



ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

Registered Charity No 271313

www.oasi.org.uk

NEWSLETTER – 2005 JANUARY



Lunar Occultation of Saturn, 2001 3rd November, showing the emergence of the planet from the darkened limb. Video still by David Payne, using the Tomline Refractor with a 50mm Lanthanum eyepiece and handheld Camcorder.

Inside – Lunar Occultation predictions for 2005...

NEWS FROM THE SECRETARY Roy Gooding

Society News

1 AGM Saturday 15th January 2005

**All members are invited to this meeting. It will be held in the usually place, in a classroom in the Courtyard at Orwell Park School.
Please arrive in time for a 20:00 start.**

2 Subscription Renewal for 2005

If you not already paid for 2005, please return the renewal form enclosed to Martin Cook, together with monies.

3 Events for 2005

Meeting	Venue	Date
Astronomy Workshops	Gerry Pilling Making Friends With The ETX-125	Wednesday 5 th January
AGM	Orwell Park School Class room in Court Yard	Saturday 15th January 20:00 start
Astronomy Workshops	James Appleton Constellation Close-up: Auriga	Wednesday 2 nd February
Visit from Loughton Astronomical Society	Meet at the Shepherd & Dog Pub for a meal	Saturday 12 th February 17:30
Lecture Meeting	Members short talks Still being planed See notice about new meeting venue below.	Friday 25 th February 20:00 start.
Astronomy Workshops	Bill Barton Positioning Ourselves - A Look At Trigonometry And Spherical Triangles	Wednesday 2 nd March
Proposed Open Weekend	No arrangements as yet	Saturday 19th & Sunday 20th March
Astronomy Workshops	Dave McCracken Planetary Atmospheres	Wednesday 6 th April
Lecture Meeting	Dr. Alan Chapman This meeting will take place at Orwell park School. More details when they are available	Friday 22 nd April
Society Excursion	A return visit to the National Space Centre in Leicester will be arranged if sufficient	A Saturday in May

	members are interested.	
Astronomy Workshops	Wednesday 04 May 2005 Paul Whiting Debris of The Solar System	Wednesday 4 th May
BAA Exhibition Meeting	The Cavendish Laboratory Madingley Road Cambridge	Saturday 26 th June
FAS Convention	Institute of Astronomy Cambridge	Saturday 1 st October Date?

4 Find Your Way Round the Night Sky Meetings (The Night Sky Section)



I plan to continue these meetings throughout the winter period if there is sufficient demand from 20:30, on Wednesday evenings when the Astronomy Workshops are not meeting. There will not be any formal dates when these meetings will take place, as it is so dependent on the weather, and my availability.

If on a clear Wednesday members would like to have a meeting, it can be convened straight away. The proposed observing site is on Nacton shores. This is about a 7 or 8 minute walk from the

observatory. **It is important that members bring along a good torch.** The track to Nacton shores can be muddy, so suitable footwear would be advisable. Other items that may be useful are binoculars and simple star maps such as Planispheres.

5 **New Lecture Meeting Venue**

As a trial we will be holding this lecture meeting on Friday 25th February at a hall in the Methodist Church in Museum Street, **but use the entrance in Black Horse Lane.**

The church has a car park, bigger enough to take about 30 cars in Black Horse Lane. Alternatively there is a Park & Display car park at the top of Black Horse Lane, next to the Town Council block. This is about 200 yards from the church.

Black Horse Lane has only one entrance, which is from Elm Street. This is just past the Police Station, if you are arriving from Civic Drive. The church car park is on the right, just past the Black Horse pub.

6 Visit by Loughton Astronomical Society on Saturday 12th February

This will follow the usual external Society visiting arrangement. Any interested member is invited to come along to the Shepherd & Dog Restaurant for a meal and a chat with this group, before proceeding on to the observatory. We will be meeting at 17:30

7 Proposed Open Weekend 2005

Dates	Saturday 19 th March	Sunday 20 th March
Moon Phase	1 st quarter 17 th March	
Mercury	Sets	
Jupiter	Rises 19:30	
Saturn	Visible all night	

8 Welcome to New Members

Nothing to report this month.

Night Sky (January)

All times GMT

Sun

The sun will be rising approximately between 08:10 to 07:50
 The sun will be setting approximately between 16:00 to 16:40

Moon

3 rd Quarter	New Moon	1 st Quarter	Full Moon
3 th	10 th	17 th	25 th

Mercury. Mercury will be low down in the pre-dawn sky. It may be difficult to see in the morning twilight sky.

Venus Venus remains in the morning twilight during the month Magnitude -3.9.

Mars Mars will rising at about 05:00 this month. Magnitude 1.5.

Jupiter Jupiter will be rising at about 22:30 by the end of the month. Magnitude -2.2

Saturn Saturn will be at opposition on the 19th. It will be visible all night.
 Magnitude -0.4

Uranus Uranus will be setting at about 19:00 by the end of the month. Magnitude 5.7

Neptune Neptune will be setting at about sunset by the end of the month. Magnitude 7.8

Meteor Showers

Name	Limits	Max	ZHR
Quadrantids	January 1 st to 6 th	January 3 rd 22:00	100?

Meteor source is the BAA Handbook

First Meetings of the Night Sky Section (Or New Light over Nacton Foreshore) Roy Gooding

This article was first published in December's Newsletter but was inadvertently truncated. Did you find both parts? If you didn't here it is a revised version.

At the time of writing there have been two meetings of this new society section, on Wednesday 13th October and 10th November. On the first meeting there were just 2 members attending. On the second meeting this increased to 4. Hopefully on future meetings more members will be able to attend.

Normally the appearance of any new light in the night sky is met with sounds of derision. Occasionally this trend is reversed and applauded by every one.

In the past during Open Weekends, when I have been showing visitors the night sky, I have always used a narrow beamed torch to point out various constellations, stars and the brighter deep sky objects. For several years green laser points have been advertised in Sky & Telescope for night time use. The more commonly encountered laser, that is used for presentations emits a red beam This type dose not produce an observable light beam at night. Martin Cook has recently been keeping an eye on Ebay, with a view to purchasing a green laser pointer for the society. On Wednesday 10th he brought along this recent acquisition.

The laser had a power of 5mW and was powered by two AA batteries. Its use exceeded both Martin's expectations and mine. Pointing out individual stars was simple. An unexpected bonus was the ease that any one could find Messier objects with binoculars. The laser was pointed near to the object, and all the observer had to do was to follow green light path to the object. This included showing Martin where M33 was. As far as I know M33 has never been seen with the Tomline refractor, as it is a face on galaxy with a very low surface brightness. However it is readily visible with binoculars if you know where to look.

Using any laser has a hazard potential, so some thought will have to be given to various dos and don'ts. The switch is just a push button on the side, and is easily touched unintentionally. A suitable container for it when it is not being used may be useful, as well as standing behind people when it is in use.

OASI OBSERVATIONS OF THE TRANSIT OF VENUS, 08 JUNE 2004 PART IV

Compiled by James Appleton

This is the final part of a four-part article summarising observations of the recent transit of Venus.

8 DAVE & ANN MCCRACKEN OBSERVING FROM SKELLINGTHORPE, LINCS

Dave and Ann McCracken observed the TOV and estimated the times of the four contacts from their home in Skellingthorpe, Lincs. In mid-transit they moved their equipment to the Queen Elizabeth School in Gainsborough, and from 08:00 to 09:45 am showed the TOV to groups of schoolchildren using both direct viewing and projection. Atmospheric transparency was initially very poor, with clouds and haze and clear periods. The sky was clearing towards the end of the TOV.

Dave and Ann used two telescopes:

- A Meade ETX70 refractor fitted with full aperture solar filter. 70 mm aperture, 350mm focal length. Equatorially mounted. Motor driven.
- A Celestron WA80 refractor used to project the solar image onto white card. 80mm aperture, 400mm focal length. Altazimuth. Not driven.

Dave and Ann's record of comments on their observations provides a good summary of their activities:

Time (UT)	Comment
04:30	Broken clouds to the East as the Sun came up over the roofline.
04:50	The Sun will be too low for projection with Celestron WA80.
04:59	Still clouds to the East.
05:10	Single wisp of cloud in front of the Sun, we might be OK. No sunspots visible. Plan to start clock at 05:17.
05:17	Stopwatch started.
05:21	1 st contact observed.
05:27	Thicker clouds drifting into field of view, might miss 2 nd contact.

05:35	Sky cloudy.
05:38	Stopwatch re-set and started.
05:39	2 nd contact observed but clouds in way so may be several seconds in error.
05:50	Clouds much thicker now. Not able to see sun at all using Meade ETX70.
06:06	Just able to see by using a 40mm e.p. (x14), no good for photos.
06:30	Sky is starting to clear. Good view with 9mm (x40). Small faint sunspot group of three approx centre of solar disk.
06:45	Pack up kit to move to Queen Elizabeth School, Gainsborough.
07:45	Set up at Queen Elizabeth School.
08:00 to 09:45	Showing transit to several groups of children using both direct view using Meade ETX70 and projection using Celestron WA80. Mixed weather from clear with haze to dark clouds and spots of rain. Packed up and move back to home.
10:30	Set up at home again.
10:45	Started observing again. Weather now very hot with a clear sky.
11:01	Stopwatch started.
11:03	3 rd contact observed using projected image. Actual timing taken by Ann McCracken.
11:19	Stopwatch re-set and started.
11:22	4 th contact observed using projected image. Actual timing taken by Ann McCracken.

Dave and Ann estimated contact times as follows, using an Oregon radio controlled watch and a digital stopwatch, with no allowance for personal reaction time:

1st Contact 05:21:56
 2nd Contact 05:39:08
 3rd Contact 11:03:31
 4th Contact 11:22:31

Using the BBC/OU AU calculator, Dave and Ann's timing of 3rd contact corresponds to an estimate for the AU of 143,600,000 km (c.f. the accepted value 149,597,870.66 km).

Dave and Ann did not observe the teardrop effect.

Figure 33 shows the ETX70 and WA80 telescopes, and use of the WA80 in projection mode. Figure 34 shows:

- The first clear photo of the TOV, taken 06:24:30 UT, once the initial haze had dispersed. Taken with the ETX70 using a Nikon FM, photoadapter and x3 barlow lens on Fujicolour Superia 200 ASA.
- Image of the projected Sun, taken at 10:30:10 UT after returning home from Queen Elizabeth School. Image projected by WA80.
- Venus between 3rd and 4th contact, taken 11:09:26 using the ETX70.

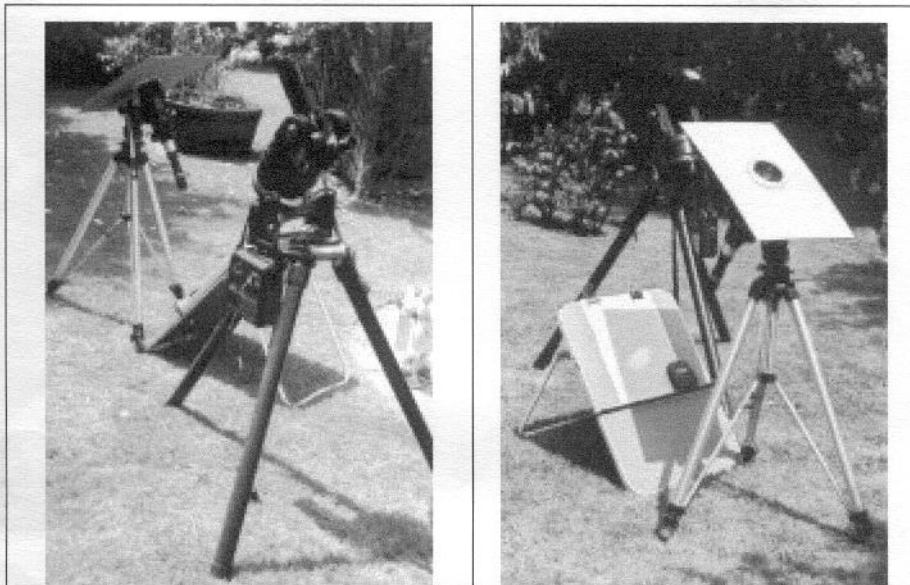


Figure 33. The Meade ETX70 and Celestron WA80.

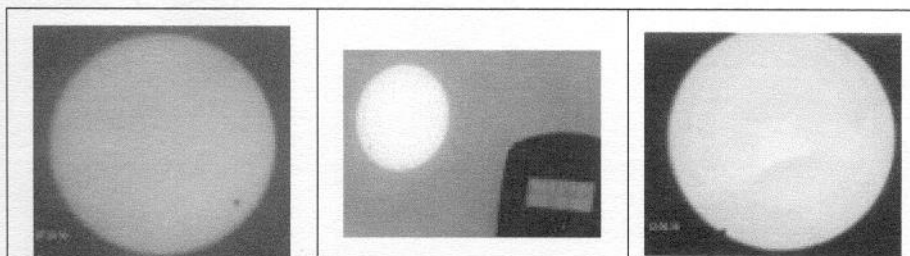


Figure 34. Images of the TOV.

9 PETER GRIMES OBSERVING FROM WOODBRIDGE

Peter Grimes observed from his home in Woodbridge together with a friend, Rev Fr Peter Wynekus. They adopted four approaches to observation, described in Peter's observing report below:

1. Naked eye using a no. 13 welder's glass. We were able to identify Venus in transit, and were surprised at how small it appeared - nowhere near as large as some sunspots I have seen by this method in recent years.
2. Direct vision through 7x50 WW II gunsight with welder's glass permanently fixed over the OG. This method provided a very clear view of the TOV, with terrestrial image orientation.
3. Solarscope. The Solarscope is a very good, inexpensive instrument (£45 at Fullerscopes) which uses a long-focus, non-achromatic objective lens without an eyepiece, but with a surface-silvered convex mirror to reflect the image. I missed 1st contact because I was searching for it in the wrong quadrant of the Sun. (Unfortunately, I did not have the opportunity of testing the Solarscope in advance on terrestrial images to establish the quadrant in which Venus would first appear.)
4. Projection using a home-constructed 76mm refractor in my observatory (76mm Swift Acro objective with focal length approximately 900 mm coupled with a 26mm Kellner eyepiece). This provided very good views. At no time could I discern the teardrop effect. Even though I kept the lens cover on the objective when not in use, I was surprised and rather alarmed at how hot the whole instrument became!

Note that a welder's glass does not provide full protection against radiation from the Sun and its use as described above is not recommended. Safe methods to observe the Sun are via projection or via a certified solar filter.

All in all it was a most enjoyable morning's observing, benefiting immensely from the perfect weather.

Figure 35 shows Fr Peter observing via the Solarscope circa mid-transit, 2nd contact observed with the Solarscope and 3rd contact observed by projection.

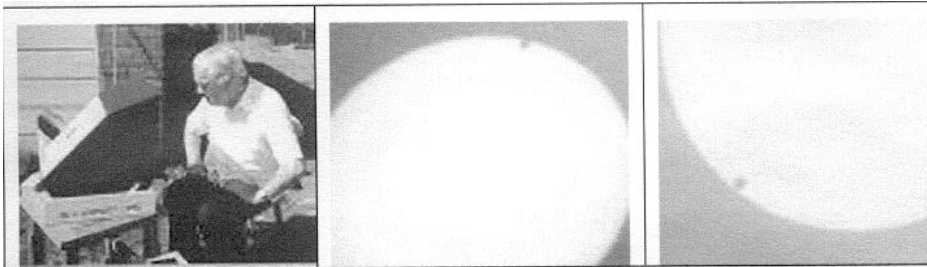


Figure 35. Observation with the Solarscope, and 2nd and 3rd contact.

Peter did not attempt to time any aspects of the TOV, as none of his clocks or watches agree about the time!!

10 MIKE HARLOW OBSERVING FROM BUCKLESHAM

Although a frequent traveller to observe astronomical phenomena from exotic locations Mike Harlow stayed at home (Bucklesham, near Ipswich) to observe the TOV. He obtained some good pictures and CCD images, of which three are shown below: figure 36 shows Mike's observing equipment and figure 37 shows Venus in mid-transit.

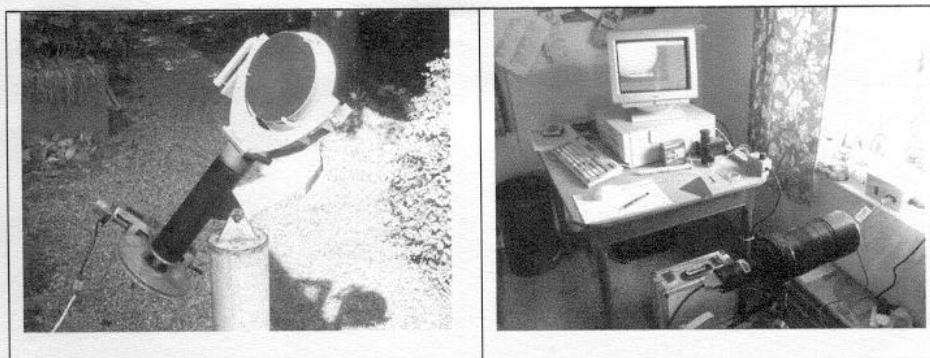


Figure 36: Mike Harlow's observing equipment.

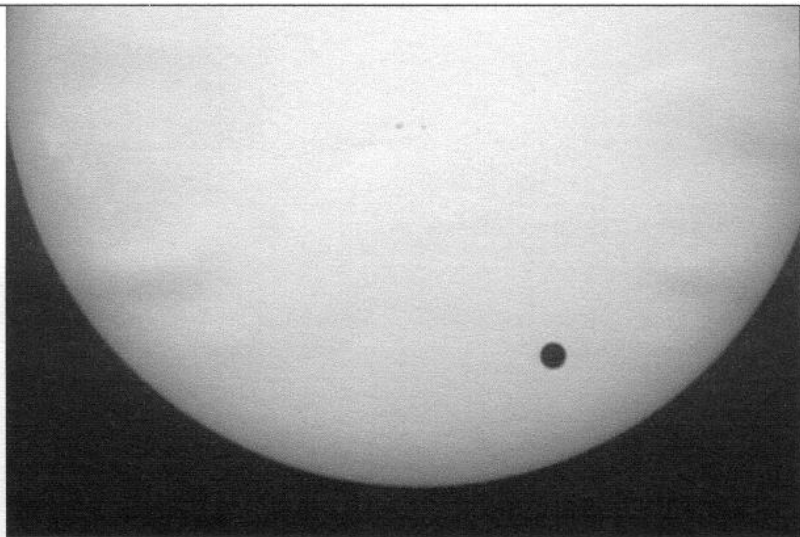


Figure 37. Venus in mid-transit, by Mike Harlow.

11 ALAN SMITH OBSERVING FROM GRUNDISBURGH

Alan Smith observed the TOV from his home in Grundisburgh. He suffered a power cut at 06:10 am just before 1st contact at 06:18 am (05:18 UT). Nevertheless, he managed to obtain estimates of the times of contacts as follows (UT):

1 st Contact	05:18:25
2 nd Contact	05:38:48
3 rd Contact	11:03:20
4 th Contact	TBD

Using the BBC/OU AU calculator, Alan's timing of 3rd contact corresponds to an estimate for the AU of 139,700,000 km (c.f. the accepted value 149,597,870.66 km).

12 TED SAMPSON OBSERVING FROM OFFTON

Having seen my neighbour at Castle Lane, Offton, trying to project the image onto a hand held card, with hand held binoculars all without success, I quickly assembled my own binoculars (7x50) onto a camera stand, setting up in my front garden. From about 08:30 am until I set off for the observatory at 9:30 am, six or

seven of my neighbours came to have a look - some summoning others by phone to come round and see. Not very dramatic, but made for a bit of local interest - and fulfils our constitutional duty to support public education in astronomy!

13 FINAL NOTES

Teardrop effect. The cause of the teardrop effect has been something of a mystery since it was first observed in 1761. It has been ascribed to the presence of an atmosphere around Venus, atmospheric disturbance (in the Earth's atmosphere), imperfections of the eye, poor instruments, diffraction effects, and combinations of factors.

At the BAA Exhibition Meeting on Saturday 26 June 2004, Nick James presented a series of photographic results of the TOV observed from Sharm El Sheikh and in the subsequent discussion it was agreed by all that those who observed the event with really sharp (state of the art) optics both in Sharm and in the UK saw little if any black drop effect.

The experience of OASI observers appeared to coincide with the above view. Some observers with very small instruments did not observe the teardrop effect. Those with larger instruments observing visually did, in the main, observe the teardrop. But Bill Barton observing in Hydrogen-alpha and Nigel Evans observing with a webcam (largely overcoming the distorting effect of the Earth's atmosphere) did not observe a teardrop. The jury is still out on the cause of the teardrop.

Future TOVs. The next TOV is the second of the current pair, a descending node transit on 06 June 2012. Unfortunately, only the final hour of this TOV will be visible from the UK, after Venus rises at approximately 03:45 UT. After that, the next transit is an ascending node transit on 11 Dec 2117, but this is not visible at all from the UK. The next transit visible from the UK, although again not in its entirety (egress phase not visible from the UK) is on 08 Dec 2125. Let's hope that the records of OASI observations of the TOV of 2004 June 08 survive until future TOVs, when undoubtedly the world will be very different and they will provide a fascinating insight into the methods and assumptions of a former era....

Estimating the length of the AU. I'm currently studying the mathematics involved in using timings of the TOV to estimate the length of the AU. This subject is not for the mathematically faint-hearted, but I hope eventually to develop rigorous estimates of the length of the AU from timings recorded by OASI observers, without using any of the approximations inherent in Horrocks' method or in the approach adopted by the BBC/OU website. Expect an article on this in the future!

14 ACKNOWLEDGEMENT

Many thanks to the following members of OASI who provided material for inclusion in this article: Garry Coleman, Martin Cook, Patrick Cook, Nigel Evans, Roy Gooding, Ken Goward, Peter Grimes, Mike Harlow, Monica Lustig, Dave McCracken, Neil Morley, Paddy O'Sullivan, Gerry Pilling, Ted Sampson, Alan Smith, Harold Waters, Paul Whiting.

James Appleton

31 August 2004

OCCULTATIONS DURING JANUARY

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

D R	Date & Time (UT)		Lunar Phase	Sun Alt (°)	Star Alt (°)	Star	Mag
D	12 Jan	17:42	0.07+	-14	7	ZC 3202	6.2
D	18 Jan	00:20	0.57+	-58	11	ZC 325	7.1
D	18 Jan	16:52	0.64+	-5	48	42 Ari (double)	5.3
D	18 Jan	20:19	0.65+	-36	52	44 Ari	7.0
D	18 Jan	21:12	0.65+	-44	47	46 Ari	5.6
D	18 Jan	21:26	0.65+	-46	45	45 Ari	5.8
D	19 Jan	17:25	0.73+	-10	50	Hip 17148	7.2
D	19 Jan	23:29	0.75+	-57	39	ZC 563	7.0
D	19 Jan	23:41	0.75+	-58	37	ZC 566	6.1
D	19 Jan	23:47	0.75+	-58	36	Hip 17928	7.3
D	20 Jan	22:17	0.83+	-52	57	ZC 703	6.2
D	21 Jan	22:16	0.89+	-51	63	ZC 833	7.1
D	22 Jan	01:10	0.90+	-55	42	ZC 844 (double)	5.8
D	23 Jan	17:18	0.97+	-8	24	47 Gem	5.8
D	25 Jan	03:15	1.00+	-41	43	19 Cnc	5.9

James Appleton

LUNAR OCCULTATIONS DURING 2005

by James Appleton

This article provides a summary of lunar occultations visible from East Anglia during 2005. The Orwell Park Observatory holds a comprehensive listing, containing full observational details.

There are some five hundred and sixty total lunar occultations which are potentially observable from East Anglia during the year, although many involve faint stars. There is one grazing occultation of a star visible from East Anglia. The Moon does not occult any planets during the year as seen from the region.

The remainder of this article summarises the circumstances of the best occultations during the year. It provides details for the location of Orwell Park Observatory; however, differences will in general be negligible for locations throughout East Anglia.

OCCULTATION PREDICTIONS

The Moon occupies a band through the sky lying within $\pm 6.75^\circ$ of the ecliptic. This band therefore defines the area of the sky within which to search for lunar occultations. I use a complex suite of computer software to search for occultations. The software models the motion of the Moon and planets in detail, and by comparing the position of the Moon at each instant with the co-ordinates of planets and stars, it evaluates the precise time at which lunar occultation events occur. Once the time of an event is known, the software runs additional algorithms to calculate other observational details.

The software is based on the algorithm *Occult* in *Astronomy On The Personal Computer*, 2nd edition by O.Montenbruck and T.Pfleger, Springer-Verlag, 1994. I have added numerous enhancements to improve accuracy and to filter out predictions occurring under unfavourable circumstances. The software uses the NASA Jet Propulsion Laboratories' ephemeris DE-405 to provide the position of the Moon and planets and the Hipparcos, Tycho2, PPM and XZ94F star catalogues to provide stellar positions. DE-405 and Hipparcos/Tycho2 represent the latest and most accurate sources of astrometric data currently available. The PPM and XZ94F catalogues provide coverage in areas of the sky that Hipparcos/Tycho2 do not cover in depth. The software uses IOTA's electronic Watts charts to correct predicted timings for the local lunar limb profile. (This typically makes a difference of several seconds.)

BRIGHT OCCULTATIONS

There are 13 occultations during the year involving stars of magnitude 5.5 or brighter, and these should be readily visible in binoculars or small telescopes. Table 1 lists the circumstances of these occultations.

D R	Date & Time (UT)		Lunar Phase	Sun Alt (°)	Star Alt (°)	Star	Mag
D R	14 Mar	21:30 22:16	0.22+	-31 -35	16 9	57 Ari	4.3
D R	17 Mar	22:27 23:31	0.51+	-35 -39	36 27	136 Tau	4.6
D	20 Mar	00:27	0.70+	-38	32	76 Gem	5.3
D	23 Apr	23:54	1.00+	-25	25	86 Vir (double)	5.5
D	19 Jun	22:27	0.93+	-12	14	42 Lib	5.0
D R	02 Jul	01:53 02:48	0.18-	-11 -6	11 19	57 Ari	4.3
D	15 Sep	20:07	0.93+	-18	15	43 Cap	4.7
D R	24 Sep	22:01 22:40	0.53-	-34 -37	9 14	136 Tau	4.6
D	12 Oct	20:43	0.73+	-33	16	33 Cap	5.4
D	14 Oct	22:56	0.91+	-46	28	92 Aqr	4.9
D	15 Nov	21:24	1.00+	-48	51	58 Ari	4.9
D	13 Dec	19:19	0.96+	-32	46	ZC 556	5.4
D	14 Dec	04:12	0.97+	-33	21	36 Tau	5.5

Table 1. Occultations of stars brighter than magnitude 5.5.

The first column of table 1 denotes the phenomenon: 'D' denotes a disappearance and 'R' a reappearance. The table lists circumstances of D and/or R for each occultation depending on the visibility of each phenomenon (determined by altitude, lunar phase, etc.) Column two gives the date and time (UT) of the phenomenon. Column three details the lunar phase as a fraction of unity ('+' denoting waxing and '-' denoting waning). Columns four and five give the altitude of the Sun and the star, both in degrees. (A negative solar altitude implies that the sun is below the horizon.) Columns six and seven provide the star's catalogue number and magnitude.

Note the two occultations each of 57 Ari and 136 Tau throughout the year.

OCULTATION SEASONS FOR 1ST MAGNITUDE STARS

The Moon's orbit is defined by a range of periodicities, both short and long term. The short term periodicities mean that the Moon's path through the sky tends to follow a pattern whereby it almost repeats itself every month. However, the longer term periodicities gradually shift the orbit so that no particular pattern of approximate repetition can last more than a few years. This results in so called "occultation seasons", lasting for some years, during which particular stars are repeatedly occulted, or repeated not occulted.

The effect is most pronounced for the four first magnitude stars that the Moon can occult, namely Aldebaran, Spica, Antares and Regulus. We are currently in an occultation season lasting until 2007 when none of these stars are occulted.

NIGHTS WITH MANY OCULTATION EVENTS

During the year, the Moon traverses some rich star fields. When this happens, a large number of occultations can occur during a single evening. Table 2 lists all evenings throughout the year when the Moon occults 12 or more stars. The precise number of occultations which an observer will record during any of the evenings listed in table 2 will depend in large part on their skill and observing conditions.

Date	No. occs.	Date	No. occs.	Date	No. occs.
14 Jan	16	12 Feb	13	13 Feb	20
13 Mar	12	14 Mar	19	13 Apr	39
14 Apr	15	15 Apr	18	11 May	35
12 May	39	13 May	21	05 Dec	17

Table 2. Evenings with 10 or more occultations.

Many of the nights listed in table 2 are associated with the passage of the Moon through the rich star fields from east Taurus to central Gemini.

GRAZING OCULTATION

The track of one grazing occultation passes through East Anglia during 2005. Table 3 summarises the circumstances.

Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Star Azi (°)	Limb	Star	Mag
23 Oct 03:27	0.68-	-29	64	149	N	54 Aur (double)	6.0

Table 3. Grazing occultation.

The first column of table 3 gives the date and time of the graze. Column two gives the lunar phase ('+' for waxing and '-' for waning), while column three gives the altitude of the Sun (below the horizon). Columns four and five give the position of the star. Column six specifies the lunar limb which grazes the star, while the final two columns detail the star and its visual magnitude.

The map in figure 1 illustrates the graze track over East Anglia.

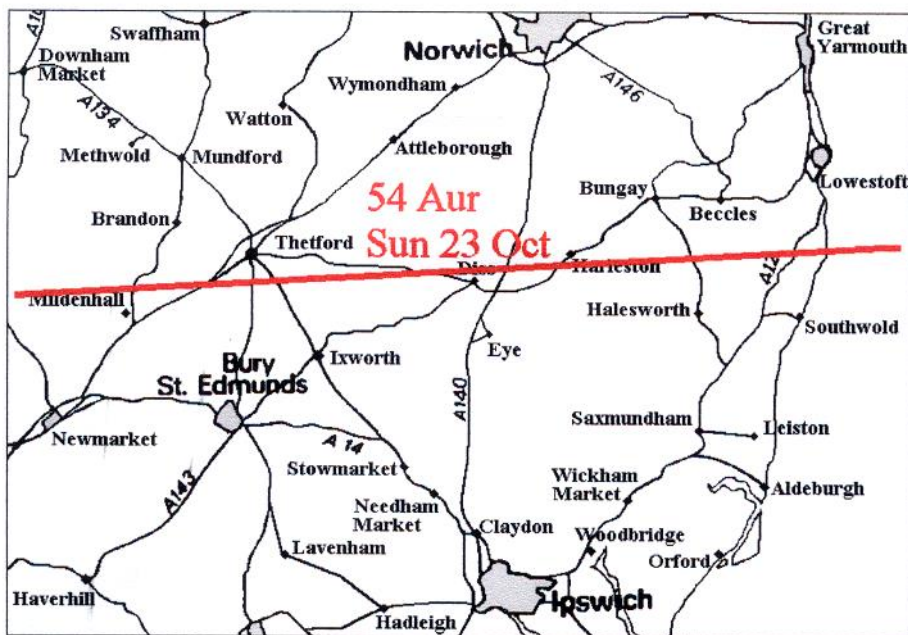


Figure 1. Graze track of 54 Aur on Sunday 23 October 2005.

The graze track crosses East Anglia from North of Cambridge, South of Thetford, through Diss, South of Harleston, North of Halesworth and out to sea two kilometres South of Kessingland. I will calculate and print a more detailed map if there is interest in mounting an observing expedition.

Summary of Committee Meeting Held 25 September 2004

Present: Ken Goward, Roy Gooding, Martin Cook, Eric Sims, James Appleton, Ted Sampson, Mike Whybray, Neil Morley

Apologies: Paul Whiting, Pete Richards, Garry Coleman, Monica Lustig

1. Chairman's Report – Ken Goward

After many attempts, Ken had finally met with Simon Dodsworth of Orwell Park School. Items discussed were:

- a. **Steeplejacks' report.** Orwell Park School had commissioned a steeplejacks' report on the Observatory. The report revealed that the stonework of the Observatory was severely weathered, but the brickwork was sound. Governors of the School envisage a ten year repair/restoration programme for the School as a whole, including the Observatory, but as yet there is no detailed plan. Following a request from the School, Ken will collate a report from OASI detailing what is wrong with the Observatory and what needs to be done to put matters right.
- b. **Governors' Meeting.** The Orwell Park School Governors are meeting all day 26 November. The Governors would like to visit the Observatory at 5:00 pm (after their meeting) and meet as many members as possible of OASI.
- c. **Regulator Clock.** A solicitor has contacted Orwell Park School claiming that he knows of the whereabouts of the Observatory's missing regulator clock (by Dent of London, thought to be potentially very valuable). The School is handling the matter.
- d. **Events Marketing.** The Events Manager of Orwell Park School visited the Observatory during the summer and is considering possible ways of exploiting the Observatory to raise funds.
- e. **School Gates.** The School gates will be re-installed in November, and the School will then lock them daily at dusk. The School will consider after-hours access arrangement for OASI.

2. Secretary's Report – Roy Gooding

Roy continues to receive several enquiries each month from potential new members of OASI – most enquiries now arrive by email via the Web site.

Roy had performed the following tasks:

- a. Sent info about OASI by email to Suffolk Library Service.
- b. Made a return to the Charity Commission.
- c. Purchased tickets for the FAS Convention in October.
- d. Booked the OASI Xmas meal (Wed 15 December, Red Lion, Martlesham).
- e. Handled two media contacts: a phone-in on Radio Suffolk and a brief interview with Anglia TV on the recent supposed meteorite landing in Lowestoft.
- f. Roy held an informal a star party at his home on Saturday 18 September.

3. Membership – Martin Cook

There are currently 106 members of OASI including eight honoraries.

4. Training and Workshops - Ted Sampson

Training

Two members of OASI had recently passed their tests in the use of the Tomline Refractor. There appears to be no significant demand at present for another round of training sessions. However, Ted will attempt to provide informal assistance to any person who wants training (only one such person has come forward recently).

The Committee recorded a vote of thanks to Ted and all the trainers for their hard work on organising training.

Workshops

The seventh year of Astronomy Workshops is starting on 06 October. Ted is reviewing the future of the Astronomy Workshops.

5. Newsletter – Eric Sims

Future new members joining OASI will be welcomed via a short note in the Newsletter.

6. Web Site – James Appleton

The Web site is continuing to act as useful “shop window” for OASI, generating a handful of enquiries about membership every month.

James registered the domain name www.oasi.org.uk for the OASI web site (a major improvement over its predecessor: www.ast.cam.ac.uk/~ipswich).

As always, James welcomes fresh material for the Web site.

The Committee expressed thanks to James for his work on the Web site.

Relatives of John Isaac Plummer (Tomline’s astronomer) had made contact with OASI through the Web site. Ken is in contact with the relatives and is optimistic of obtaining a photograph of John Isaac Plummer from his great grandson. It has emerged that Plummer’s family had significant astronomical connections: John Isaac’s younger brother, William Edward, held several astronomical posts including Director of Oxford University Observatory, and William Edward’s son, Henry Crozier, was last Astronomer Royal for Ireland and president of the RAS.

7. Equipment & Maintenance – Neil Morley

The Committee agreed not to sand and varnish the floor of the Dome during 2004. The Committee will reconsider the matter in 2005.

Neil has purchased a set of three collimation tools (needed to collimate the Millennium Telescope) from the US. Gerard Travers will transport them back to the UK shortly.

8. Security & Safety – Monica Lustig

Monica was not present but gave a report verbally to Ken in advance of the meeting. She had completed a safety inspection on Wednesday 22 September. The inspection revealed that several items are in need of attention, and the Committee assigned people to attend to them.

9. Library – Mike Whybray

Mike has finished updating the software running on the computer in the Map Room.

Approximately six books appear to have been borrowed from the library long ago and not returned. Mike will attempt to recover them.

Mike is mid-way through cataloguing the books in the library.

10. Visits – Paul Whiting

Paul was not present at the meeting but provided a brief report in advance by email. Essentially, slots for visits are filling up for the 2004-05 season and volunteers are wanted to help - see the list on the notice board.

11. Lectures – Pete Richards

Pete Richards was not present at the meeting but provided a report in advance by email. Pete had received several suggestions for lecture venues as alternatives to Fonnereau Road. Peter had examined these, but so far none had proved suitable.

Pete had arranged two lecture sessions:

- a. Nik Szymanek on *Astronomical Imaging* on October 22nd at The Friends' Meeting House.
- b. OASI Members' Talks – date TBD. Paul Whiting will speak on *Hark the Aurora* and Garry Coleman will talk on *An Unusual Planatarium in the Netherlands*.

12. Observing Strategy

OASI's observations of the TOV had been superb. The reports collated on the OASI web site stood favourable comparison with other UK astronomy societies.

Roy Gooding will take members of OASI to the Nacton foreshore for constellation spotting on Wednesday evenings starting in October.

Martin Cook and Roy Gooding suggested finding a dark-sky sight close to Ipswich for observing trips with portable telescopes. Roy will put an article in the Newsletter to ask for expressions of interest in attending such trips.

13. Dark Skies

Pete Richards was not present at the meeting but provided a report in advance by email. He had facilitated a meeting on 09 September between members of OASI and engineers involved in the Bathside Bay development. The Committee expressed unanimous appreciation of Peter's work in facilitating the meeting.

14. OASI Events

The 2004 Christmas Meal will be held Wednesday 15 December at the Red Lion, Martlesham.

The Committee hoped to hold an Open Weekend in 2005, but could not make detailed plans until the new arrangements for access to Orwell Park School were understood.

The Committee provisionally set the 2005 AGM for Saturday 15 January in Orwell Park School, starting at 8:00 pm.

The Committee hoped to arrange an outing to the National Space Science Centre in Leicester, circa May 2005.

15. Date of Next Meeting

AGM, 15 January 2005, 8:00 pm.

Full minutes of the committee meeting are posted on the noticeboard in Orwell Park Observatory. Please contact any member of the committee if you require any further information about the above committee meeting or any other aspect of the running of OASI.

James Appleton

08 November 2004

OASI COMMITTEE CONTACTS & RESPONSIBILITIES

Kenneth J Goward FRAS	Chairman	☎		Press Publicity with the Secretary. Open Weekend.
Roy Gooding	Secretary	☎		Main point of Society Contact. Press Publicity with the Chairman. Observatory Decoration. Visits by potential new members.
Garry Coleman	Treasurer	☎		Finance. Supervision of Grant Applications.
James Appleton	Committee	☎		Committee Meeting Minutes. Web site.
Martin Cook	Committee	☎		Membership. Tomline Refractor Maintenance.
Neil Morley	Committee	☎		Equipment Curator.
Ted Sampson	Committee	☎		Workshops. Tomline Refractor tutoring.
Eric Sims	Committee	☎		Newsletter
Mike Whybray	Committee	☎		Librarian.
Paul Whiting FRAS	Committee	☎		Visits by outside groups.
Monica Lustig	Committee	☎		Safety & Security
Peter Richards	Working under Committee direction but not Co-opted			Lecture Meetings.

DIARY FOR JANUARY

MONDAY	<u>SMALL TELESCOPES OBSERVING NIGHTS</u> 3 rd Taurus & Crab Nebula (M1) 17 th Auriga ☎ Paddy O'Sullivan
WEDNESDAY	<u>OBSERVATORY CLUB NIGHTS</u> 5 th , 12 th , 19 th , 26 th ☎ Martin Cook
WEDNESDAY 5 th Science Classroom	<u>ASTRONOMY WORKSHOP</u> From 7.45pm 'MAKING FRIENDS WITH THE ETX 125EC' Presented by Gerry Pilling ☎ Ted Sampson
SATURDAY 15 th	<u>OASI ANNUAL GENERAL MEETING</u> Classroom at the base of the Observatory Tower From 8pm ☎ Ken Goward
THURSDAY	<u>OBSERVATORY VISITS BY OUTSIDE GROUPS</u> 20 th From 8pm - Tuddenham Chapel ☎ Paul Whiting FRAS

SOCIETY PRIMARY CONTACTS

CHAIRMAN Kenneth J Goward FRAS ☎ (daytime & evenings)
SECRETARY Roy Gooding ☎ (daytime) (evenings)
E-MAIL QUERIES ipswich@ast.cam.ac.uk

Contact details for the full Committee may be found on the inside back page

Society Trustees

Roy Adams David Brown David Payne
Hon President

Professor Allan Chapman D.Phil MA FRAS



Happy New Year!!