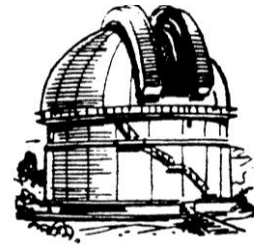

Journal

of the



Nottingham Astronomical Society

May 2007

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Thursday 3rd May

at the

British Geological Survey

Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight is a

MEMBERS' EVENING

with the theme

Developing the N.A.S.

Please come along and make your views known on the future direction of the Society. Some of our members' telescopes will also be on display

MAGELLANIC CLOUDS: SATELLITE GALAXIES OR NOT?

The standard view has long been that the Large and Small Magellanic Clouds are satellite galaxies of the Milky Way.

But new measurements suggest that they may just be passing us by, with no permanent attachment to our galaxy. Apparently the Clouds are travelling with velocities of about 300 km per second, and if current estimates of the mass of the Milky Way are correct, this speed exceeds the escape velocity of our galaxy. So it appears that the Magellanic Clouds are free to go their own way in space, though of course retaining their membership of the Local Group of galaxies.

Sky Notes

2007 May

Compiled by Roy Gretton



From the third week of May, astronomical twilight lasts throughout the night, so the sky is never truly dark, a situation that lasts until the last week of July.

PHASES OF THE MOON

Full Moon occurs on the morning of the 2nd
Last Quarter occurs in the early morning of the 10th
New Moon occurs in the early evening of the 16th
First Quarter occurs on the evening of the 23rd

This month the Moon is closest to Earth on the 15th, and furthest from Earth on the 27th.

THE PLANETS

Mercury reaches superior conjunction (on the far side of the Sun) on May 3rd. After this, Mercury becomes an evening object, and will be visible from late May until well into June. By the last week of May it will be 7 degrees above the horizon an hour after sunset, shining at magnitude zero. Look for the planet in the northwestern sky at dusk – but finding it is likely to be a challenge!

Venus will be at greatest eastern elongation early next month (on June 9th), when it will be 45 degrees from the Sun, and shining at magnitude -4.2. This bright evening star, high in the western sky after sunset, is hard to miss. Through a telescope the planet shows a gibbous phase this month, but on June 9th will look like the Moon at first quarter. Thereafter the phase will decrease to become a thick crescent as the planet brightens even further, approaching magnitude -4.4 by the close of next month.

Mars is a morning object in the constellation of Pisces, but still relatively small in apparent size, barely 6 arcseconds across. It will be low in the southeast before sunrise, and still not clear of the pre-dawn glow.

Jupiter is slowly moving westward across the southern part of the constellation of Ophiuchus, about 22 degrees south of the celestial equator – great if you are in southern Africa, but not very useful for observers in the latitude of Nottingham, where it won't be more than 16 degrees above the horizon. By the end of May it will be almost due south at midnight, and shining at magnitude -2.5, so splendid for naked eye observation.

Saturn is an evening object, a few degrees west of Regulus in the constellation of Leo, and still well-placed for telescopic viewing. On May 22nd there will be a **daylight occultation** when the crescent Moon will pass in front of the planet in the early evening. Observers with reasonably good telescopes will be able to see Saturn disappear behind the dark limb of the Moon a few minutes after 19 hours UT (8 pm BST) – *but take extreme care not to point your telescope directly at the Sun!* – and reappear from behind the bright limb just over an hour later (when the Sun will be below the horizon).

Uranus (magnitude 5.9) in the constellation of Aquarius, and **Neptune** (magnitude 7.9) in the constellation of Capricornus, are both morning objects. Uranus begins the month about one degree away from the planet Mars.

ASTEROID Vesta

The brightest of the asteroids, Vesta, will be at opposition on May 31st, when its brightness will have increased to magnitude 5.4, making it a naked eye object in clear, non-polluted skies. It will be in the constellation of Ophiuchus, northwest of Jupiter.

METEORS

This month is not great for meteor showers. The **Eta Aquarids** reach their maximum activity on May 6th, but the radiant does not rise above our horizon until morning twilight has already begun.

SCARBOROUGH AND RYEDALE ASTRONOMICAL SOCIETY

Seventh Summer Star Festival

August 17th – 20th 2007

will take place at Adderstone Field, Dalby Forest, in the North York National Park

Further information may be obtained by telephoning 01653691128 or 01723500389 and by visiting the society's website: www.scarborough-as.org.uk

DIARY DATES 2007

Meetings of the Nottingham Astronomical Society

Our programme for 2007 is below. Don't forget to check our website:
<http://beehive.thisisnottingham.co.uk/nottinghamastro>
for the latest information about the Society's meetings and observing sessions.

Thursday 3 May 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Members' Evening: Developing the NAS

Come and give the committee your views on the future of your society!

Thursday 7 June 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Build you own Aurora Detector

Fred Hopper

NAS President

Thursday 5 July 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

The BGS 3D Immersion Suite

An opportunity to view images of the surface of Mars in 3D

August – summer break, no meeting

Thursday 6 September 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: 'How Galaxies are Formed'

Christopher Conselice

University of Nottingham

Thursday 4 October 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: 'Beneath the Shadow of the Moon'

Mike Frost

Thursday 1 November 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Annual General Meeting 2007

Thursday 6 December 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: 'Simple Sums for Astronomers'

Dr Roy Gretton

NAS Vice-President

Nottingham Astronomical Society Members Survey

The committee of the NAS are seeking your views as a member of the Society. Our observatory at Cotgrave is equipped with a 24 inch aperture telescope. Our monthly meetings at The British Geological Survey are well attended and we have a programme of talks and other activities arranged for 2007.

Your answers to the questions below will help the committee plan the Society's activities over the next couple of years. **Please answer any of the questions or all of them, as you wish.** Then hand in this sheet to Fred Hopper or Paul Stocks at the meeting on 3rd May. Or you can e-mail your responses to nottinghamastro@yahoo.co.uk

Your name:

Phone number & e-mail address:

1 Have you visited our Observatory, or if not, do you plan to visit it this year?	<i>Please circle your answer</i> Yes No
2 If you use the Observatory, which evening(s) would be best for you? <i>Choose more than one if you wish.</i>	Sat Sun Mon Tue Wed Thur Fri
3 Would you like to have training in the use of the large telescope?	Yes No
4 Is there any area of observing, not currently carried out by the Society, which would interest you? <i>If 'yes', please give an example, e.g. solar observing.</i>	Yes No
5 Would you be willing to help with observing sessions? <i>For example, holding a set of keys opening up the site and operating the telescope.</i>	Yes No
6 Are you happy with our current programme of talks and activities? <i>If 'no', please say why.</i>	Yes No
7 Do you know anyone who may be willing to give a talk to the Society? <i>If 'yes', please give their name and e-mail address or phone number.</i>	Yes No
8 Would you be willing to give a short talk at a Members' Evening? <i>If 'yes', please mention the topic.</i>	Yes No
9 Would you be interested in NAS organised visits to places of interest? <i>For example: The National Space Centre at Leicester, Jodrell Bank radio telescope, or Shanghai for the 2009 total solar eclipse!</i>	Yes No
10 Do you have a skill that you could offer the NAS? <i>If 'yes', please give a brief description. Help from members is always appreciated!</i>	Yes No

Thank you for your help in completing this survey.

Feel free to add overleaf any other suggestions you may have for future NAS events/activities.

SUGGESTIONS:

Small Advertisements

For Sale

Celestron Nexstar 5 telescope

(Schmidt-Cassegrain)

with 26 mm Plossl eyepiece, red-dot finder, standard and erect-image diagonals, aluminium tripod, padded carry-case, Nexstar user's guide.

Excellent condition. Very robust, fully computerised with easy set-up and GOTO operation with large database. Free delivery within 50 miles of Nottingham.

Only £600

**Please contact Sam Boote
s.boote@bcs.org
0115 937 4644**

**This advertising space is available
free of charge to society members**

For Sale

10 inch reflector telescope, focal length 63 inches
with RA Drive
two eyepieces
and storage shed

Any reasonable offer accepted

Phone **Mr Chambers**
0115 914 1454

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

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 "Join this Group".

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, 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 _____

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

(please tick appropriate box)

- Full Adult £25
- Junior (17 years or under) £12.50
- Concession (*full time student, UB40, etc*) £12.50

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

PRESIDENT:

Fred Hopper

e-mail: fwmh@nerc.ac.uk

VICE PRESIDENTS:

David Lukehurst

e-mail: gildor@ntlworld.com

website: www.dobsonians.co.uk

Dr Roy Gretton

e-mail: roygretton@fast4.net

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: roygretton@fast4.net

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

e-mail: duncan.collins@talk21.com

ORDINARY COMMITTEE MEMBERS:

Joe Sowerby

Dorothy Sowerby

Kevin Greally

Meetings

Our meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August & October) at:

The British Geological Survey

Nicker Hill

Keyworth

Nottingham NG12 5GG

Doors open 7.30pm

Meetings start 8.00pm

Meetings end 10.00pm

Meetings are open to the public and visitors are always welcome to attend.

Annual subscriptions 2006-07

Adult	£25
Junior (under 18 years)	£12.50
Concessions*	£12.50
(*Full-time student, jobseeker's allowance, basic state pension)	

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 more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary, Paul Stocks, 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.
