

Comets - but none nearly in the Southern Hemisphere - may quickly disappear

THE

NOTTINGHAM ASTRONOMICAL SOCIETY

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COMMENT

The Nottingham Astronomical Society is now in its second year of existence, and it is timely to consider the progress made since its inauguration on May 24th, 1946.

Regular monthly meetings have been held, and some excellent talks on various subjects given, but, as confirmed by the enjoyable visit to Rugby School Observatory last month, the lack of practical means of undertaking astronomical activities is felt acutely.

The Society's greatest need is an observatory equipped with at least a moderate-sized telescope which can be used freely, not only by keen observers for serious work, but by all members for general 'sight-seeing' and for familiarising themselves with the various heavenly objects.

To a beginner, mere discussion indoors is not to be compared with actually seeing the heavenly bodies and items of interest with his or her own eyes.

Unfortunately, the provision of a telescope, its accommodation and a suitable site, involves a financial outlay quite out of reach of the Society's modest funds. We can but hope that the future progress of the Society will make this greatly desired amenity a reality.

In the meantime, a move to make the monthly meetings more attractive is the loan of an epidiascope (a combined projector for lantern slides and sketches, illustrations, etc. on paper) for the next meeting on July 3rd. Mr. Lane Hall will be present to explain the various pictures shown.

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THE SKY IN JULY

The Julian Date for July 0 is 243 2367. For other dates add the date.

The Sun

Solar rotation No. 1254 began on June 6th. Rotation No. 1255 begins on July 4th and rotation No. 1256 begins on July 31st.

Spot activity continues and several groups are usually visible simultaneously. Two inch discs with the East-West line determined as carefully as possible showing the position of each group, and a note of the total number of spots in all groups are still required.

Twilight continues all night through most of the month.

The Moon

Moonlight interferes at the beginning and end of the month.

Full Moon on July 3rd and August 2nd.

There is an interesting occultation of Mars in the early hours of the 15th. Disappearance is July 14 at 15 hr. 23 m. GMAT. and re-appearance at 16 hr. 16 m. GMAT. Moon rises at 12 hr. 45 m. GMAT., a slender waning crescent.

Planets

Only Jupiter is prominent, very low in the evening sky. Mars can be seen before dawn low in the East in Taurus near the Hyades (do not confuse with the nearby reddish Aldebaran, Alpha Tauri) but disc is very small, $4\frac{1}{2}$ seconds arc diameter.

Venus is in the morning twilight.

(Contd.)

Comets

These have all remained faint except one in the southern hemisphere, and are beyond reach of small instruments.

Fixed Stars

The Hercules, Cygnus, Lyra, Aquila, Delphinus, Sagitta area of the sky should be learned with an atlas. It is a rich Milky Way area needing some practice in an emergency for quick identifications. M 11 Scuti, M 13 Hercules, and M 92 Hercules are nebulous objects resembling moderately bright comets in binoculars.

The examination of this group can be carried over into August with its darker evening skies and the end of Double Summer Time on August 10th.

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THE AURORA OF APRIL 17th, 1947

Observed at Newark

by

W.E.FOX

An observation of the Sun earlier in the day revealed only one small spot about 15 degrees past the central meridian, and as Aurorae are usually associated with large Sunspots, it was a surprise to find, after sunset, the first appearance of a large display present in the Northern sky.

Centred about 12 degrees west of Polaris was a glowing arch of silvery light which, by 20 hr. 45 mins. GMT., had reached a height of 30 degrees to the crown and 20 degrees to the underside, while its length was about 120 degrees.

The height of the arch was visibly increasing and by 21 hr. 5 mins GMT. had become double, the higher component reaching the zenith.

The most intense light was at the east and west ends of the arch where "streamers" were observed flashing upwards towards the zenith.

The colours noted at this time were pale green, yellow and a curious silvery tint.

At 22 hrs. GMT. the maximum activity was reached, when the whole arch from east to west became "alive" with red, yellow and greenish streamers, all converging on a point about 5 degrees south of the zenith. This appearance continued for about 15 minutes, then great patches of light appeared southwards and westwards, gradually fading until about 23 hrs. GMT.

Up to 24 hrs. GMT. the glow in the northern sky remained intense but afterwards it gradually faded until all trace was lost at 01 hr. 30 mins.

During the early part of April a great Sunspot crossed the disc but this was not in any way connected with this display. Three pencil sketches are given of this spot, and it is interesting to compare its size with that of the Earth, shown as a small circle on the same scale on each sketch. (Note: These sketches were shown at the May meeting).

The Director of the Aurora section of the B.A.A. expressed the opinion that any ejection of electrified particles from the large group must have missed the Earth, while a stream ejected from the small spot observed on April 17th (as described in the first sentence of this paper) must have scored a direct hit, causing the great Auroral display we fortunately saw.

It will be obvious that we can expect to see aurorae at any time, so those who are interested should keep a watch on every clear night shortly after sunset.

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