerry Pilling [REDACTED]</p>
<p>Wednesdays From 8.00pm</p>	<p>OBSERVATORY CLUB NIGHTS</p> <p>Observing with the Tomline Refractor and other telescopes if skies are clear.</p> <p>☎ Martin Cook [REDACTED], mobile [REDACTED] ☎ Roy Gooding [REDACTED], mobile [REDACTED]</p>
<p>Wednesday 1st</p> <p>Doors open 7.30pm Start 7.45pm</p>	<p>OASI WORKSHOP At Nacton Village Hall</p> <p>Tides: The tides are familiar, predictable, and pretty regular. But what is really happening? And why is the tidal effect so important to astronomers. By Joe Startin.</p> <p>☎ Mike Whybray [REDACTED]</p>
<p>Thursday</p> <p>9th February 8:0pm</p> <p>23rd February 8:0pm</p>	<p>OBSERVATORY VISITS BY LOCAL COMMUNITY GROUPS</p> <p>Bury Home Educators</p> <p>CSMA Ipswich Group ☎ Paul Whiting FRAS [REDACTED]</p>
<p>Saturday 3rd March 8.00pm</p>	<p>NEXT COMMITTEE MEETING</p> <p>Venue: The Methodist Church Hall Blackhorse Lane Ipswich</p>

This option only applies if last month was cancelled.

WINTER STAR PARTY : CHRISTCHURCH PARK

2nd Option Saturday 25th February 19:00 to 21:00

Meet at Westerfield gate.

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]