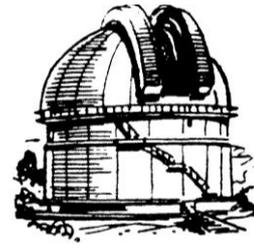


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# Journal

of the



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## Nottingham Astronomical Society

March 2004

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### Thursday 4<sup>th</sup> March

at the Djanogly City Technology College

*Doors open from 7.30pm*

Tonight we welcome

**Madeline Cox**

who will be speaking about

**William Herschel's  
Telescopes**

**Comet NEAT (C/2002 V1)** reached perihelion (closest approach to the Sun) on February 18<sup>th</sup>. At this time it was less than 0.1 of an astronomical unit from the Sun (only a quarter of the distance of Mercury), and unobservable from Earth, but was tracked and imaged by the SOHO spacecraft.

**Another Comet NEAT (C/2001 Q4)**, continues to brighten and should reach naked eye visibility by the end of this month. Invisible to northern hemisphere observers, it will be near to the Small Magellanic Cloud. Perihelion will occur on May 15<sup>th</sup>. Toward the end of May it will start to be visible to northern hemisphere observers, though fading.

# Sky Notes

## 2004 February

Compiled by Roy Gretton

*All times quoted are U.T.*



### THE MOON

Full Moon	6d 23h 14m
Last Quarter	13d 21h 01m
New Moon	20d 22h 41m
First Quarter	28d 23h 48m

### THE PLANETS

**Mercury** will be in its best position of the year for evening observation in the second half of this month. Greatest eastern elongation occurs on March 29<sup>th</sup>, when the planet will be 19° from the Sun. In the last week of the month it will be setting about 80 minutes after the Sun. You will need a position with a low western skyline to have the best chance of seeing Mercury, but if you do see it, you also may be able to spot Venus, Mars, Jupiter and Saturn as well (one of those rare occasions when all five naked eye planets, known to the ancients, may be viewed at the same time).

**Venus**, already a brilliant evening star, continues to brighten throughout the month. In the middle of the month it will form a 45° angle with Earth and Sun. The crescent Moon will again be nearby on March 24<sup>th</sup>.

**Mars** can still be observed, but it continues to fade to about magnitude 1.4. To observers in Orkney and Shetland the Moon will be seen to occult Mars around midnight on the 25<sup>th</sup>/26<sup>th</sup> of the month.

**Jupiter** reaches opposition on March 4<sup>th</sup>, and is “king” of the sky once Venus has set, shining brightly at magnitude -2.4. It will be 3° south of the Moon two days after opposition.

**Saturn** is a lovely object near the feet of the Heavenly Twins. It is fading in brightness (now magnitude zero), and before long will be setting in the early hours. It will be seen 5° south of the Moon on the 28<sup>th</sup>.

**Uranus** and **Neptune** continue to be unobservable this month.

### METEORS

You might catch sight of the odd **Virginid** meteor late in the month. No more than five are expected per hour.

## NAS Observatory work weekend, 21-22 February 2004

A superb piece of teamwork by members (and a very good friend) of the NAS during the weekend of 21<sup>st</sup> -22<sup>nd</sup> February successfully installed the observatory dome shutter mechanism along with other tasks. Much thanks are due to **Mike Provost** for co-ordinating all the activities and to **Nick Howarth**, for designing and installing the mechanism. Many members came along to the site to work, lend tools, or provide much welcome food and drink. Despite the freezing cold weather, more than half the current total membership of the NAS visited the site during the weekend. A wonderful turnout - Thank you, everyone!

*Here is a summary of events, based on Mike's e-mails:*

### **Saturday**

A really productive day at the Observatory. Nick Howarth (assisted by David Owen, Richard Stewart, Roy Gretton and Greg Eisenhauer) got the pulley blocks and motor mechanism bolted to the dome, and one of the chains threaded up. Keith Harris and Paul Saxton (assisted by David Owen) got the electrics wired up and tested. Paul Stocks, Stuart Atkin and David Lukehurst came early to lend us tools and take photos and Fred Hopper and Cyril Henry arrived later with food and drink. David Owen used some spare 240V generator output to charge up some of the batteries and began to check them over.

The scaffolding worked well: thanks to Joe and Dorothy Sowerby for getting that set up on Friday. For some, there seemed to be a fair amount of standing around while Nick drilled away, but there were moments where everybody's help was needed and we wouldn't have managed with just a few of us. Apologies to anyone whose contribution has not been mentioned – it was a long day!

### **Sunday**

Nick's mechanism works! We wound the shutter up and down several times, both by hand and with the electric motor. The chain wasn't running properly on one of the pulleys and in an attempt to guide it properly a bolt was added to the pulley block. The bolt guided the chain perfectly, but caught on one of the springs and bent it out of shape. The overload also broke the flexible coupling ('spider'). But from this, we discovered that under such circumstances, the coupling, rather than the motor/gearbox, breaks. So we have an unexpected 'mechanical fuse' in the system because the coupling failure torque is greater than what the motor can produce, according to the specifications.

### **Later in the week...**

Greg fitted a piece of Teflon to enable the chain to run smoothly over the pulley. This completed all the 'overhead' work. Joe and Ted later dismantled the tower scaffold, which has now been collected from the site. Joe freed, wire brushed, oiled and re-assembled the telescope mounting bolts and nuts on the concrete block. Greg and Mike replaced the bent spring on the chain with a new one.

### ***What's next?***

There are a few jobs that remain to be completed and the weekend of **6<sup>th</sup> -7<sup>th</sup> March** now looks set for the final 'push' to finish everything off. We can discuss details at the CTC meeting on 4th March. As before, some volunteers are needed please...

Beacon Hill Telescopes have now completed all the components of the large telescope. It will be test assembled and then dismantled ready for transport to the site. David Lukehurst is liaising with BHT and an installation date is expected to be set soon.

Paul Stocks  
NAS Secretary

# DIARY DATES

## Meetings of the Nottingham Astronomical Society

**Thursday 4<sup>th</sup> March**

Djanogly CTC

*Doors open from 7.30pm*

**William Herschel's Telescopes**

Madeleine Cox & Les Jepson

**Thursday 1<sup>st</sup> April**

Djanogly CTC

*Doors open from 7.30pm*

**"X (rays) Marks the Spot" – X-ray astronomy**

Dr Darren Baskill,

Dept of Physics & Astronomy, University of Leicester

**Tuesday 27<sup>th</sup> April**

**NAS Annual Dinner, 7.00pm**

Please see details in this issue of the Journal

**Thursday 6<sup>th</sup> May**

Djanogly CTC

*Doors open from 7.30pm*

[Topic and speaker to be arranged]

**Thursday 3<sup>rd</sup> June**

Djanogly CTC

*Doors open from 7.30pm*

**The Exploration of the Moon**

Dr Mike Leggett FRAS FBIS

**Thursday 2<sup>nd</sup> September**

Djanogly CTC

*Doors open from 7.30pm*

**Update on European/UK Space Science Programmes**

Prof Ken Pounds

Dept of Physics & Astronomy, University of Leicester

## Other events

**Saturday 24<sup>th</sup> April**

**British Astronomical Association Meeting in Nottingham**

**"Practical Observing Tips for Amateurs"**

See this issue of the NAS Journal for details of the programme

**Venue:**

**Nottingham High School for Girls**

**Arboretum Street, Nottingham**

*Doors open at 11.00am*

## **Nottingham Astronomical Society Annual Dinner 2004**

Our Society's annual dinner will be on Tuesday **27 April 2004**, at 7.00pm. The venue is the Newstead Restaurant at NCN – Clarendon College, Pelham Avenue, Nottingham, the same venue as last year.

The menu will be available at the Society's 4<sup>th</sup> March meeting at Djanogly CTC. The cost is £8 per person (with no charge for children under 5 years only).

Do please come to the dinner and make it a great evening! All members, their spouses, partners, children, relatives and friends are very welcome. If you wish to attend, please book at the Society's meetings on **4th March or 1st April**. Payment in advance will be welcome and preferable - please make cheques payable to 'Nottingham Astronomical Society'.

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## **British Astronomical Association Nottingham Meeting, 24 April 2004**

at

**Nottingham High School for Girls  
Arboretum Street, Nottingham**

Doors open at 11.00am

### **Practical Observing Tips for Amateurs**

Ordinary meeting followed by

- "Observing Near Earth Asteroids" Roger Dymock
- "Variable star observing from the city" Gary Poyner
- "Drawing the Moon" Bob Marriott
- "Following features on Jupiter" Mike Foulkes
- "Web cam imaging of the planets" Martin Taylor

*Organisers:*

*Nick Hewitt (BAA) and Paul Stocks (Nottingham Astronomical Society)*

Open to all interested members of the public  
This meeting is hosted by the NAS and we are delighted to welcome  
the BAA to Nottingham

## **TRANSIT OF VENUS, JUNE 2004**

On June 8, 2004, Venus will pass in front of the Sun. This transit is extremely rare as the last one occurred in 1882.

On this important occasion, the European Southern Observatory (ESO), in collaboration with several partner institutions and with support from the European Commission in the framework of the European Science and Technology Week, has established the Venus Transit 2004 (VT-2004) public education programme which takes advantage of this extraordinary celestial event to expose the public to a number of fundamental issues at the crucial interface between society and basic science.

VT-2004 has several components, including an instructive and comprehensive website. It is directed towards the wide public in general and the media, school students and their teachers, as well as amateur astronomers in particular. It invites all interested persons to participate actively in the intercontinental VT-2004 Observing Campaign (that re-enacts historical Venus Transit observations) and the VT-2004 Video Contest.

More information about this ambitious public education programme is available in ESO Press Release 03/04 (<http://www.eso.org/outreach/press-rel/pr-2004/pr-03-04.html>) and on the VT-2004 website (<http://www.vt-2004.org>).

## ***KIELDER FOREST STAR CAMP***

Northumberland, 14 - 17 October 2004

**From: Gary Fildes, Sunderland Astronomical Society**

I'm delighted to be able to give you the first details of the 2004 Kielder Forest Star Camp. Last year's inaugural event organised by Sunderland Astronomical Society and the Forestry Commission was a great success, with a full campsite and three largely clear nights under the wonderful dark skies of Northumberland.

This time round star camp will be staged over four nights (rather than three) from Thursday 14 October to Sunday 17 October, inclusive. The venue remains Kielder Forest campsite in the remote Border region and the main day will be on Saturday 16 October at 18<sup>th</sup> century Kielder Castle.

Leading vendors already signed-up to attend include Green Witch, Widescreen Centre, Bray Imaging and our main sponsor this year, Pulsar (Optical). There will also be starlab, barbeque, tours of the observing field and talks by two top speakers from the world of astronomy.

Campsite pitch fees are from £10 per night. Facilities include a laundrette, pay phone, electric hook-ups, showers with hot and cold water, toilet disposal point and children's play area. During the day you will have the opportunity to explore one of Britain's great wilderness areas, which aside from its amazing wildlife, is also wonderful walking and biking country. You can even take a steam ship cruise on Kielder Water. But the prime attraction will be the quality of the night sky – which a recent CPRE survey revealed to be one of the nation's darkest.

For more information please visit the star camp website at

[www.richarddarn.demon.co.uk/starcamp](http://www.richarddarn.demon.co.uk/starcamp)

which has a booking form to download. Alternatively call Richard Darn on 01226 246351 or e mail [starcamp2004@richarddarn.demon.co.uk](mailto:starcamp2004@richarddarn.demon.co.uk)

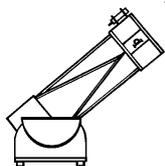
Bookings can be made by telephone by contacting Margaret Hardon at the Forestry Commission on 01434 220242.

We hope to see you under Kielder's dark sky!

## Small Advertisements

**David Lukehurst**

*Astronomical Telescope Maker*



**Large, Highly Portable Dobsonians**

From 6¼ to 30-inches

12-inch f/6 truss-tube Dobsonian: £995

**Also:**

Large Finders, Low-profile Helical and Rack & Pinion Focussers, Eyepieces, Barlow Lenses, Ronchi Testers, etc.

**For details & price list:**

Tel: 0115 9602266

[gildor@ntlworld.com](mailto:gildor@ntlworld.com)

## For Sale

**Maksutov 6-inch by Drew.** 2x2-inch finderscopes, equatorial tripod mount with circles, eyepiece tray, carry box. Selection of eyepieces, Barlow lens, star diagonals.

Buyer collects. **£495** for prompt sale.

**Telephone Peter Davison  
on 0115 923 0040**

## The Widescreen Centre

18, LADY BAY ROAD ,Nottingham, NG2 5BJ

0115 945 5459 FAX: 0115 945 5362

WebShop: [www.widescreen-centre.co.uk](http://www.widescreen-centre.co.uk)

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You are always made welcome at our shop or a telephone call to Lynda will bring you our latest catalogue

## The Nottingham Astronomical Society: E – SERVICES

### *The Journal*

To register for your FREE Journal, just E-mail Carl Brennan at [carl.stella@virgin.net](mailto:carl.stella@virgin.net) - You don't have to be a Society member to take advantage of this service.

### *Observatory Group*

A web group page and message service has been set up at <http://uk.groups.yahoo.com/group/nottinghamastronomicalsociety/>  
It will be used for circulating information about the observatory construction and projects, large telescope up-dates, and use of the site by members of the Observatory Group. Please visit the web site and E-mail on line if you wish to join (NAS Members only)

### *Minute Reports*

If you wish to receive E-copies of the draft minutes of the committee let Carl Brennan know at [carl.stella@virgin.net](mailto:carl.stella@virgin.net) . This service is open only to Society members.

#### **Nottingham Astronomical Society**

*The Nottingham Astronomical Society, and/or the Editor accept no responsibility for any errors that may occur within this publication. Any views expressed in the **NAS Journal** are those of the individual authors and not necessarily endorsed by the Nottingham Astronomical Society, it's Committee or Members.*

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### **APPLICATION FOR MEMBERSHIP**

If you would like to join the Nottingham Astronomical Society, please complete and tear off this slip. Make your cheque/postal order payable to:

#### **THE NOTTINGHAM ASTRONOMICAL SOCIETY**

Then send the slip and payment to Paul Stocks, Hon. Secretary, **Nottingham Astronomical Society**, 22 Killerton Park Drive, West Bridgford, Nottingham, NG2 7SB

Alternatively you may hand the slip and payment to the Secretary or Treasurer at one of the Society's regular meetings.

Your name \_\_\_\_\_

Full address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Postcode \_\_\_\_\_

I wish to join the Nottingham Astronomical Society and enclose the membership fee for

*(please tick appropriate box)*

- Full Adult £23
- Junior (17 years or under) £11.50
- Concession (*full time student, UB40, Senior Citizen*) £11.50

# Nottingham Astronomical Society

Affiliated to the British Astronomical Association  
Member of the Federation of Astronomical Societies  
Member of the Society for Popular Astronomy  
Supporters of the Campaign for Dark Skies  
Registered Charity No: 1066645

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## PRESIDENT:

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Tel: 01949 875857

e-mail: [greg.eisenhauer@ntlworld.com](mailto:greg.eisenhauer@ntlworld.com)

## HONORARY VICE PRESIDENT

**Alan Heath** (Ex. Dir. BAA Saturn Section)

## VICE PRESIDENTS:

**David Lukehurst**

e-mail: [gildor@ntlworld.com](mailto:gildor@ntlworld.com)

**Dr Roy Gretton**

e-mail: [roy@gretton.surfonwater.com](mailto:roy@gretton.surfonwater.com)

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## CAMPAIGN FOR DARK SKIES:

**Greg Eisenhauer**

## ORDINARY COMMITTEE MEMBER:

**Carl Brennan**

**Joe Sowerby**

**Dorothy Sowerby**

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## Meetings

Formal monthly meetings, with speakers, are held on the first Thursday of each month (except August, and occasionally other months as announced) at

*Djanogly City Technology College*

Sherwood Rise, Nottingham NG7

Doors open	7.30pm
Meetings Start	7.45pm
Meetings end	10.00pm

**Non-members** are very welcome at our meetings and there is no charge for the first meeting. We make a small charge of £2.50 adults, £1.25 juniors to non-members after their first attendance. Invited guests are admitted free of charge.

## Annual Subscriptions, 2003-04

Full Adult:	£23
Junior (17 years or under)	£11.50
Concessions	£11.50

(Full time student, UB40, Senior Citizens)

Subscriptions become due on 1 October. Half-price subscription is charged if joining after 1st April. Please make cheques payable to:  
**Nottingham Astronomical Society.**

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If you would like further information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Honorary Secretary, Paul Stocks, at the address given above, or speak to any NAS committee member at one of the regular monthly meetings. A membership application form appears inside this issue of the Journal.

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