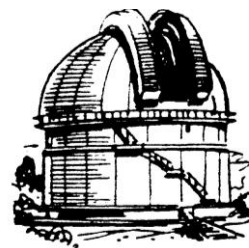

Journal

of the

Nottingham Astronomical Society

June 2014



Inside this issue

- Sky Notes for June
- NAS e-Services
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- Membership application form

Thursday, June 5th
British Geological Survey
Nicker Hill, Keyworth
8 pm (doors open at 7.30pm)

Tonight we welcome

Paul Hyde

who will be speaking on

**“Practical Radio Astronomy
for Amateurs”**

RECENT NEWS STORIES ON THE WEB

Follow these links for interesting current news:

Camelopardalids Fail to Materialise?

<http://www.skyandtelescope.com/astronomy-news/observing-news/first-reports-camelopardalid-shower-disappoints/>

Tidal effects on the shape of the Moon, studied from orbit

<http://www.nasa.gov/content/goddard/nasa-missions-let-scientists-see-moon-s-dancing-tide-from-orbit/>

Massive Wolf-Rayet star goes supernova

<http://www.sciencedaily.com/releases/2014/05/140521133520.htm>

New Martian Double-Crater

<http://www.skyandtelescope.com/astronomy-news/new-double-martian-crater/>

Four Billion-Year-Old rock from ancient Protocontinent

<http://www.sciencedaily.com/releases/2014/05/140529112057.htm>

Images of flickering light display on Saturn, captured by the HST

<http://www.nasa.gov/content/goddard/hubble-sees-flickering-light-display-on-saturn/>

Sky Notes

June 2014

Compiled by Roy Gretton



All times are given in British Summer Time

PHASES OF THE MOON

First Quarter	9:39 pm on June 5 th
Full Moon	5:11 am on June 13 th
Last Quarter	7:39 pm on June 19 th
New Moon	9:08 am on June 27 th

This month the Moon is closest to the Earth on the 15th, and furthest on the 30th.

THE PLANETS

Although the sky is never truly dark this month, a clear evening will give us a very pleasing naked eye view of three bright planets, Jupiter, Mars and Saturn (from west to east). Other than their brightnesses, the most obvious differences are in their colours, with Mars distinctly orange, and Jupiter the closest to white.

Mercury begins the month as a magnitude +1.4 evening object, but only 6 degrees above the northwestern horizon when the Sun has sunk 12 degrees below, so it is a challenging object to spot with the naked eye. Binoculars are probably the best aid when attempting to find it. As June progresses, Mercury moves steadily in toward the Sun, reaching inferior conjunction on the 19th.

Venus is a brilliant magnitude -3.9 morning object, but very low in the northeast as June begins, so not well placed for UK observers.

Mars, in the constellation of Virgo, is still well placed for evening observation, being due south at sunset as the month begins. However its apparent diameter has shrunk considerably since opposition, and it will be less than 10 arcseconds across by the end of June.



Looking SSW at midnight
in the middle of June

Jupiter, in the constellation of Gemini, is still prominent in the west after sunset at the start of June, although it will have disappeared from view by midnight. By the end of the month it will be only 24 days away from conjunction with the Sun, bringing the current memorable apparition to an end.

Saturn, in the constellation of Libra, will be undergoing retrograde (westward) motion throughout this month. It will be shining at magnitude +0.2, with the diameter of the ring system more than 41 arcseconds. The north pole of the planet is tilted toward us at more than 21 degrees, providing a magnificent view of the rings. Saturn's largest and brightest satellite, Titan, will be due north of the planet on June 2nd and again on the 18th.

Uranus, in the constellation of Pisces, rises at 3 am as June begins, making observation extremely difficult as dawn approaches.

Neptune is a morning object in the constellation of Aquarius, rising at about 2 am as June begins.

METEORS

June is not a promising time for observing meteors, unless they happen to be particularly bright ones. The **Ophiuchids** turn up this month, but their activity is very weak.

NOCTILUCENT CLOUDS

Noctilucent clouds are pale blue filamentary clouds, formed about 50 miles above the Earth's surface, far above the normal clouds we associate with the weather. They are best observed in June and July (from the northern hemisphere), becoming visible when illuminated by the Sun when it is well below the horizon. They are still poorly understood, but their "electric blue" appearance is quite distinctive. If you wish to see noctilucent clouds, look toward the north or northwest on a clear evening after 10.30 pm. You might like to try imaging them with a digital camera; in which case use a tripod, and find the best exposure setting by trial and error.

The Nottingham Astronomical Society: E - SERVICES

Whether or not you are a NAS member, you can keep up to date with details of the Society's meetings and other events by visiting the NAS website: www.nottinghamastro.org.uk

NAS on Facebook

You are welcome to connect with other members and friends of the NAS on Facebook by going to: <http://www.facebook.com/nas.org.uk>

NAS Journal e-mailing list

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

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

DIARY DATES 2014

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 information about the talks and speakers.

Our meetings are held on the **FIRST THURSDAY** of the month,
at the British Geological Survey, Keyworth, Notts. NG12 5GG

doors open at 7:30pm for 8pm start.

Thursday 5th June

Practical Radio Astronomy for Amateurs

Paul Hyde

Thursday 3rd July

Phoenix from the Ashes – the Origin of the Chemical Elements

Prof Mike Edmunds

Thursday 7th August

Summer Break - No meeting

Thursday 4th September

Members' Evening – Non-members welcome – Topics to be arranged

Thursday 2nd October

The Latest on the Sun

Dr Lucie Green

Thursday 6th November

2014 Annual General Meeting

Thursday 4th December

**Into the Cosmic Ocean
*The Dream of Travel to the Stars***

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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CAMPAIGN FOR DARK SKIES

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Barrie Chacksfield

ORDINARY COMMITTEE MEMBERS:

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 2014

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

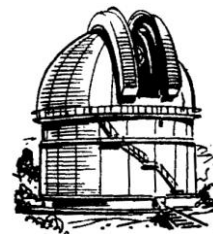
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

If you would like more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary secretary@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

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.

NOTTINGHAM ASTRONOMICAL SOCIETY



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Affiliated to the British Astronomical Association
Member of the Federation of Astronomical Societies

Registered Charity No. 1066645
Member of the Society for Popular Astronomy
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Membership application and Gift Aid declaration

Title:

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

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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.

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Date: