



Nottingham Astronomical Society January 2006

Inside this issue

- Sky Notes for January
- Lunar extremes
- Diary Dates
- Observing Sessions: the new Observatory Line
- Advertisements
- E-Services
- Membership application form
- Society Information

Thursday January 5th 7.30 p.m.

Tonight we have an

OBSERVATORY EVENING

at the Society's observatory near Cotgrave

(no meeting at the City Academy this month)

A VERY HAPPY AND PROSPEROUS NEW YEAR to all members and friends of the Society

TWO ASTRONOMICAL HIGHLIGHTS OF THE COMING YEAR

- Total eclipse of the Sun (visible as partial eclipse from Britain), March 29th
- Partial eclipse of the Moon (just visible as a penumbral eclipse at moonrise in Britain), September 7th

Sky Notes 2006 January

Compiled by Roy Gretton

All times quoted are U.T.



On January 4th the Earth will be at perihelion, 147 million km from the Sun.

PHASES OF THE MOON

First Quarter occurs on the evening of January 6th
Full Moon occurs on the morning of the 14th
Last Quarter occurs in the afternoon of the 22nd
New Moon occurs in the afternoon of the 29th

This month the Moon is closest to Earth on the 30th, and furthest from Earth on the 17th. There is an additional perigee on January 1st.

THE PLANETS

Mercury may just be visible in the morning twilight at the beginning of this month, but rapidly disappears from view, reaching superior conjunction on January 26th.

Venus is a brilliant object low in the southwest after sunset at the start of the month, but then rapidly disappears as its elongation from the Sun shrinks, until inferior conjunction is reached on the 13th. Thereafter it will emerge into the morning twilight toward the end of the month.

Mars continues to fade, reaching magnitude zero in the last week of January. At the start of the month its angular diameter will be 13 arcseconds, so it will still be worthy of telescopic observation, but by the end of the month it will have shrunk to 9 arcseconds (less than half its apparent diameter when at opposition last November).

Jupiter continues to brighten in the morning sky, and will reach magnitude -2 by the end of January. It is now in the constellation of Libra, 15 degrees south of the celestial equator, and is a good object for telescopic observation, with an angular diameter of 35 arcseconds.

Saturn has now taken over from Mars as the main planet of interest in the midnight sky. It will be at its best this month, as opposition is reached on

January 27th. The planet's equatorial diameter will then be 20.5 arcseconds, while the ring system will be a full 46 arcseconds across, so even modest-sized telescopes should give a rewarding view.

Uranus and **Neptune** are virtually unobservable this month, although a determined observer might be able to find Uranus, in the constellation of Aquarius, low in the southwest after sunset.

METEORS

The **Quadrantids** are the only meteor shower worthy of note for the rest of the winter, and this year conditions are favourable for observation. The peak of activity is expected in the early evening of January 3rd, when it is possible that the meteors will appear at a rate of one or two every minute, given good observing conditions.

LUNAR EXTREMES

Source of information: JBAA, Vol 115, No.6

The angular distance of the Moon from the plane of the Earth's orbit varies from month to month, and consequently its most northerly and most southerly declinations vary throughout the year, and from year to year. The maximum possible declinations are + or -28.7 degrees. This year is special in that the extreme declinations achieved in 2006 will be greater than they have been for over thirty years, and they will not be exceeded for at least another 800 years, and probably much longer than that.

The Moon will be 28° 43' 23" south of the celestial equator on March 22 (which is further **south** than it has been at any time since September 1950), and it will be 28° 43' 22" north of the celestial equator on September 15 (which is further **north** than it has been at any time since March 1979).

Editor

DIARY DATES 2006

Meetings of the Nottingham Astronomical Society

Our current programme of monthly meetings is below. Don't forget to check our website:

http://beehive.thisisnottingham.co.uk/nottinghamastro
for the latest information about the Society's activities.

Thursday 5 January 2006

NAS observatory site, from 7.30pm

Observatory Evening

An opportunity to use the large telescope, weather permitting!

E-mail for directions: nottinghamastro@yahoo.co.uk
(PLEASE NOTE: There is no meeting at Djanogly City Academy in January)

Thursday 2 February 2006

Djanogly City Academy, doors open 7.30pm

The Discovery of Pluto

a talk by

Martin Lunn MBE

A selection of astronomy books will also be on display to browse and buy.

Thursday 2 March 2006

Djanogly City Academy, doors open 7.30pm

Cosmic Collisions

a talk by **Dennis Ashton**

(This talk has been re-scheduled from the December 2005 meeting)

Thursday 6 April 2006

NAS observatory site, from 7.30pm

Observatory Evening

Do please come along and help prepare the observatory for the official opening in May E-mail for directions: nottinghamastro@yahoo.co.uk
(No meeting at Djanogly in April)

Thursday 4 May 2006

Djanogly City Academy, doors open 7.30pm

The Galactic Centre – a hidden treasure

a talk by **Dr Susan Cartwright**Sheffield University

DIARY DATES (2) Other Events

Saturday 28 January 2006 10.00am to 4.00pm The Widescreen Centre 18 Lady Bay Road, West Bridgford Nottingham NG2 5BJ

Russian Open Day

Examine the range of Russian telescopes at your leisure. Meet the manufacturers' representative. Free drinks and snacks.

Details/directions: 0115 945 5459

Friday 3 and Saturday 4 February 2006 Kensington Town Hall Hornton Street, London

EUROPEAN ASTROFEST 2006

Exhibition and Conference

Organised by **Astronomy Now** magazine Ticket hotline: **01732 367542**

Details: www.astronomynow.com/astrofest/

Has Beagle 2 been found?

View the detailed images of the suspected crash site at: www.beagle2.com/

Observing sessions with the large telescope New "Observatory Line"

There is now a dedicated mobile phone number for NAS members to call for details of forthcoming observing sessions with the large telescope. You can also leave voice mail messages. The phone is kept by John Hurst, the society's Director of Observing.

The number to call is **07726 940700**. Please bear in mind that this is a new (and experimental) way of keeping members informed about observing sessions.

Small Advertisements

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

For Sale

8¾-inch Newtonian telescope on Dobsonian mount

Built by David Lukehurst. 65x and 250x eyepieces, finderscope. 3 years old. Hardly used, very good condition.

£375 or near offer

Telephone Terry Naylor on 0115 9815968

The Widescreen Centre

18, LADY BAY ROAD ,Nottingham, NG2 5BJ 0115 945 5459 FAX: 0115 945 5362

WebShop: www.widescreen-centre.co.uk www.telescopes-direct.com

eMail: call@widescreen-centre.co.uk

Stockists for:

MEADE

ORION

CELESTRON

KONUS

HELIOS

BINOCULARS

EYEPIECES

BARLOW'S

FILTERS

BOOKS

ASTROPHOTOGRAPHY OUTFITS CCD CAMERAS

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

'Beehive' Website

Whether or not you are a NAS member, you can now keep up to date with details of the Society's meetings and other events by visiting the NAS 'Beehive' website: http://beehive.thisisnottingham.co.uk/nottinghamastro

NAS Journal e-mailing list

To register for your monthly e-mailed copy of the NAS Journal, just e-mail nottinghamastro@yahoo.co.uk

You don't have to be a Society member to take advantage of this service.

NAS Observatory Group

(please tick appropriate box)

☐ Full Adult £25

☐ Junior (17 years or under) £12.50

☐ Concession (full time student, UB40, etc.) £12.50

A web group page and message service (for NAS members only) is available at http://uk.groups.yahoo.com/group/nottinghamastronomicalsociety/

It is used for circulating information to members about work at the observatory and use of the large telescope. If you are a member of the Society, you can join this online group by visiting the website and clicking on "Joint this Group".

Nottingham Astronomical Society				
The Nottingham Astronomical Society, and/or the Editor accept no responsibility for any errors that may occ within this publication. Any views expressed in the NAS Journal are those of the individual authors and necessarily endorsed by the Nottingham Astronomical Society, its 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 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				
Postcode I wish to join the Nottingham Astronomical Society and enclose the membership fee for				

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

PRESIDENT:

Fred Hopper

email: fwmh@nerc.ac.uk

HONORARY VICE PRESIDENT

Alan Heath (Ex. Dir. BAA Saturn Section)

VICE PRESIDENTS:

David Lukehurst

e-mail: gildor@ntlworld.com website: www.dobsonians.co.uk

Dr Roy Gretton

e-mail: roy@gretton.surfonwater.com

HONORARY SECRETARY:

Paul Stocks

Tel: 0115 914 8185

e-mail: nottinghamastro@yahoo.co.uk

TREASURER:

Dr Mike Provost

e-mail: mike.provost@ntlworld.com

JOURNAL EDITOR:

Dr Roy Gretton

e-mail: roy@gretton.surfonwater.com

CURATOR OF INSTRUMENTS

David Lukehurst

e-mail: gildor@ntlworld.com

DIRECTOR OF OBSERVING

John Hurst

Observatory line: 07726 940700

CAMPAIGN FOR DARK SKIES:

Duncan Collins

email: duncan.collins@talk21.com

ORDINARY COMMITTEE MEMBERS:

Joe Sowerby Dorothy Sowerby

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 Academy, Room 105*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, 2005-06

Full Adult: £25
Junior (17 years or under) £12.50
Concessions £12.50

(Full time student, UB40, etc)

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, 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.