



Nottingham Astronomical Society January 2007

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Thursday 4th January at the British Geological Survey Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight is a

MEMBERS' EVENING

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

ASTRONOMICAL HIGHLIGHTS OF 2007

There will be a total eclipse of the Moon on March 3rd, with totality lasting about an hour and a quarter.

Venus will be a bright Evening Star during the spring.

Mars will be well-placed for observation near the end of the year, with opposition occurring high in the constellation of Gemini on Christmas Eve.

Our three best meteor showers, the Perseids (August), the Leonids (November) and the Geminids (December) are all very favourable for observation this year.

Sky Notes 2007 January





Earth will be at its closest point to the Sun (perihelion) on January 3^{rd} . This month the Moon is closest to Earth on the 22^{nd} , and furthest from Earth on the 10^{th} .

We are now at, or very close to, the current sunspot minimum, and many observers are reporting days with a total absence of spots.

PHASES OF THE MOON

Full Moon occurs on the afternoon of the 3rd
Last Quarter occurs shortly after midday on the 11th
New Moon occurs before dawn on the 19th
First Quarter occurs in the late evening of the 25th

THE PLANETS

Mercury reaches superior conjunction on January 6th, and will appear in the evening sky later in the month. By January 31st, the planet may be found, preferably through binoculars, low in the south-southwest at dusk.

Venus is becoming increasingly easy to locate, low in the southwest as darkness falls. By the end of January it will be visible for two hours after sunset. The planet was behind the Sun (on the part of its orbit furthest from Earth) last October 27th, and since then has been moving toward us, and slowly pulling away from the Sun as viewed from Earth. It is currently showing a broad gibbous phase when viewed through a telescope. This phase will diminish steadily through the spring, and after June 9th the planet will appear as a bright crescent as it begins to move between Earth and Sun.

Mars appears as a very small and relatively faint (magnitude 1.5) object in the morning sky this month, low down in the constellation of Sagittarius.

Jupiter is a morning object close to the border of the constellations of Scorpius and Ophiuchus. At this southerly declination the planet is not well-placed for telescopic observation from the UK, but is easy to spot due to its brightness.

Saturn remains the best-placed planet for observation, a few degrees west of Regulus, the brightest star in the constellation of Leo. It is now rising in mid-evening, and by midnight will have achieved a good elevation in the southeast. The planet

brightens to magnitude zero by the close of the month. Meanwhile, the ring system is steadily narrowing its angle of presentation toward us.

Uranus in the constellation of Aquarius, and **Neptune** in the constellation of Capricornus, are both very difficult to observe this month.

METEORS

The Moon interferes badly with our view of the **Quadrantids** this month. They reach their peak activity just before midnight on the evening of January 3rd, when a rate of 100 events per hour is possible.

VARIABLE STAR: Algol

There are five minima of the dark-eclipsing variable Algol (Beta Persei) visible from the UK this month. They occur on January 5th (5.20 am), the 8th (2.05 am), the 13th (11 pm), the 16th (7.40 pm) and the 31st (4 am). The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of about five hours.

DIARY DATES 2007

Meetings of the Nottingham Astronomical Society

Our programme for the coming months 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 4 January 2007

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

Members' Evening

Thursday 1 February 2007

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

The Leonid Meteors

Dennis Ashton FRAS

Thursday 1 March 2007

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

Light Pollution

Dr Darren Baskill University of Leicester

REMINISCENCES OF CHILDHOOD

by Roy Gretton

I first became interested in astronomy when I was about nine years old. One of the earliest influences was a BBC radio serial called *Journey Into Space*, which ran for three series in the 1950s. It was broadcast on Monday evenings at 7.30. The very first programme was transmitted on 21st September 1953, and the 13 episodes lasted almost until Christmas. The story was set in 1965 and concerned the first expedition to the Moon. The commander of the spaceship was one Jet Morgan (played by Andrew Faulds, who later became a Labour MP). The writer, Charles Chilton, as well as producing an absorbing story, did much to educate the listener about conditions in outer space, and this stimulated my interest in the subject.

Knowing my interest, my elder sister bought me a book called *Space Travel* (I forget the name of the author). It contained a lot of stuff about the theory of rockets and how to escape Earth's gravity, as well as chapters on the planets. I soon realised that my primary interest was in astronomy rather than space travel, and one of my earliest books on the subject was J B Sidgwick's *Introducing Astronomy*, from which I learned the patterns of the constellations. I remember an exciting winter around 1955 (when I was about 11) when, as the months progressed, I waited for each new constellation to come over the eastern horizon so that I could identify it from the charts in the book. We lived in Woodthorpe at that time, and even though this was a built-up area on the edge of a major city, the sky was much, *much* darker than it is today. Faint objects could easily be seen. How sad that we have lost so much to light pollution! How impoverished we now are: able to look at images of the cosmos on our computer screens, but unable to appreciate the glory of it over our own heads.

In 1956 I acquired *Frontiers of Astronomy* by Fred Hoyle, quite an advanced book for a 12 year-old, and in 1957, with the help of my father, I built my first telescope, a six-inch Newtonian reflector. The Dobsonian mount hadn't been invented then, unfortunately, for the mounting was far from satisfactory by modern standards. (The 'scope went through various incarnations over the years, until finally in the 1990s it was indeed given a Dobsonian mount).

In 1957 I saw my first two naked eye comets: Arend-Roland in April, and Mrkos in August. The former of these coincided with the very first *Sky at Night* programme. Incidentally, do you know why Patrick Moore's programme was called *The Sky at Night* rather than *The Night Sky* (which sounds less clumsy)? My guess is that it was because there was already a BBC programme with that title. It was a monthly talk by a Dr J G Porter of the Royal Greenwich Observatory, broadcast on the Home Service or Third Programme between 1946 and 1961. (Dr Porter was also President of the BAA in the late 1940s). So the BBC needed a different name for Patrick Moore's show.

I also wonder how many people of my generation remember that for a while Patrick Moore had a second astronomy programme on BBC TV? It was called *Seeing Stars* and was screened for 15 minutes in the children's television slot between 5 and 6 pm. It was aimed at youngsters who would normally be in bed when the *Sky at Night* went out. However it was soon discontinued.

From late 1957 it became possible to observe the early artificial satellites (the Soviet ones at first, because the early American satellites had orbits that didn't bring them over Britain). One of the easiest to observe was the third stage of the Sputnik III

rocket, which appeared to wink as it crossed the sky, due to the rotation of the elongated vehicle.

In 1958 I observed my first aurora, easily seen from Woodthorpe: bright beams of light advancing from the north, together with red and green patches. The first total lunar eclipse that I can recall occurred in May 1958. I remember walking out with my parents that evening to watch it. As Dr Porter had already informed us on *The Night Sky*, the Moon was low down so we didn't need to crick our necks.

The first solar eclipse I can recall occurred one lunchtime in 1959. I hurried home from school and was able to take a photograph of it (which I still have somewhere), then dashed back for the afternoon lessons. The next solar eclipse I observed was early one morning in January 1961. The sky was clear, and as the Sun rose it was about 90% obscured. By then I had left school and had started work as a chemical apprentice, and remember getting permission to go on to the roof of the factory in Nottingham to take a brief look.

But by then my childhood was over...

Could *you* write a piece for the Journal? Something of general interest to readers – it doesn't have to be specifically about astronomy, but preferably have some relation to the subject.

Why not jot down your thoughts and email them to the Editor?

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, dust cover, 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

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

(please tick appropriate box)

☐ Full Adult £25

☐ Junior (17 years or under) £12.50

☐ Concession (full time student, UB40, etc.) £12.50

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 "Joint this Group".

| Nottingham Astronomical Society |
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| The Nottingham Astronomical Society, and/or the Editor accept no responsibility for any errors that may occumulation. 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. |
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| 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 |

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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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.