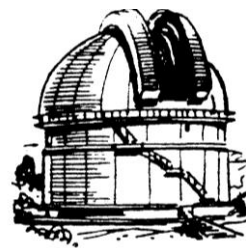

Journal

of the



Nottingham Astronomical Society

October 2014

Inside this issue

- Sky Notes for October
- NAS e-Services
- Diary Dates
- Advertisement
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- Membership application form

Thursday, October 2nd

British Geological Survey

Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight we welcome

Dr Lucie Green

who will be giving us

“The Latest on the Sun”

RECENT NEWS STORIES ON THE WEB

Follow these links for interesting current news:

Rosetta to attempt comet landing on November 12th

<http://www.universetoday.com/114873/esas-rosetta-mission-sets-november-12th-as-the-landing-date-for-philae/>

Earth's water is older than the Sun

<http://www.sciencedaily.com/releases/2014/09/140925141226.htm>

Smallest exoplanet ever found to have water vapour

<http://www.sciencedaily.com/releases/2014/09/140924135020.htm>

The MAVEN spacecraft returns its first observations from Mars

<http://www.astronomy.com/news/2014/09/maven-spacecraft-returns-first-mars-observations>

Hubble snaps what looks like a young galaxy in the local universe

<http://www.astronomy.com/news/2014/09/hubble-snaps-what-looks-like-a-young-galaxy-in-the-local-universe>

Complex molecule isopropyl cyanide found in a giant molecular cloud 27,000 light-years away

<http://www.sciencedaily.com/releases/2014/09/140926213634.htm>

NASA chooses American companies to transport U.S. astronauts to the ISS

<http://www.astronomy.com/news/videos/2014/09/nasa-chooses-american-companies-to-transport-us-astronauts-to-space-station>

Sky Notes

October 2014

Compiled by Roy Gretton



All times are given in British Summer Time unless otherwise stated

British Summer Time ends at 2 am on October 26th. Clocks should be put back one hour at this time.

PHASES OF THE MOON

First Quarter	8:33 pm on October 1 st
Full Moon	11:51 am on the 8 th
Last Quarter	8:12 pm on the 15 th
New Moon	10:57 pm on the 23 rd
First Quarter	2:48 am GMT on the 31 st

This month the Moon is closest to the Earth on the 6th, and furthest on the 18th.

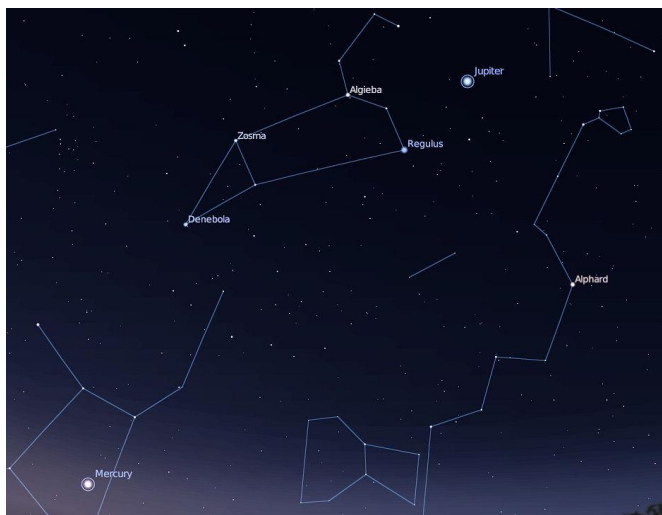
THE PLANETS

Mercury begins the month as an evening object, moving in toward the Sun and passing through inferior conjunction on October 16th. Thereafter it moves rapidly into the morning sky to give a good apparition in the last week on the month. On October 31st Mercury will be 20 degrees from the Sun and 15 degrees above the southeastern horizon at sunrise. So, if you are an early riser, look for the -0.5 magnitude planet from about 6 am GMT as October ends.

Venus disappears from the morning sky this month as it heads toward superior conjunction on October 25th.

Mars continues to fade and to move closer to the Sun in the evening sky, making worthwhile observation almost impossible.

Jupiter, close to the border between Cancer and Leo, is an unmistakable object in the eastern sky for early risers. By the end of October it will be shining at magnitude -2.1 , and its equatorial diameter will have increased to more than 36 seconds of arc.



Looking southeast
at 5:45 am
on October 30th

Saturn, in the constellation of Libra, is rapidly fading into the sunset glow as it moves toward conjunction with the Sun on November 18th. It does, however, have one more trick to show us, as it will be occulted by the Moon (in daylight, as the Sun is setting) in the late afternoon of October 25th. If you are planning to observe this, it is essential that you take precautions to ensure that direct sunlight doesn't enter your equipment. The Moon will be a thin crescent, just under two days old, and only 12 degrees above the horizon as the occultation begins, soon after 5pm **BST**. Saturn will emerge from behind the Moon about an hour later, but by then it will be less than 5 degrees above the horizon, so you will have to be very lucky to see it.

Uranus is well placed for observation this month, as it reaches opposition on October 7th, when it will be about 44 degrees above the southern horizon at 1 am **BST**. It is to be found in the constellation of Pisces, shining at magnitude +5.8 and having an angular diameter of 3.6 arcseconds.

Neptune is also well placed for observation, being due south about 11 pm, in the constellation of Aquarius. Its magnitude is +7.9, and its diameter a tiny 2.3 arcseconds.

METEORS

October's main shower is the **Orionids**, which are fast-moving meteors with a tendency to leave trails that can remain visible for a second or two. This year their maximum activity (up to 25 events per hour) occurs between October 21st and the 24th. Conditions this year are very favourable, with New Moon occurring on the 23rd. The radiant doesn't rise until after 10 pm, so don't expect to see much activity before this time.

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 2014-2015

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 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***

Andrew Lound

Thursday 8th January

“It's Time for Astronomy!”

**Dr Roy Gretton
*Vice President, NAS***

Advertisement

Meade DS10" Reflector

Imported from the US in 1983.

Manufacturer's specification:

10" Reflector. Null-figured, diffraction limited Pyrex parabolic primary mirror and matching (2.60" M.A.) 1/10-wave flat elliptical secondary; 67 toothed rack-and-pinion focuser at convenient observing position; Kellner 25mm (46x) eyepiece; Sonotube 12" I.D x 46" long, sealed and attractively Zolaton coated; all metal, precision-machined Equatorial Mount, with ultra-smooth nylon bearings and 1" solid steel shafts; rock-solid, low profile pier and tripod legs, locks on both axes.

Additional items:

Meade OR 9mm eyepiece

Weights for use on equatorial mount

Rings for use on an EQ5/6 mount

Meade Spotting Scope with 9mm eyepiece

Storage bag

New laser collimator

Original manual

The mirrors were re-silvered by Orion Optics in 2013

More information and photos - tony@raban.plus.com. (Nottingham)

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

REPRESENTATIVE:

Barrie Chacksfield

Email: darkskies@nottinghamastro.org

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

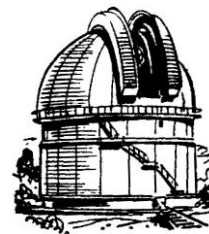
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

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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Registered Charity No. 1066645
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Supporter of the Campaign for Dark Skies

Membership application and Gift Aid declaration

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Subscription rate:	Full	£25.00	(year)	£12.50	(half year)
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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: