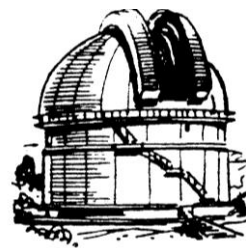


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# Journal

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## Nottingham Astronomical Society

January 2011

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- Sky Notes for January
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**Thursday, January 6<sup>th</sup>**

at the

**British Geological Survey  
Nicker Hill, Keyworth**

**8 pm (doors open at 7.30pm)**

Tonight we welcome

**Professor Mike Merrifield**

of the School of Physics and Astronomy  
University of Nottingham

who will be speaking on

**“21<sup>st</sup> Century Telescopes”**

**The Committee wishes all members and friends of the Society  
a very happy and prosperous New Year**

Some astronomical highlights to look forward to (weather permitting)  
in 2011 are:

- A very favourable return of the Quadrantid meteor shower on the night of January 3<sup>rd</sup> – 4<sup>th</sup> (see further details under Sky Notes)
- A partial solar eclipse, visible from Britain at sunrise on January 4<sup>th</sup> (see further details under Sky Notes)
- Opposition of Saturn on April 4<sup>th</sup>, with the planet about 34 degrees above the southern horizon
- A total lunar eclipse, partially visible from Britain at moonrise on June 15<sup>th</sup>
- Opposition of Jupiter on October 29<sup>th</sup>, with the planet about 50 degrees above the southern horizon

# Sky Notes

## January 2011

Compiled by Roy Gretton



Earth will be at perihelion (its closest approach to the Sun) at 6.30 pm on January 3<sup>rd</sup>, when the two bodies will be 147,106,000 km apart.

### PHASES OF THE MOON

New Moon occurs on January 4<sup>th</sup> at 9am  
First Quarter occurs on the 12<sup>th</sup> at 11.30am  
Full Moon occurs on the 19<sup>th</sup> at 9.20pm  
Last Quarter occurs on the 26<sup>th</sup> at 1pm

This month the Moon is closest to Earth on the 22<sup>nd</sup>, and furthest from Earth on the 10<sup>th</sup>.

### PARTIAL SOLAR ECLIPSE, January 4<sup>th</sup>

There will be a partial eclipse of the Sun, visible across Britain as the sun rises on January 4<sup>th</sup>. The eclipse begins at 7.02am, more than an hour before sunrise. Maximum eclipse will be at 8.15am, when approximately 60 percent of the Sun will be hidden behind the Moon. The eclipse ends at 9.35am, when the Sun will be about 8 degrees above the southeastern horizon.

### THE PLANETS

**Mercury** is a morning object throughout January. It will be difficult to observe, being low above the southeastern horizon in the twilight sky before dawn.

**Venus** is a brilliant object (at magnitude  $-4.4$ , easily the brightest of the planets) at an altitude of nearly 50 degrees above the southeastern horizon before dawn as January commences. At this stage it will appear as a thick crescent through a telescope. It will reach greatest western elongation on the 8<sup>th</sup>, when it will be 47 degrees from the Sun, and rising at 4.15am.

**Mars** is unobservable this month.

**Jupiter** continues to be a bright object in the southwest after sunset, although the planet is now far past its best for observation. By the end of the month will be setting less than 5 hours after the Sun, and its apparent diameter will have shrunk below 36 arcseconds (compared with almost 50 arcseconds in late September 2010).

**Saturn** is a morning object in the constellation of Virgo. By the end of January it will be rising at 1 a.m., and will be due south at 4.45am. Saturn's equatorial diameter is 16 arcseconds, while the visible ring system is 40 arcseconds across.

**Uranus** is a magnitude 5.9 object in the constellation of Pisces. As January begins it is half a degree (one Moon's width) to the north of Jupiter, and therefore very easy to locate with binoculars.

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

## **METEORS**

The **Quadrantids** are due to put in a very favourable appearance this year, as the Moon is New on the date of their maximum activity. The best time to observe them will be on the night of **January 3<sup>rd</sup> – 4<sup>th</sup>**, with peak activity expected between midnight and 1am. The radiant of this shower, in northern Boötes, is circumpolar. Quadrantids tend to be blue or yellow in colour, and we may get over 100 of them per hour at maximum (if we are very lucky!)

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## **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](http://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](mailto:info@nottinghamastro.org.uk)

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

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## **Small Advertisement**

### **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](mailto:rockvision@btinternet.com) (Keyworth)

Mike Sumbler

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

## DIARY DATES 2011

### Meetings of the Nottingham Astronomical Society

Our programme for the coming months is below. Don't forget to check our website:  
[www.nottinghamastro.org.uk](http://www.nottinghamastro.org.uk)  
for the latest information about the Society's meetings and observing sessions.

#### Thursday 6<sup>th</sup> January 2011

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

Talk: "**21<sup>st</sup> Century Telescopes**"

**Prof Mike Merrifield**

School of Physics and Astronomy  
University of Nottingham

#### Thursday 3<sup>rd</sup> February 2011

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

**Members' Evening**

with members' Astronomical Photographs and a Quiz

#### Thursday, 3<sup>rd</sup> March 2011

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

Talk: "**Discovering New Worlds**"  
**Andy Lound**

#### Thursday, 7<sup>th</sup> April 2011

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

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

#### Thursday, 5<sup>th</sup> May 2011

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

Talk: "**Exodus: the Life and Death of Stars**"  
**Paul Money**

**Thursday, 2<sup>nd</sup> June 2011**  
British Geological Survey, Keyworth  
8.00pm (Doors open 7.30pm)

**Programme to be announced**

**Thursday, 7<sup>th</sup> July 2011**  
British Geological Survey, Keyworth  
8.00pm (Doors open 7.30pm)

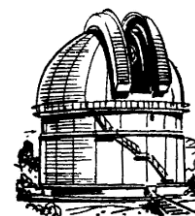
**Members' Evening**

If you know of anyone who is willing to give an astronomy or science-related talk at one of our monthly meetings, please let the Secretary (or any committee member) have their contact details

# 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:**

<b>Subscription rate:</b>	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

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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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email: [b.chacksfield@bgs.ac.uk](mailto:b.chacksfield@bgs.ac.uk)

**ORDINARY COMMITTEE MEMBERS:**

**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 1<sup>st</sup> January. Half-price subscription is charged if joining after 1<sup>st</sup> 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](mailto: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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