

JOURNAL of the
ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

May, 1975

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What's Up? The Solar System as seen from Ipswich, May, 1975.

SOLAR SECTION.

The Sun will be in the constellation of Aries and Tauris this month. On May 11th there will be a partial eclipse of the Sun visible from North Africa, Europe, the British Isles, Greenland, and the extreme north of Canada, Northern Asia and the north-western part of Alaska.

The eclipse begins at 05h 08m U.T. and ends at 09h 25m U.T. At maximum eclipse it has been calculated that 0.86 of the Sun's diameter will be obscured by the Moon. Geocentric conjunction in right ascension is predicted at 07h38m37s.89.

Do not forget to add 1hour to correct for B.S.T. Any drawings from projected images would be gratefully received, 'spode' permitting.

Heliographic Co-ordinates at noon U.T.

	P.	Bo	Lo		P	Bo	Lo
4th May	-23.6°	-3.8°	98.3	20th May	-19.6°	-2.1°	246.7°
8th "	-22.8°	-3.4°	45.4	24th "	-18.3°	-1.6°	193.8°
12th "	-21.8°	-3.0°	352.5	28th "	-17.0°	-1.1°	140.8°
16th "	-20.8°	-2.5°	299.6				

Rotation 1628 starts May 11.93d.

PLANETARY SECTION.

Mercury.

Mercury is an evening star low above the W.N.W. horizon at the end of civil twilight, it's magnitude is decreasing from -1.0 to -1.6. On the evening of the 13th a thin crescent moon 2.5 days old will be 10° - 11° east of Mercury as seen with the naked eye.

Greatest elongation (22°) occurs on May 17th 00hrs. U.T.

Venus.

Venus remains a brilliant object in the evening sky in Taurus/Gemini, magnitude -3.7. On the evening of the 24th Venus will be close to Saturn and shortly after Venus has set it will pass 3° North of Saturn. By the end of the month Venus will be 4° south of Pollux.

Mars.

It is still a morning star mag. +1.0 rising around 02h30m U.T. in the middle of the month, its elongation reaching 61° west by the end of the month. The Moon will be near Mars on the morning of the 6th.

JUPITER.

Jupiter becomes a morning star mag -1.7 from the middle of the month onward and should be visible above the eastern horizon just before the beginning of civil twilight. (i.e. centre of Sun's disc 6° below the horizon) The Moon will be near Jupiter on the 8th.

SATURN.

Saturn is still very conspicuous in Gemini, mag. +0.4 now being joined by Venus. Some splendid photographs would possibly be obtained here. On the evening of the 15th a crescent Moon will be near the Planet.

LUNAR SECTION.

Moon Phases:

Lunation 648

New Moon	11th May	07h 05m U.T.
First Quarter	18th "	10h 29m U.T.
Full Moon	25th "	05h 51m U.T.
Last Quarter	1st June	23h 23m U.T.

Apogee 5th May 10h U.T. (404,820 kilometers)

Perigee 20th May 20hrs U.T. (368,300 kilometers)

Total Eclipse of the Moon.

A total eclipse of the Moon will occur on May 25th which will be visible from many parts of the world but only the beginning of the eclipse may be seen from Britain a few minutes before the moon sets and this will be seen from.....

...south west counties. So if you are on holiday down in Cornwall you may see part of the penumbral eclipse around 03hrs U.T.

Transient Lunar Phenomena.

There seems absolutely no doubt from the extent of observations received by the B.A.A. Lunar Section that there was major T.L.P. activity in Aristarchus at the latter part of February. An interesting theory which seems to be very coincidental with the recent T.L.P. activity which was put forward by Charles Radley recently, this was that Full Moon and Perigee occurred together, Full Moon was 26th Feb 01h 15m, Perigee 25th Feb 22hrs U.T. a difference in time of 3hrs 15mins. The combined gravitational influences of the Sun and the Earth acting upon the Moon may have attributed to the outbreak of T.L.Ps. Charles's theory certainly seems too coincidental to be ignored.

Occultations:

1st May 195B Sgr. 02h22.9m U.T. Reappearance, mag 7.0/7.1 Sep. o.1"
 18th " 19 Sex 20h40.3m U.T. Disappearance, mag 5.9.

COMET BRADFIELD, 1975d

Discovered on March 12th a diffuse 9th magnitude object in Cetus now fading and setting by the end of the evening twilight.

COMET KOHOOTEK 1975c.

Yes, Dr. L. Kohoutek does it again! Feb. 9th a diffuse 9th magnitude object in Taurus which has now faded to 16th magnitude.

METEOR SECTION. - for further information contact director, Mr. S. Flory.

The Eta Aquarids or May Aquarids will be visible this month maximum on May 5th. The shower is predicted as rather favourable, the normal limits of the shower are from 1st May to 8th May. Z.H.R. predicted at 21. The Radiant will rise about 1h 40m U.T. and transit the meridian at 07h 35m U.T. on the 5th. The Moon which will be 24 days old will rise at 01h 54m U.T. (for B.S.T. add 1hr)

Forthcoming events.

The B.A.A. Lunar Section are holding a meeting in London on 17th May at the rooms of the Swedenborg Society, planned to start at 1.45B.S.T.

An international Astronomical Youth Conference will be held in Gt. Britain next year from 17th July 1976 to 31st July. It will be held at Burwell House, Burwell, about 10 miles from Cambridge. If you are interested in attending or can help with the organisation please contact Mr. C. Radley, [REDACTED], [REDACTED], Wherstead, Ipswich.

THIS SPACE TO LET.

If YOU have any odd items such as articles of astronomical interest jokes, poems, cartoons, short articles in fact anything of astronomical interest you would like inserted in future journals PLEASE send them to the editor.

The Falkau Star Atlas.

The Society has now received the Falkau Star Atlas which had been on order for nearly three months.

The Atlas consists of 303 star charts printed black on white sheets giving stars down to the 13th magnitude. (The limit of the 10" O.G. at Orwell Park is supposed to be able to go down to the 14th mag) A photo-copy of all the maps together with the plastic overlay grids are now in the Observatory Library while the master copy set is being kept by the Librarian, Mr. T. Cardot.

Each chart covers a field of $10^{\circ} \times 10^{\circ}$ which equals 100 square degrees of sky with an overlap on each map of about 1° . The scale of $\frac{1}{4}$ mins of arc equals 1mm gives a field of 18cm x 18cm while the charts in the $\pm 90^{\circ}$ declination zone are 1cm wider than the rest in order to ensure an adequate overlap.

In the right hand corner of each chart are its serial number and the abbreviation for the principal constellations with right ascension and declination of the field center. The cross at the center of the chart represents this position for the equinox 1950.0 determined by means of reference stars in the Smithsonian Astrophysical Observatory Star Catalogue.

Mr. T. Cardot has compared the star charts with the resolving power of the 10" O.G. at Orwell Park and found that the charts cover stars well within the grasp of our telescope. It is hoped that these charts will enable us to do more serious work with the telescope as the Norton's Star Atlas, although excellent for a small telescope and for reference, would not give us the necessary information regarding stars position when looking for faint objects.

When using the charts one should never rely on them alone when on the trail of celestial objects marked on the charts. The copies of the charts in the observatory, together with the master copies held by Mr. Cardot, are not free from printing plate defects of the copying machines. Also the original maps are not free from spots. The charts cannot replace the original photographic plates, for the charts, apart from showing spots and dust during the printing process, also show planets, minor planets and meteors which were around in the sky when that area of sky was being photographed.

The conscientious observer before shouting "Eureka!!" will therefore consult all identification aids within reach such as other star catalogues and atlases before announcing a detected new phenomenon.

R.M. Cheesman.

May, 1975.

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

PROGRAMME FOR MAY 1975.

TUESDAYS from 8p.m. Double Stars Section.

Director. Mr. D. Bearcroft, [REDACTED], Ipswich, 'Phone [REDACTED]

13th May

27th "

WEDNESDAYS Solar, Lunar & Planetary Section.

Director. Mr. R.M. Cheesman, [REDACTED], Ipswich.

from 7p.m. 21st May

From 8-30p.m. 14th May

THURSDAYS, Variable Stars Section from 8p.m.

Director. Mr. T. Cardot, [REDACTED], Ipswich, 'Phone [REDACTED]

and Mr. D. Barnard, [REDACTED], Ipswich, 'Phone [REDACTED]

1st May

8th "

15th "

22nd "

29th "

FRIDAYS. from 8p.m. Lunar & Planetary Section.

Directors. Mr. J. Deans, [REDACTED], Capel St. Mary

'Phone GT. WENHAM [REDACTED]

and Mr. K. Dye, [REDACTED], Ipswich, 'Phone [REDACTED]

9th May

23rd "

FRIDAYS from 8.30pm Nebular & Faint Objects Section.

Directors. Mr. M. Stow, [REDACTED], Ipswich

and Mr. R. Hazelwood, [REDACTED], Ipswich, 'Phone [REDACTED]

2nd May

16th "

SATURDAY. From 10.00p.m. Meteor Section.

Director Mr. S. Flory, [REDACTED], Ipswich, 'Phone [REDACTED]

3rd May. AQUARIID METEOR COUNT. Meet at entrance to Foxhall Stadium
at 10p.m. irrespective of weather conditions.