



Nottingham Astronomical Society July - August 2003

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Thursday July 3rd

Doors open 7.30pm

This evening is the

ASTROQUIZ NIGHT

!!Prizes to be won!!

COMETS COMING!

Two newly-discovered comets may be making a spectacular appearance in our skies next spring (with the accent, of course, on the word *MAY*). They are:

Comet C/2001 Q4 discovered by the NEAT (Near Earth Asteroid Tracking) observatories will reach perihelion on 2004 May 15 and will pass within 50 million km of Earth. It will not be visible in the northern hemisphere until it is close to perihelion (in the constellation of Cancer), but may become as bright as magnitude 1. From May 24 the comet will be circumpolar from the U.K.

Comet C/2002 T7 discovered by the LINEAR (Lincoln Laboratories Near Earth Asteroid Research) facility will reach perihelion on 2004 April 23, but will not be well-placed for observers in the northern hemisphere.

News Notes

There's plenty to report this month, and a favour to ask of members.

Progress with our Large Telescope...

As you will know, the society's new 24 inch telescope is being built by Barry Watts of Beacon Hill Telescopes. Our Curator of Instruments, David Lukehurst, has been in touch with Barry to check progress.

Barry has had to take some time away from work, sadly due to a recent bereavement, but is now working on our telescope exclusively until it is finished. It is quite possible that the telescope will be completed in time for the Mars perihelion opposition in late August, but this cannot be guaranteed. However, I am sure members will agree that having the telescope made well and without undue hurry is much more important in the long run than having it ready by August for the Mars opposition. The society does of course possess a good quality $8^{1}/_{2}$ inch telescope, which David confirms is likely to be as good an instrument for observing the opposition as the new 24 inch.

..and progress with our Observatory

Work on getting the observatory ready for the telescope also continues. I would like to thank NAS members Dorothy and Joe Sowerby for their hard work in making improvements to the dome. Joe recently spent a day at the observatory replacing the old nylon-tyred dome support wheels with new steel ones. As a result, the dome can now be rotated more easily and this should improve further once a few minor problems with the length of the shafts have been sorted out.

At the next committee meeting (in mid-July) the committee will meet with our engineer Nick Howarth to discuss plans for the installation of the motorised shutter mechanism that he is designing. The parts will be ordered soon.

Can you help at the site in late July?

At the time of writing, details have yet to be finalised, but we expect fitting of the dome's shutter motor and drive mechanism to take place over a weekend in late July. The bulk of the work will be done by a professional welder, but there will be some essential "support" activity - fetching, carrying and a variety of other jobs. **Volunteers are needed please!** If you think will be able to come along to the site to help, please have a word with me at the July CTC meeting.

There will not be another NAS ordinary meeting before the observatory work takes place, so we will post the details on the Observatory Group Yahoo site pages: http://uk.groups.yahoo.com/group/nottinghamastronomicalsociety/

If you are a NAS member and have not yet joined the Observatory Group but would like to do so, please see the "E-Services" section in this issue of the Journal.

Summer break

After our AstroQuiz Night on 3rd July, the summer break will be upon us. Hopefully skies will be clear enough to permit some fine views of a magnitude -2.8 Mars.

We'll be back at the CTC again on Thursday, 4th September. Please don't forget that our meeting on 2nd October will be at the observatory – details will appear in the Journal.

And finally, have a good summer!

Paul Stocks NAS President

Sky Notes 2003 July - August

Compiled by Roy Gretton

All times quoted are U.T.



THE MOON

	July	August
First Quarter	7d 02h 32m	5d 07h 27m
Full Moon	13d 19h 21m	12d 04h 48m
Last Quarter	21d 07h 01m	20d 00h 48m
New Moon	29d 06h 53m	27d 17h 26m

THE PLANETS

Mercury will be in the evening sky for most of July and August, but very low down and difficult to observe. If you have a very low western skyline you may be able to find this planet with binoculars on July 26th because it will be less than one degree away from Jupiter on this date.

Venus also is difficult to observe in the pre-dawn twilight, but on July 7th passes within one degree of Saturn, when its elongation from the Sun will be a mere 11°. Venus will be totally unobservable in August, being at superior conjunction on the 18th.

Mars, in the constellation of Aquarius, will at the beginning of August be rising as the Sun sets. The Moon will be very close to the planet on July 17th, and will in fact occult Mars as seen from Central America. Mars will grow steadily brighter through July and August, increasing by 1.5 magnitudes between July 1st and August 28th, when it will be at opposition. On this auspicious occasion, when the planet will be exceptionally close to Earth, its angular diameter will reach 25 seconds of arc. However, it will be rather low in our sky, being about 16° south of the celestial equator, or 21° above the southern horizon. But there will be no mistaking this bright red star!

Jupiter is fading in the evening sky, and although still visible at the beginning of July, will soon disappear from view, reaching conjunction on August 22nd.

Saturn is not visible at the beginning of July, but will have moved far enough from the Sun to be observable by the end of August.

Uranus (magnitude 5.7) and **Neptune** (magnitude 7.8) are observable after midnight. Neptune rises first (opposition is on August 4th) and is close to theta Capricornus. Uranus is in Aquarius and is at opposition on August 24th.

METEORS

August is the month of the Perseids, but this year interference from moonlight will be severe, as the Full Moon coincides with the maximum.

FAS Annual Convention 2003

Saturday, 20th September Institute of Astronomy, Madingley Road, Cambridge

Speakers

Dr Robin Catchpole (Old Royal Observatory Greenwich)

From the Solar System to the Edge of the Observable Universe

Prof. Gerry Gilmore (IoA Cambridge)

Towards the Temperature of Cold Dark matter

Bob Mizon (Well known Campaigner for Dark Skies)

An A-Z of Astronomy

Prof. Andy Fabian (IoA Cambridge)

The Search for Massive Black Holes

Dr. Andrew Coates (MSSL)

Looking for Life on Mars with Beagle 2 and Mars Express

Doors open 8.30am - Lectures start at 9.00am

Tour the Telescopes

Tours of some of the telescopes will be available during the lunch break. Numbers are limited; tickets will be on first come first served basis on the day of the convention.

Trade Stands and Society Displays

Tickets

£7.00 on the door, £6.00 in advance from John Parratt 73 Woolbarn Lawn, Whiddon Valley, Barnstaple, North Devon, EX32 8PQ Telephone 01271 372331 E-mail john@parratt8017.freeserve.co.uk

This is a great day out, and Cambridge is only just over two hours away by car, (and all on good roads). There are no lunch facilities at the IoA but the excellent gardens are ideal for a packed lunch picnic, the Northumberland telescope is always worth a visit, (the telescope that nearly discovered Neptune). There are a number of places nearby serving excellent food. Please do book early as the lecture theatre on holds 180 people, and there is already talk of there being no "on the door" tickets left!

Over the years the NAS has visited Cambridge many times. I think everybody will tell you it has always been a worthwhile trip. If you want to attend the convention but have a family that does not then let them visit Cambridge itself for the day. The IoA is on the Cambridge bus tour route (so parking problems or congestion charges). The Backs is a great place to sit and have a packed lunch, Kings, and the other colleges are great places to tour, there are many small museums that cover a vast range of topics, and it's a great place to just walk around, shop and do lunch. So go on, indulge yourself in astronomy and let the family have a great day out.

Carl Brennan

Sent: Monday, June 23, 2003 7:28 PM Subject: Re: NAS FAS slide request

Dear Mr Brennan

I would be extremely grateful if you could take the time to make your Society members aware of the following message (by whatever means you see fit, be it notice board, e-mail, announcement, newsletter, etc.).

Message reads:

As you may be aware, the Federation of Astronomical Societies (FAS) keeps a slide library so that speakers and amateur astronomers have access to astronomical slides they might find useful. The FAS would like to ask if you have any astronomical slides that you feel might be of interest to other amateur astronomers. The FAS slide library needs updating so if you do have slides, would you like to consider offering them to the library? We do not want to keep the original slides permanently. We would copy them, and return the originals to the owner. Having your slides available is a way of helping others, getting a wider audience for your work, and occasionally making a little bit of money. Publishers sometimes contact the library and ask permission to use a slide in a book or magazine, for which they pay of course. The FAS will act as your agent, and collect and send you the money. At this moment, the FAS needs slides of virtually anything astronomical so if you would like to offer yours, please contact the FAS slide librarian, Bob Dryden, on bobdryden@ntlworld.com or telephone 01491 201620, or write to 21 Cross Road, Cholsey, Oxon., OX10 9PE. Thank you very much.

Paris, 24 June 2003

Antenna anomaly may affect SOHO scientific data transmission

The Solar and Heliospheric Observatory (SOHO) spacecraft expects to experience a blackout in the transmission of its scientific data during the week of 22 June 2003. This is estimated to last for about two and a > half to three weeks. Engineers are predicting this problem after detecting a malfunction in the pointing mechanism of the satellite's high-gain antenna (HGA), which is used to transmit the large amounts of data from SOHO's scientific observations to Earth. The SOHO spacecraft is operating as safely as before the problem occurred. If the problem is not solved, the Earth will be left outside the HGA beam on a periodic basis, with similar blackouts occurring every three months. ESA and NASA engineers are currently assessing several options to recover the situation, or minimize the scientific data loss.

DIARY DATES, by Carl Brennan

MEETINGS OF THE NOTTINGHAM ASTRONOMICAL SOCIETY

July 3rd Djanogly CTC, Doors open 7.30pm ASTROQUIZ NIGHT

September 4th Djanogly CTC Meeting. Doors open from 7.30pm MARS ODYSSEY

Andy Lund, The Planetary Society, UK Regional Coordinator

October 2nd

OBSERVATORY MEETING NIGHT –DETAILS TO FOLLOW

November 6th Djanogly CTC Meeting. Doors open from 7.30pm A.G.M.

December 4th Djanogly CTC Meeting. Doors open from 7.30pm
UNDERSTANDING THE LARGEST EXPLOSIVE VOLCANIC ERUPTIONS ON EARTH (TBC)
Dr M J Branney BSc, PhD, Department of Geology, University of Leicester

January 1st 2004 No Meeting

OTHER EVENTS

5th July Saturday Night Ilkeston & District AS are holding a sky watch at Shipley Park between Ilkeston and Heanor. This is a good night sky sight, and an excellent opportunity to see bats as well as stars! Call Mary McNulty for more information on 01298 78234

1st to 4th August Third Summer Star Festival (That's a Friday to Monday) 3 nights observing at Adderstone, Dalby Forest, North York Moors National Park. The site is ideal for caravans and tents. £15 for the weekend. Details from Mrs. S Anderson, 25 Highfield, Scarborough, N. Yorks, YO12 4AW, 01723 500389, E-mail gwernan2@ukf.net, visit http://www.scarborough-as.org.uk

23rd to 30th August NATIONAL ASTRONOMY WEEK

28th to 31st August Astro-Camp South West. West Buckland School, West Buckland, Nr. Barnstable, N. Devon. Camping in school grounds, or local B&Bs (www.staynorthdevon.co.uk) or john@parratt8017.freeserve.co.uk, or www.halien.com/swaa/

26th Sept. to 5th Oct 9th Equinox Sky Camp. For full details contact Mike Cook, 2 Sunset Drive, Havering-Atte-Bower, Essex, RM4 1QL. All inquiries must be with Mike by September 19th latest.

20th September FAS ANNUAL CONVENTION returns to IoA Madingley Road, Cambridge. Doors open 8.30am, lectures start 9.00am. You must book in advance as seating is limited. Tickets in advance cost £6.00 from John Parratt, 37 Woolbarn Lawn, Whiddon Valley, Barnstable, N. Devon, EX32 8PQ, 01271 372331 johnparratt8017@freeserve.co.uk

HELP

My name is Tony Stibbons. I was wondering if you could help me out, I am looking for someone with transport who would not mind me tagging along with them when they go to a dark site to watch the stars or if you know anyone who has not got a telescope but would love use my beautiful 8inch Orion telescope. I am asking you this because I bought my scope at the beginning of the year and only been able to use it once! Because I have not got transport. If know anyone please let them know and give them this phone number 0115 8478325 or 07905713884. My land address is 39 Bingham Road, Flat 3, Sherwood, Nottingham

(Tony has also volunteered his services at the observatory if somebody can help with transport)

Small Advertisements

David Lukehurst

Astronomical Telescope Maker



Large, Highly Portable Dobsonians

From 6½ to 30-inches 12-inch f/6 truss-tube Dobsonian: £995

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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

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

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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 the secretary at <u>carl.stella@virign.net</u> - 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 the secretary know at 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.

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 Carl Brennan, Hon. Secretary, **Nottingham Astronomical Society**, 40 Swindon Close, The Vale, Giltbrook, Nottingham NG16 2WD.

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 £22 ☐ Junior (17 years or under) £11 ☐ Concession (full time student, UB40, Senior Citizen) £11	

Nottingham Astronomical Society

Affiliated to the **B**ritish **A**stronomical **A**ssociation Member of the **F**ederation of **A**stronomical **S**ocieties Member of the Society for Popular Astronomy Supporters of the **C**ampaign for **D**ark **S**kies Registered Charity No: 1066645

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Richard Evans

Meetings

Formal monthly meetings, with speakers, are held on the first Thursday of each month (except August) 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, 2002-03

Full Adult: £22
Junior (17 years or under) £11
Concessions £11
(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.*

If you would like further information about the Nottingham Astronomical Society, or would like to become a member, please

- contact the Honorary Secretary, Carl Brennan, 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.