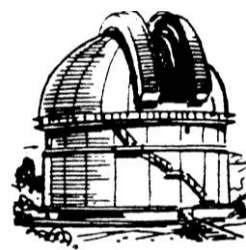

Journal

of the



Nottingham Astronomical Society

February 2011

Thursday, February 3rd

at the

**British Geological Survey
Nicker Hill, Keyworth**

8 pm (doors open at 7.30pm)

Tonight we have a

Members' Evening

(open to everyone)

with a display of images taken by NAS members,
a short talk on how to use a compact camera to take your own pictures,
and an Astronomical Quiz

Inside this issue

- **Sky Notes for February**
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SATURN'S GREAT WHITE STORM

A major feature on the planet Saturn has been observed over recent weeks. It was first seen from Earth on December 8th by the amateur astronomer Gomadazeh in Iran, and consisted of a large bright spot in the North Tropical Zone. By December 10th the spot had brightened further, and an additional bright spot had appeared nearby. By the end of December the system had grown into a major storm that stretched about a third of the distance around the planet.

The Cassini spacecraft has also been observing the storm, and an image received by mission control on December 27th showed the main spot to be 3600 miles across, with a tail streaming downwind for more than 30,000 miles. The whiteness of the storm is thought to be due to the presence of crystals of ammonia ice which are formed when gases from the warmer interior are cooled as they reach higher altitudes.

As I write this, the storm continues to be visible. but if you wish to observe Saturn in detail you will need to be outside in the early morning hours. About 4 a.m. would be ideal, when the planet has risen to a reasonable altitude.

Sky Notes

February 2011

Compiled by Roy Gretton



PHASES OF THE MOON

New Moon occurs on February 3rd at 2.30 am

First Quarter occurs on the 11th at 7.20 am

Full Moon occurs on the 18th at 8.36 am

Last Quarter occurs on the 24th at 11.26 pm

This month the Moon is closest to Earth on the 19th, and furthest from Earth on the 6th.

THE PLANETS

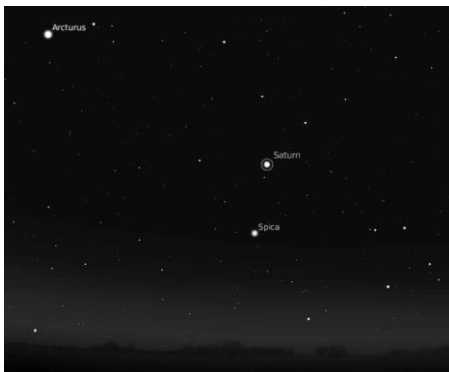
Mercury passes through superior conjunction on February 25th, and is unobservable this month.

Venus begins February as a prominent object in the southeast before dawn, but is moving back toward the Sun, and will become more difficult to observe as the month progresses .

Mars reaches conjunction with the Sun on February 5th, and therefore is unobservable this month.

Jupiter, still prominent in the southwest after sunset as February begins, will steadily move toward the Sun and become more difficult to observe.

Saturn, in the constellation of Virgo, will be the planet of choice for observation over the next few months. It will continue to be a morning object until early April, but even at the start of February it will be rising before midnight and culminating (reaching due south, with maximum altitude) at about 4 a.m.



Saturn above the southeastern horizon at 1 a.m. on February 9th

Uranus, in the constellation of Pisces, may be seen through binoculars or a small telescope as February begins, but will begin to disappear into the sunset by the end of the month.

Neptune, due to its proximity to the Sun, is unobservable this month.

METEORS

February is the leanest month of the year for meteor showers.

VARIABLE STAR: Algol

There are **three** minima of this **eclipsing binary** visible from the UK this month. They occur on February 10th (3.20 am), the 13th (12.05 am), and the 15th (8.50 pm). The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of 4.8 hours.

Nottingham Trent University Open Dome Event - "The Dark Arts of Astronomy"

Date: 28 February 2011

Time: 8pm - 10pm

Event: Open Dome Event - The Dark Arts of Astronomy

Location: CELS and Optical observatory, Clifton campus

Details:

During the history of astronomy many new concepts and discoveries have caused us to rethink our views on the Universe and how it works. During recent times a new concept has developed stating that most of our Universe is missing! This new dark art of astronomy features such ideas as of dark matter and even dark energy.

The event will start at 8pm in CEL 015 with a talk on The Dark Arts of Astronomy - Dark Matter and Dark Energy by Dr H Liang (SST/NTU). This talk will shed light upon what dark matter is and how it is observed. It will also explain how dark energy is a vital ingredient to our cosmological model of our Universe.

Afterwards, visitors will be introduced to what is visible in the evening's sky, followed by a tour of the NTU observatory. They will have the chance to see interesting objects in the autumn sky with the observatory's 20 and 14 inch telescope, small telescopes, and binoculars (if the weather allows it). If the weather is not good, a small planetarium session will be offered in the observatory pointing out objects of interest.

Booking is required for this event. Please contact [Daniel Brown](#) to register.

For further information about the optical observatory, please visit the [observatory website](#).

DIARY DATES 2011

Monthly Meetings of the Nottingham Astronomical Society

Our programme for this year is shown below. Don't forget to check our website:
www.nottinghamastro.org.uk

for the latest information about the Society's meetings and for further details about the talks and speakers.

Our meetings are held on the **1st THURSDAY** of the month, at the British Geological Survey, Keyworth, Notts. NG12 5GG
Doors open at 7:30pm for 8pm start.

Thursday, 3rd February 2011

Members' Evening (Visitors welcome)

with members' **Astronomical Photographs**, a short talk by Dr Roy Gretton, NAS Vice President, entitled "**Astrophotography with a Compact Camera**" and an **Astro Quiz**

Thursday, 3rd March 2011

Dramatic lecture : "**A Jupiter Odyssey**"

Andrew Lound

Thursday, 7th April 2011

Talk: "**Backyard Telescopes and Observatories**"

Dr Roy Gretton

Vice President, Nottingham Astronomical Society.

Thursday, 5th May 2011

Talk: "**Genesis – The Birth of a Star**"

Paul Money FRAS

Thursday, 2nd June 2011

Talk: "**Herschel - Seeing the Stolen Starlight**"
(what the Herschel Space Telescope is showing us about the hidden side of the Universe)

Dr Loretta Dunne

School of Physics and Astronomy
University of Nottingham

<p style="text-align: center;">Thursday, 7th July 2011</p> <p>Talk: “ Gamma Ray Bursts – A Cosmic Detective Story ”</p> <p style="text-align: center;">Dr Andrew J. Norton Department of Physics and Astronomy The Open University</p>
<p style="text-align: center;">August 2011 - Summer Break - No Meeting</p>
<p style="text-align: center;">Thursday, 1st September</p> <p style="text-align: center;">Members’ Evening (visitors welcome) - Topics to be arranged</p>
<p style="text-align: center;">Thursday 6th October</p> <p>Talk: “ Journey to the Aurora of Jupiter ” The 2018 NASA/ESA Double Mission to the Jupiter System</p> <p style="text-align: center;">Dr Nigel Bannister Department of Physics and Astronomy University of Leicester</p>
<p style="text-align: center;">Thursday 3rd November 2011</p> <p style="text-align: center;">2011 Annual General Meeting</p>
<p style="text-align: center;">Thursday 1st December 2011</p> <p>Dramatic Lecture : “ Fire from the Sky - the Tunguska Incident ”</p> <p style="text-align: center;">Andrew Lound</p>

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 website:

www.nottinghamastro.org.uk

NAS Journal e-mailing list

To register for your monthly e-mailed copy of the NAS Journal, just e-mail

info@nottinghamastro.org.uk

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

Small Advertisements

Telescope for sale

Meade 2080 8-inch f/10 Schmidt-Cassegrain with field tripod and wedge. Reflex sight, 6mm, 12.5mm, 25mm and 32mm eyepieces, 2X Barlow, 0.4X telecompressor, two 90° erecting prisms; 45° roof prism. All in excellent condition in fitted trunk/case. Offers to 0115 937 6333 or rockvision@btinternet.com (Keyworth)

Mike Sumbler

FOR SALE

Vixen single-axis (Right Ascension) drive motor and hand controller to fit Great Polaris or GP-DX equatorial mount.

Also battery case for use with the above.

£20

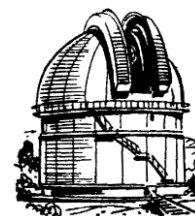
Email the Editor: roygretton@hotmail.co.uk

NAS Members may submit private advertisements for inclusion free of charge in the Journal. Please email the Editor.

NOTTINGHAM ASTRONOMICAL SOCIETY

Founded in 1946 for all interested in astronomy
Affiliated to the British Astronomical Association
Member of the Federation of Astronomical Societies

Registered Charity No. 1066645
Member of the Society for Popular Astronomy
Supporter of the Campaign for Dark Skies



Membership application and Gift Aid declaration

Title:

Full name:

Full home address:

Postcode:

Telephone:

e-mail address:

Subscription rate:	Full	£25.00	(year)	£12.50	(half year)
	Concession	£12.50		£6.25	
	Partnership	£37.50		£18.75	

Concession = under-18 / full-time student / unemployed and receiving benefits
Partnership = two members living together as a couple at the same address

I wish my subscriptions to be eligible for Gift Aid **Yes / No**

Gift Aid declaration

(HMRC reference XR32048)

I want Nottingham Astronomical Society to treat all subscriptions and donations that I make from the date of this declaration as Gift Aid donations, until I notify you otherwise.

I pay an amount of UK Income Tax and/or Capital Gains Tax at least equal to the tax that Nottingham Astronomical Society reclaims on my donations in the appropriate tax year.

Signature:

Date:

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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Joe Sowerby

Dorothy Sowerby

Kevin Greally

David Anderson

Meetings

Our meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August) 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 2011

Full	£25
Concessions	£12.50
Joint rate for partners living at the same address	£37.50

Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. 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 info@nottinghamastro.org.uk or speak to any NAS committee member at one of the regular monthly meetings. A membership application form is inside this issue of the Journal.

The Nottingham Astronomical Society

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