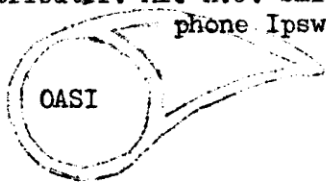
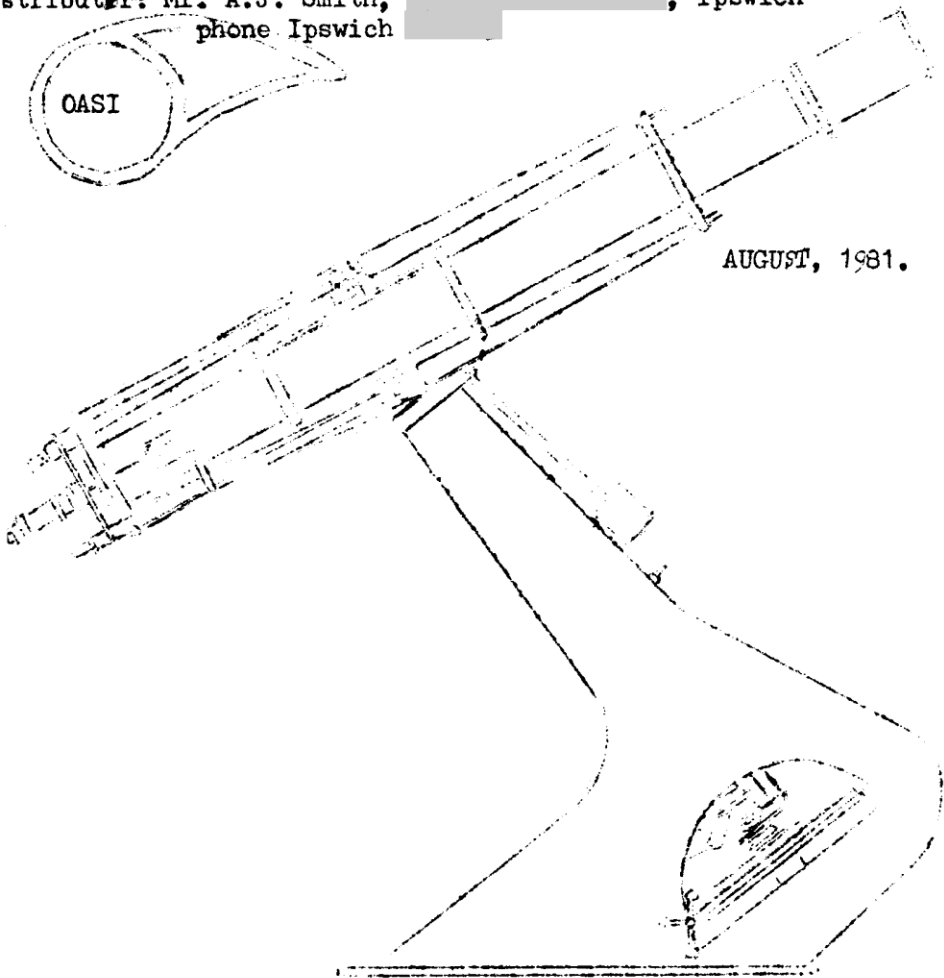


JOURNAL OF THE ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

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AUGUST, 1981.



The Orwell Park 10 inch Astronomical Telescope  
at Nacton, near Ipswich.

THE NIGHT SKY AS SEEN FROM ORWELL PARK DURING AUGUST:

by Paul Burt.

The unmistakable Cygnus dominates the zenith area this month, surrounded by Pegasus to the east; Delphinus, Sagitta and Aquila to the south; Lyra to the west; and Draco and Cepheus to the north. To the south-east, Aquarius is visible above the horizon by late evening, with Capricornus slightly lower in the sky, just south of it. The western sky contains Pegasus, Hercules and Bootes, with Ursa Major dominating the north-west, while over to the north-east Perseus and Cassiopeia are becoming prominent. Finally, the Milky-Way is at it's glorious best at this time of year, sweeping right across the sky through the zenith.

THE SUN:

Sunrise is at 04h 20m at the beginning of the month, changing to 05h 10m at month-end. Sunset changes from 20h00m to 18h50m. The sun moves from Cancer to Leo during the month.

THE MOON: - Phases:-

First Quarter	7d 19h 26m	Last Quarter	15d 16h 37m
Full Moon	22d 14h 16m	New Moon	29d 14h 43m

Occultations:-

<u>Star</u>	<u>Phase</u>	<u>Mag.</u>	<u>Time</u>		
			<u>d.</u>	<u>h.</u>	<u>m.</u>
364	D	4.3	21	00	06.7
364	R	4.3	21	00	49.1
491	R	6.2	22	01	04.1
**498	R	6.2	22	02	11.3
*995	D	4.1	25	04	16.0

D = Disappearance R = Reappearance. Stars listed according to Zodiacal Catalog (ZC) Numbers.

\* denotes double star \*\* denotes time correct for Greenwich.

THE PLANETS:

Mercury reaches superior conjunction on the 10th and will not be visible this month.

s will be setting only an hour after the Sun, at mag. -3.4  
 will be rising nearly four hours before the Sun at mag.  
 +1.8 in Gemini.  
 eter will be setting only an hour after the Sun by month-end  
 at mag. -1.3  
 rn now becoming west of Jupiter, will be at mag. +3.2, and  
 more difficult to find than Jupiter.

Source: B.A.A. Handbook, 1981. All times are U.T.  
 (=B.S.T. minus 1 hour)

### Articles to Read:

by Paul Burt.

### Quasars expand faster than light?"

- New Scientist 25th June.

A study of the recent evidence suggesting that some distant  
 o-sources defy Einstein's theory of relativity by expanding  
 er than light.

### VARIABLE STAR OBSERVATIONS

by Mike Nicholls.

The light curve on page 3 this month is that of R Leonis,  
 January to early June, 1981, when it moved into the sunset.  
 R Leonis is a member of the long period class of variables,  
 an average period of approximately 313 days. The light curve  
 has a minimum at the end of February but there is no sign of a  
 minimum.

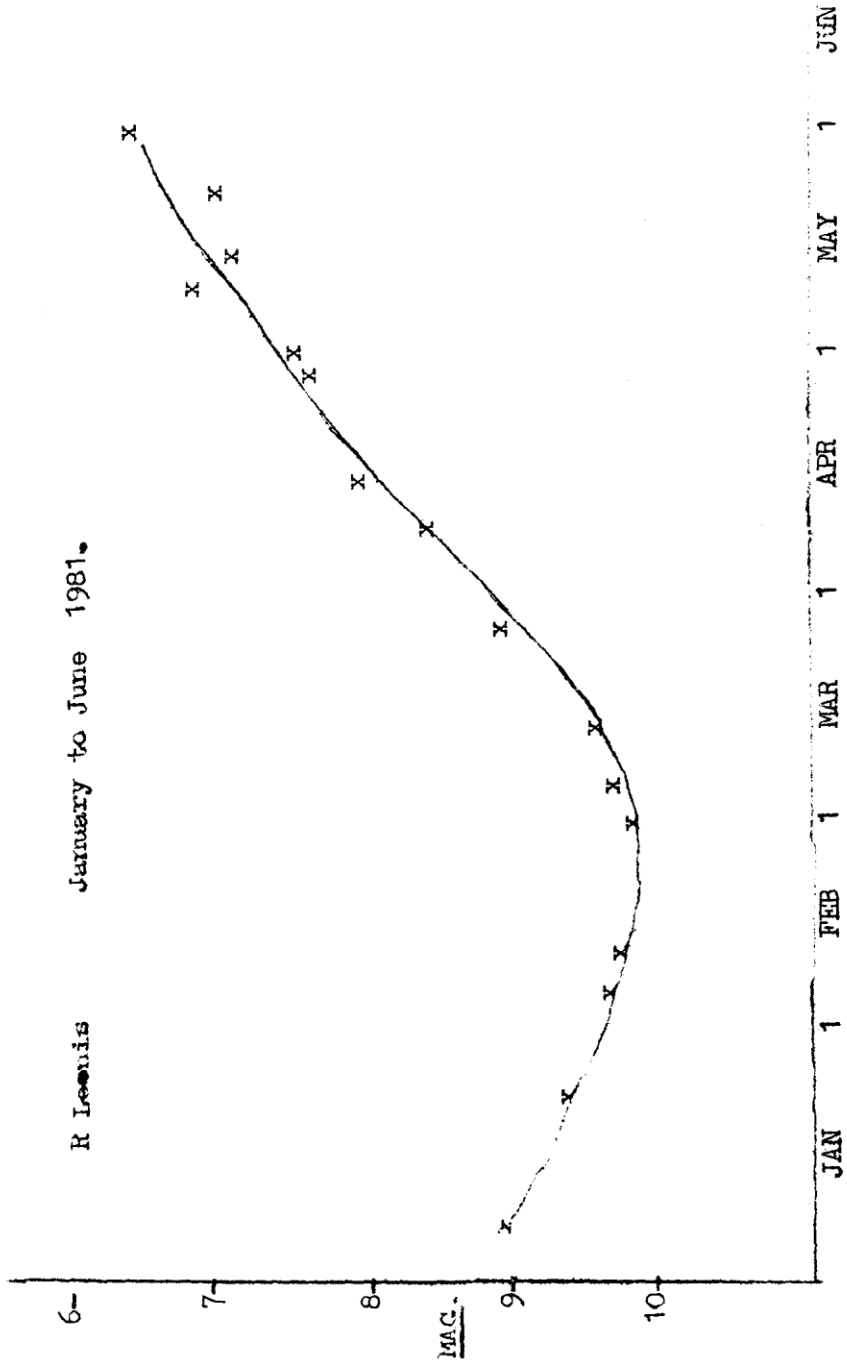
Observations were made using an 8" reflector and the 10" at  
 Mill Park.

As a follow up to the light curve of W Cygni in the June  
 Journal I have since heard from Mr. E.H. Collinson, a member who  
 is also observing W Cygni. He has observed a variation with a  
 period of around 160 days similar to mine. However, he has seen  
 nothing of the short period variations of around 20 days.

Finally a correction to the July Journal regarding the period  
 of Mira Ceti. This should read 331 days and not 312 days.

R Leunis

January to June 1981.



SOCIETY NEWS:

CHANGE OF SECRETARY:

Mr. J. Ranson has resigned as our Society's Secretary and as a member of the Committee because of extra business pressures and his place has been taken by Mr. Roy Gooding, [redacted], Ipswich.

OBSERVATORY REPAIRS:

Observatory repairs have been going quite well during the last couple of months but again nearly all the work has been done by the same people. More help is desperately needed and work will be going on at the Observatory on the advertised club nights until it gets dark

The Observatory mahogany dome is being sanded down and we hope will be re-varnished - the first revarnish in maybe a hundred years! Meanwhile, outside the observatory tower, suspended on a mountaineer's climbing harness, Colin Button is playing Spider Man while members feed him with cement so that he can re-point the observatory tower.

All this work is not only being done for the Open Day but is necessary every year to keep the observatory, tower and telescope in good condition. So if you can spare a couple of hours please come up and help.

OPEN DAY on 10th October.

On Saturday 1st August at 7.30p.m. in the Observatory we are holding a meeting specially to discuss the Open Day arrangements. Please come along and give us your support and help on the day. Many ~~thing~~ things have to be done and organised. If you can help by loaning pictures, drawings and anything of astronomical interest please give Mike Nicholls a call at [redacted], Ipswich who is co-ordinating all the displays. We have a very large hall to fill up this year and your help to fill it up with games, pictures, astronomical items etc. etc. etc. will be much appreciated.

COMMITTEE MEETING:

There will be an Open Committee Meeting to which all members are invited on Saturday 22nd August in the Observatory starting at 7.30p.m.

AURORA SECTION:

The expedition to the far north of Scotland will be leaving Ipswich on Friday August 28th or 7 to 10 days. This trip is now fully booked.

CARAVAN CLUB RALLY at Orwell Park.

Again this year Orwell Park is playing host to the Suffolk Caravan Club from Friday 28th August to Sunday the 30th. The Secretary of the Suffolk C.C. has again asked us to open up the telescope for their members to look through and as many of our members will be away on the Aurora expedition as many members as possible are asked to come up on these nights to help.

DRAW TICKETS AND POSTERS FOR OPEN DAY.

The posters advertising our Open Day together with draw tickets should be enclosed with this month's Journal. If you have not received any or would like more please contact David Barnard or any of the Committee Members.

DEADLINE FOR SEPTEMBER JOURNAL:

All articles for inclusion in the September Journal should be sent, not to arrive later than 24th August to Mr. R.M. Cheesman, [REDACTED], West Hanningfield, Chelmsford, Essex. CM2 8LQ. All items will be gratefully received.

J.HOOD broke his ankle while playing football with his boys on Friday 10th August and we wish him a speedy recovery so that he can continue his good work at the observatory.

METEOR NOTES by David Barnard.

This month there is a host of meteor activity with six showers active from our latitude.

1. CAPRICORNIDS

This shower is still active for the first half of the month with it's characteristic bright meteors. Expect a Z.H.R. of about five at the most.

2. Also for the first half of the month the DELTA AQUARIIDS are active, with it's double radiant giving a Z.H.R. of around 30 at the beginning of the month.

3. THE ALPHA CAPRICORNIDS reaches maximum on August 1st, lasting until August 25th with a Z.H.R. of 8. This shower is noted for it's abundance of yellow fireballs. Radiant 20hrs 36m, Dec.  $-10^{\circ}$ . This shower is very favourable for observation this year.
4. THE IOTA AQUARIDS is an interesting shower to observe reaching it's peak on August 6th and fading away on August 25th. This shower has two radiants, R.A. 22hrs 32m, Dec  $-15^{\circ}$  and R.A. 22hrs 04m, Dec.  $-6^{\circ}$ . Again this shower is favourable to observe
5. THE PERSEIDS is arguable one of the most spectacular showers of the year reaching maximum on August 12.5 but active until August 18th. This shower has a fair amount of bright flaring meteors with trains. The Z.H.R. is in the region of 68, the radiant is R.A. 03h 04m Dec.  $+58^{\circ}$ , although not very favourable at this time of the year due to the near full Moon around the maximum. However, observations either side of the maximum are valuable. The radiant transit is at 5.7hours U.T.
6. Finally, another shower which produces fireballs is the KAPPA CYGNIDS which reach it's peak on August 20th. The normal limits of this shower fall between August 19th and 22nd. The Z.H.R. is about 4. The radiant is R.A. 19hrs 20m and the Dec. is  $+55^{\circ}$ .

THE METEOR SECTION WILL MEET TO OBSERVE THE PERSEID'S SHOWER ON SATURDAY AUGUST 8th. The meeting place is OUTSIDE the 'Levington Ship' public House at 9p.m. irrespective of weather conditions. Everybody and anybody is welcome to come along for an hour or so.

Members observing this, or any of the showers, should send their observations direct to me at [REDACTED], Ipswich.

David Barnard.

THOUGHT FOR THE DAY:- 'Astronomy is looking up!'

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

PROGRAMME FOR AUGUST, 1981.

AT THE OBSERVATORY, Orwell Park School, Nacton.

TUESDAYS: Solar, Lunar & Planetary Section from 7p.m.

Directors Mr. J. Hood, [REDACTED], Ipswich.  
phone Ipswich [REDACTED]

Mr. J. Ranson, [REDACTED], Ipswich  
phone Ipswich [REDACTED]

4th 11th 18th & 25th.

WEDNESDAYS: Nebulae & Faint Objects Section from 8p.m.

Directors. Mr. D. Payne, [REDACTED]:  
Wickham Market, Suffolk.  
phone Wickham Market [REDACTED]

Mr. M. Cook, [REDACTED], Ipswich  
phone Ipswich [REDACTED]

5th 12th 19th & 26th

FRIDAYS: Variable Stars Section from 8p.m.

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

Mr. R.T. Hodgkiss, [REDACTED],  
Ipswich.

7th 14th & 21st.

SATURDAYS: 1st August at 7.30p.m. Open Committee Meeting to  
arrange Open Day details

22nd August at 7.30p.m. Open Committee Meeting to  
which all members are invited.

FRIDAY 28th to Wed 2nd September each night from 8p.m.

Observatory open for visitors from Suffolk Caravan Club.

All members are invited to help on these nights.

OTHER MEETINGS: METEOR SECTION . Meteor watch on Sat 8th  
to observe the Perseids Shower. 9p.m. at Levington Ship.