

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

AUGUST 1985



The Orwell Park Observatory 10 inch Astronomical Telescope at Necton near Ipswich

1. The Annual F.A.S. Convention at Herstmonceux is on Saturday 5th October. Tickets cost £2.50 plus transport costs. Interested members please contact Roy Gooding.
2. A field trip for the observation of the Perseids and the graze occultation on 12th August is being arranged. This will be a long weekend, camping in the Cromer West Runton area. Interested members should contact Eric Sims.
3. Open Week this year will be held on the four nights of November 13th to 16th inclusive. The principal aim will be giving the general public the opportunity to observe Halley's Comet.
4. The most recent F.A.S. newsletter contained an article about the new Data Protection Act 1984 and its relevance to societies holding membership lists on computer files. Our Society holds a list of payed-up and honorary members on computer file for the purpose of producing address lables for members' newsletters and a yearly list of members for internal society use only. According to the F.A.S. article, such purposes are exempt from registration though permission from members is required. A negative responce will be assumed to be a 'yes'.
5. An open committee meeting will be held on Saturday, 3rd August in the club room from 7.30 p.m. All members welcome.

Constellations (all times G.M.T.)

At 22.00 in mid month. The spring constellations of Bootes and Corona Borealis are sinking to the West, while the principal summer constellations of Cygnus, Lyra and Equila are due south. The autumn constellation of Pegasus is rising in the east.

Sun Rises approx. between 04.20 - 05.10
Sets approx. between 20.00 - 19.00

Moon ☾ 8th ● 16th ☽ 23rd ○ 30th

Occultations

Graze occultation on 12th. See society notices.
23rd ZC 2371 mag. 4.9 D 20hr. 53.6m.

Mercury Inferior conjunction on the 7th
Greatest western elongation on the 28th (18°)
Rising about $1\frac{1}{2}$ hours before sunrise.

Venus Visible in morning sky, rising about 3 hours before sunrise. Mag. -3.5

Mars Visible in morning sky, rising about $1\frac{1}{2}$ hours before sunrise in mid month.

Jupiter	Opposition on the 5th.	Mag. -2.4	
Saturn	Sets at about 22.00 hours	in mid month.	Mag. 0.7
Uranus	Sets at about 23.00 hours	in mid month.	Mag. 5.8.
Neptune	Sets at about 00.30 hours	in mid month.	Mag. 7.7

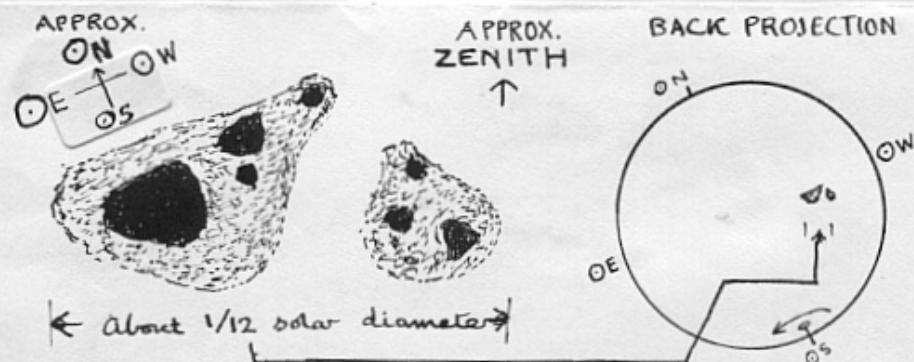
R. Gooding

The 'Quiet' Sun Briefly Awakes... Or Is This The Start Of A New Cycle R Adams

After what I believe to have been quite a long period of inactivity - several months with little or no sun spot features - I was suprised to see what proved to be a 'naked eye' group on the sun on 24th April 1985. The seeing was not marvellous at 09:20 UT that morning but I made a drawing, an enlarged copy of which is shown below. The drawing was made by simply copying a projected image from my 2.1 inch refractor.

To check groups for 'naked eye' status, I use over exposed black and white film negatives. I keep a small selection of these ready, of different densities, though usually one 'standard' pair is suitable for clear weather (or clear patches between clouds). The pair is held so one looks at the sun through the the two layers of film. NOTE do not use this technique for observing the sun through the telescope always use the projection method.

This group was still strong on 30th April when near to dissappearance round the suns limb. It was still visible but much depleted on 17th May after a trip round the back of the sun. Meanwhile, on 13th May another large spot also visible to the 'naked eye' was observed near the centre of the disk. These spots so close to the sun's equator indicate a new cycle has started or at least is not far away.

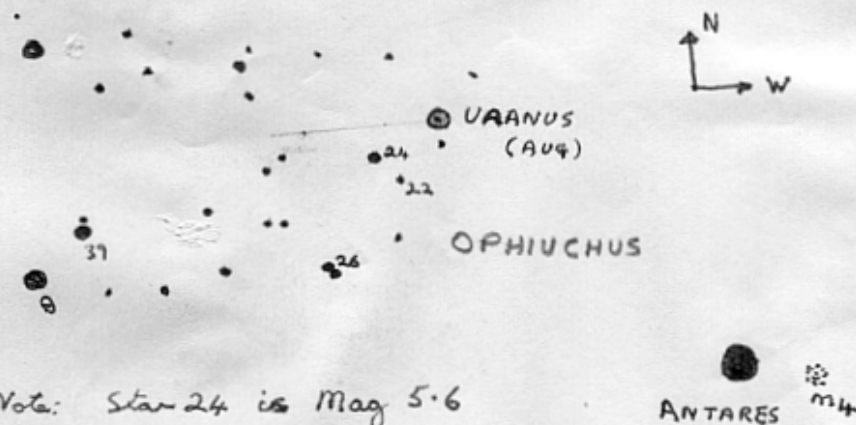


Uranus and Neptune in August D B Payne

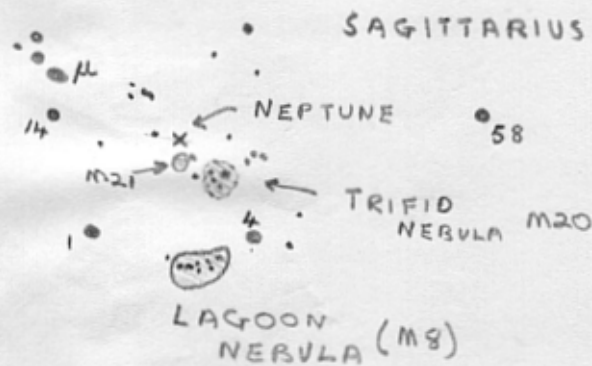
August could be a good time to observe those remote gas giants of the solar system, Uranus and Neptune. Both planets are very low down (-22 degrees declination) in the south after sunset and good clear skies will be required (let's hope there will not be too much stubble burning!).

Uranus has an unusual axial tilt of 98 to the plane of it's orbit and will therefore at different positions in it's path round the sun, present to the Earth, a south pole followed by an equatorial view, followed by a north pole and then a further equatorial view. In it's present orbital position It is presenting a south pole to the Earth and we will have to wait about 20 years for the next full equatorial view. Uranus presents a 5.5 magnitude disk of 4" diameter and should be easily detectable in binoculars ,given good skies. A moderate magnification will be required (100-150x) with at least a 3 to 4 inch telescope inorder to definitely determine the disk.

Neptune is much fainter at magnitude 8 and has only a 2.3" diameter disk. Although it should be visible in binoculars at this magnitude it's low southerly position will almost certainly mean a telescope is required to observe it. It will also require at least a 4.5 inch or larger telescope with 200x or more magnification to definitely determine the disk.



Note: Star 24 is Mag 5.6



A quick guide to the observation of Halley's Comet:-

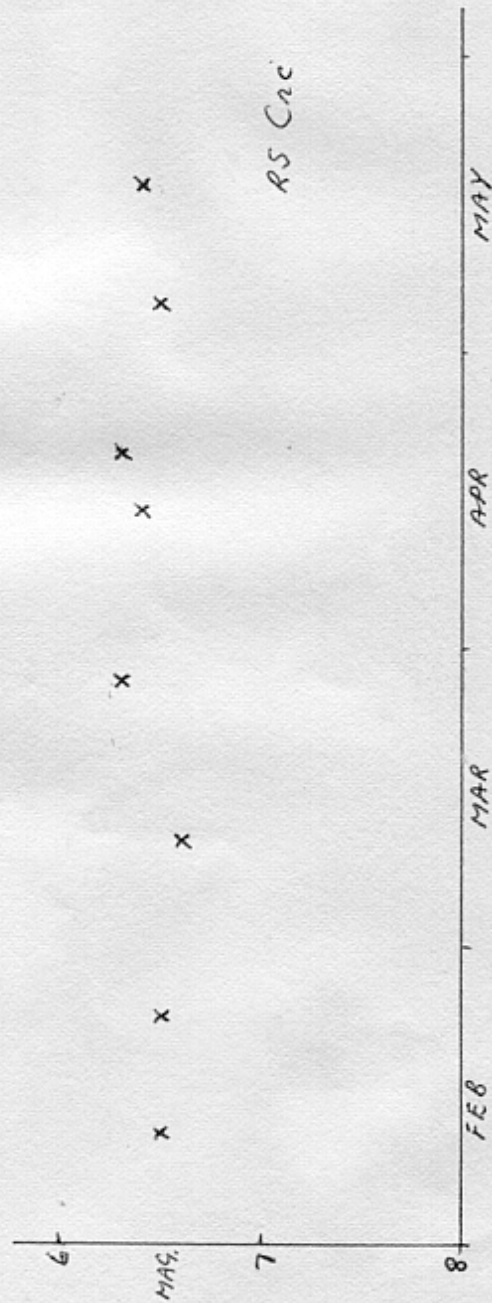
Date	Comet's Magnitude	how to observe	Notes
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1985			
Aug. 1st.	13.8	large telescope	Near Orion at dawn.
Aug. 31st.	12.7	telescope	-
Sept. 15th.	12.0	telescope	-
Oct. 1st.	11.1	telescope	-
Oct. 15th.	10.2	telescope/ binoculars	In Taurus; Start of tail; 150 million miles away.
Oct. 31st.	8.9	binoculars	-

Date	Comet's Magnitude	How to observe	Notes
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1985			
Nov. 15th.	7.4	binoculars	In Taurus.
Nov. 27th.	6.4	binoculars	In Aries; Nearest to Earth; 60 million miles away.
Dec. 15th.	6.2	binoculars	-
Dec. 31st.	5.9	naked eye	Tail should be observable.
1986			
Jan. 15th.	5.1	naked eye	Near Jupiter & crescent; Moon in Aries.
Jan. 30th.	4.2	too near sun to see.	-
Feb. 9th.	-	-) Comet at other) side of Sun;) observed by) space-probes;) tail at it's) max. length.
Feb. 15th.	-	-	

VARIABLE STAR OBSERVATIONS

by Mike Nicholls.

This light curve is that of the semi-regular variable star RS Cancrri from February to May this year. Although the light range is supposed to be between 5.5 and 7.0 magnitude, this star does not seem to have varied much over the given period of time. A look at the journal of August 1984 will show that it can vary sometimes. However, it is not unknown for a semi-regular variable to alter its characteristics occasionally. It is unfortunate that this star can only be observed for a short period of time, as cancer moves quite rapidly into the twilight. This is quite an easy variable to observe because it is easy to locate, and can be followed using binoculars throughout its range.



PROGRAMME FOR AUGUST

MONDAYS from 8pm 5, 12, 19, 26,	DOUBLE STAR & PLANETS SECTION Mr N Taylor [redacted], Farnlands Trinley Mr T Gillan [redacted], Felixstowe	Tel: Fel. [redacted] Tel: Fel. [redacted]
WEDNESDAYS from 8pm 7, 14, 21, 28	NEBULEA & FAINT OBJECTS SECTION Mr M Cook, [redacted], Ipswich Mr D Payne, [redacted] Wickham Market.	Tel: Ips. [redacted] Tel: W.Mkt [redacted]
THURSDAYS from 8pm 8, 22	GENERAL OBSERVATION SECTION Mr R A Lobbett, [redacted], Felixstowe. Mr J Hood, [redacted], Ipswich.	Tel: Fel. [redacted] Tel: Ips. [redacted]
FRIDAYS from 8pm By Arrangement With Directors	VARIABLE STAR SECTION Mr R Gooding, [redacted], Ipswich Mr M Nicholls, [redacted] Capel St. Mary.	Tel: Ips. [redacted] Tel: Ips. [redacted]

1985 COMMITTEE

CHAIRMAN	D Payne [redacted], Wickham Market, IP13 OSD	Works: [redacted] Homes: [redacted]
VICE CHAIRMAN	R Cheesman [redacted], Corringham, Essex SS17 9BU	Works: [redacted] Extn: [redacted]
SECRETARY	R Gooding [redacted], Ipswich IP1 6AE	Works: [redacted] Homes: [redacted]
TREASURER	M Nicholls [redacted], Capel St. Mary, Ipswich, IP9 2EX	Works: [redacted] Homes: [redacted]
MEMBERSHIP SEC.	D Barnard [redacted], Ipswich, IP4 5PP	Homes: [redacted] Works: [redacted]
P.R.O.	D Barnard [redacted], Ipswich, IP4 5PP	Homes: [redacted] Works: [redacted]
MAINTENANCE	M Cook [redacted], Ipswich, IP4 5QA	Homes: [redacted] Works: [redacted]
FUNCTIONS	E Sims [redacted], Ipswich, IP1 4HA	Homes: [redacted]
LIBRARIAN	E Sims	