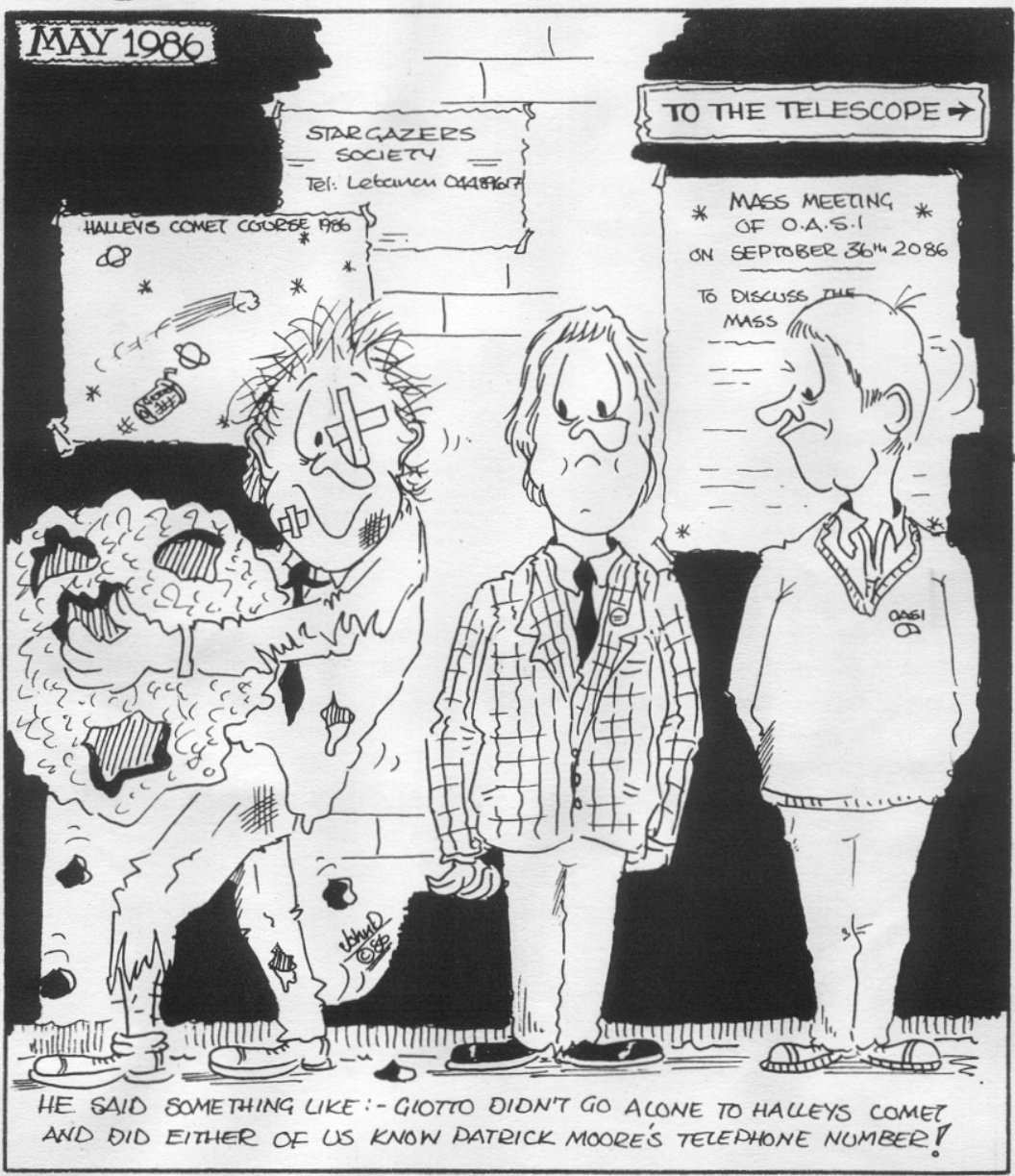


MAY 1986



1. Open Evenings

The observatory will be open to the public on Friday and Saturday 25th and 26th April from 8.30 to 11.00 p.m. with the aim of observing Halley's Comet. If you can help, please come along to the observatory on either or both of these evenings.

NIGHT SKY

Constellations (all times G.M.T.)

The constellations of Leo, Virgo, Corvus and Crater can be seen towards the southern part of the sky after sunset.

Sun Rises between 04.40 to 03.50
Sets between 19.30 to 20.07

Moon 1st 8th 17th 23rd 30th

Occultations

13th	ZC 1105	mag. 6.5	D	21hr.56.6m
19th	" 1772	" 4.0	D	22hr. 7.6m

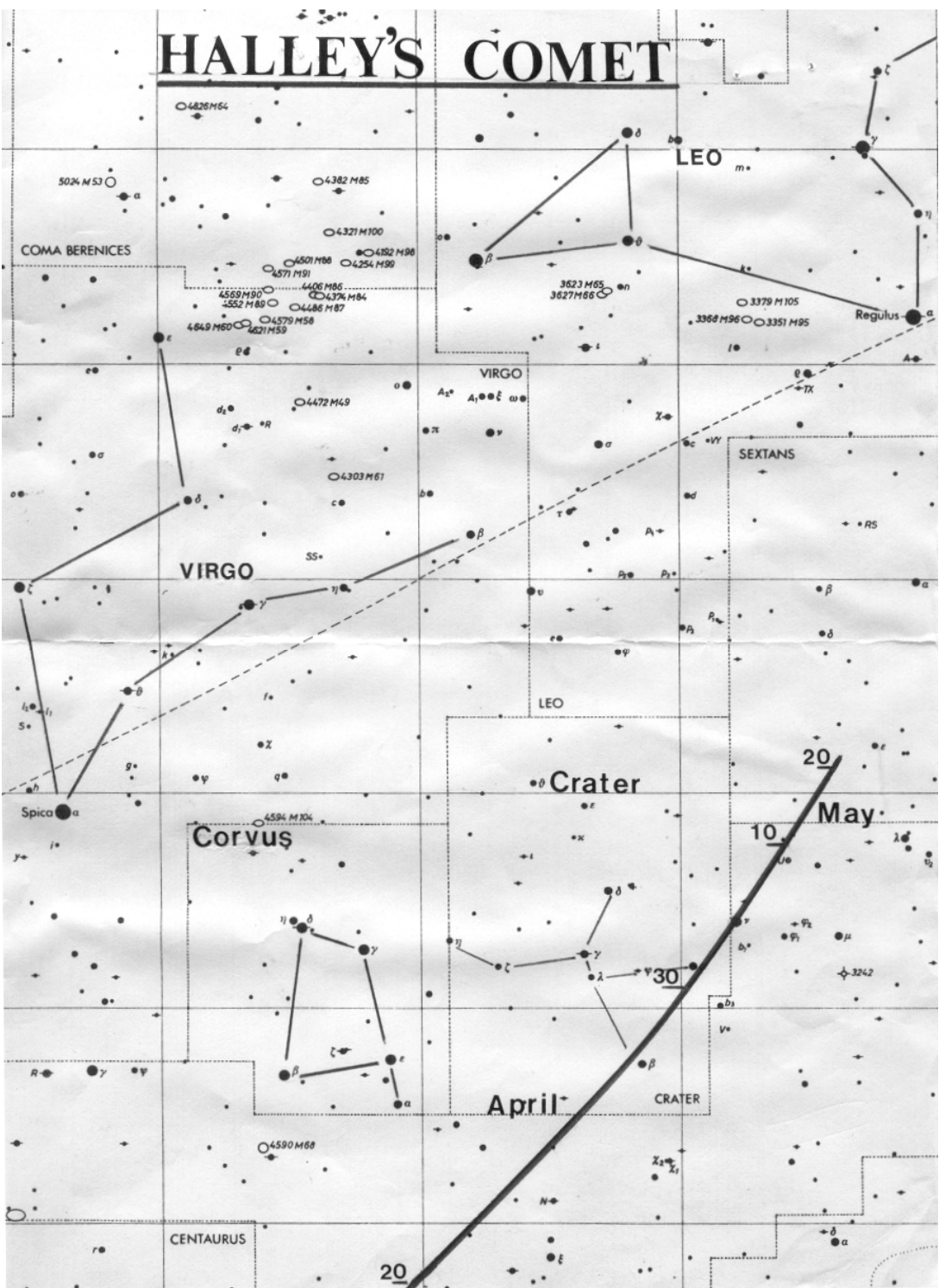
Mercury Superior conjunction on the 23rd
 Venus Bright evening sky object mag.-3.9 Sets about 2 hours after the sun.
 Mars Rises between 00.40 and 23.20 during the month mag.1.2.
 Jupiter Rises between 03.00 and 01.10 during the month mag.-2.3
 Saturn Rises before sunset by the end of the month mag.0.1
 Opposition on the 28th.
 Uranus Rises between 23.00 to 21.00 during the month mag.5.8
 Neptune Rises between 23.50 to 22.00 during the month mag. 7.7

Halley's Comet

The map on the facing page should help in locating the comet.

	<u>R.A.</u>	<u>Dec.</u>
April 20	12h 03.83	-32 47.1
30	10h 58.11	19 13.3
May 10	10h 34.96	12 24.2
20	10h 26.23	8 49.4

HALLEY'S COMET



HALLEY: LAST CHANCE OPEN WEEKEND!

D B Payne

Towards the end of April Comet Halley will travel sufficiently far north to be visible from the Northern Hemisphere. It is also possible, given the right seeing conditions, for it to be visible without optical aid and certainly to be a good binocular object. Because of the great interest shown by the public during the previous open weeks in November and December last year and the dissappointments by many of our visitors because of the poor weather conditions, we have decided to open the observatory for two nights on:

Friday 25th April, 8:30pm to 11:00pm
and Saturday 26th April, 8:30pm to 11:00pm

YOUR HELP IS NEEDED
PLEASE COME ALONG

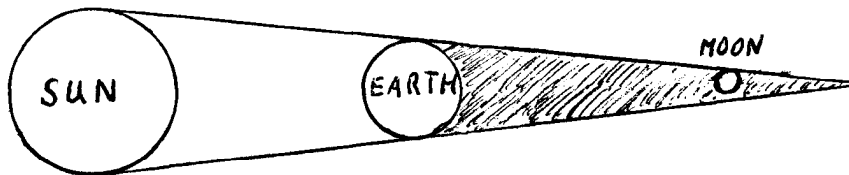
These two nights are probably the best weekend chance of naked eye observations of the comet from Britain. On these nights the comet will be due south at approximately 10:15pm BST at an altitude of about 14 degrees. This time is about 2 hours after sunset and twilight may still be affecting naked eye observations. However if the weather is fine and we have good seeing it should be an easy binocular object and hopefully a good chance to try out the Society's 10x80 binoculars. The comet should be reasonably easy to locate due west of the quadrilateral of Corvus about 12 degrees west of Epsilon.

PLEASE COME AND HELP!

ECLIPSE.

An eclipse happens when one object passes through the shadow of another.

An eclipse of the Moon occurs when the Moon passes into the shadow cone of the Earth.

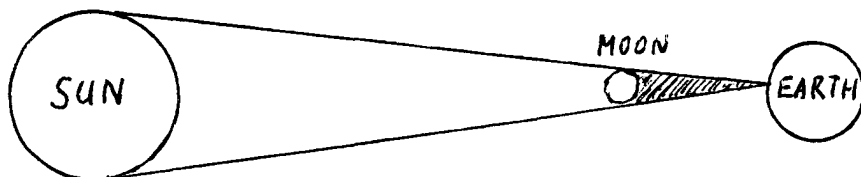


An eclipse of the Sun occurs when the Moon passes between the Earth and the Sun. The Sun is about 400 times larger than the Moon and 400 times further away. When all three are in line the shadow that is cast on the Earth only covers a very small area which means if you want to see either a partial or total eclipse of the Sun you will have to be in the right place at the right time.

A partial eclipse is when the Moon only covers part of the Sun and can be observed either through a very Dark Filter or by projecting the image on to a screen which is by far the safest method. If you look directly at the Sun with Binoculars or a telescope permanent blindness will occur.

A total eclipse is much more spectacular but of short duration. Seen from a fixed observation point the maximum duration of totality is up to about 7 mins..

As the Moon moves between the Earth and the Sun, just before and just after totality, the Sun shines between the mountains on the outer edges of the Moon giving the appearance of a curved string of bright jewels. This is known as Baily's Beads effect. Sometimes one last gap gives a final burst of Sunlight showing the Diamond Ring effect.



E. Sims

The Geocentric view of the Universe persisted from the Greek era until the middle of the sixteenth century. Indeed although the Arabs extended observational techniques and nomenclature (many of the proper names of the stars are Arabic), very little progress was made in the modelling and physical reasoning of the Universe. The Greek view of an Earth centred Universe was not challenged as it seemed right, especially to the Church, that the Earth should occupy the most important place. Then came what is now known as the Astronomical revolution

A Polish Canon. Nicolaus Copernicus (1473-1543), and a student of Greek philosophy, realised that Aristarchus's heliocentric view may well be the correct approach. He compiled a thesis to support this view but was hesitant in publishing, possibly because of his position in the Church. Copernicus envisaged the Universe as having the Sun at its' centre, with the Earth and the other planets revolving uniformly about the Sun.

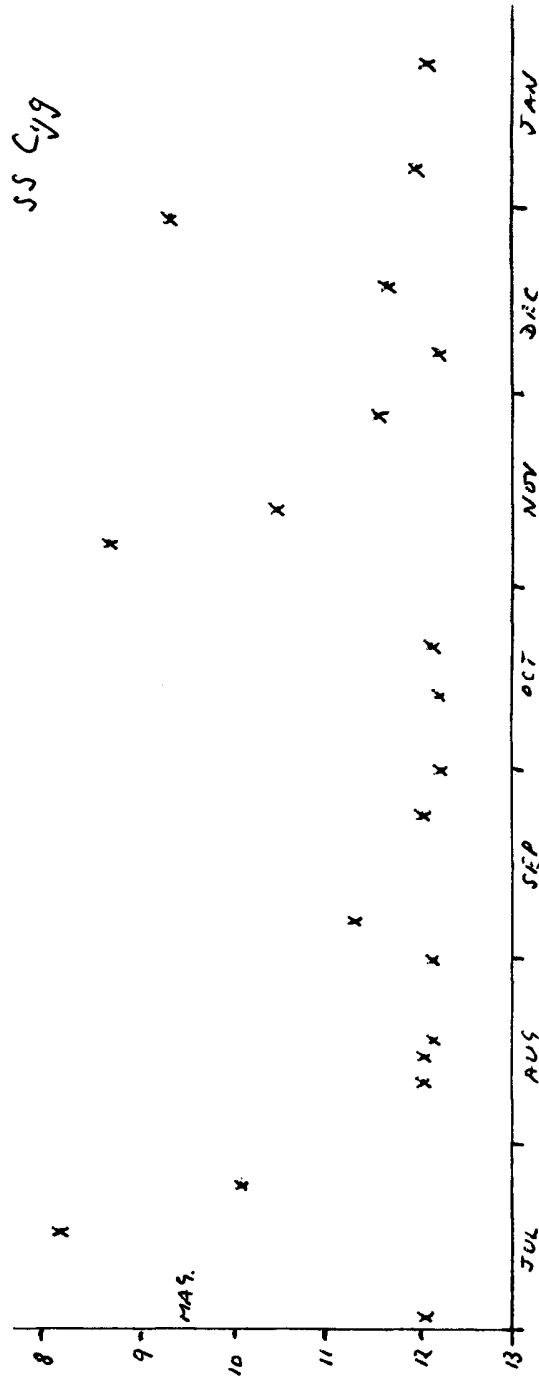
Because of the uniformity of the planetary motion, it was still necessary to include the concept of Epicycles in the model, albeit a greatly reduced number. The rotation of the stars across the night sky was then merely a natural effect of the scenery going by. Copernicus could offer no convincing proof that he was correct, only that his model was very much simpler, a fact which some quarters even held against the idea!

Copernicus was reluctant to publish his work, and only after spending 2 years with him did German Mathematician Rheticus persuade him to publish firstly a short article, and two years later (1543) the volume "On the revolutions of the celestial bodies". Copernicus died very shortly after seeing his work in print.

VARIABLE STAR OBSERVATIONS

by Mike Nicholls

This shows SS Cygni from July 1985 to January 1986. This star belongs to a class of variables known as dwarf novae. They remain at minimum brightness for most of the time, but occasionally rise to a maximum for a few days. This behaviour is caused by the interaction of the two components of a twin star system; one of which is a white dwarf. The outbursts do not occur regularly but a rough period of about 52 days has been calculated. The light curve shown here would seem to confirm this, bearing in mind that a maximum has been missed in mid September. The start of it can be seen. The light range which is normally between about magnitudes 8.2 and 12.4 is amply demonstrated. One of the most popular of all variable stars, it was observed with an 8" reflector.



PROGRAMME FOR MAY

MONDAYS from 8pm 5, 12, 19, 26	DOUBLE STAR & PLANETS SECTION Mr N Taylor [redacted], Farnlands Trimley Mr T Gillan [redacted], Felixstowe Miss M Edwards [redacted], Felixstowe	Tel: Fel. [redacted] Tel: Fel. [redacted] Tel: Fel. [redacted]
TUESDAYS from 8pm 6, 13, 20, 27	GENERAL OBSERVATION SECTION Mr N Gage, [redacted], Trimley Mr R Newman [redacted], Felixstowe Mr J King, [redacted], Felixstowe	Tel: Fel. [redacted] 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]
FRIDAYS from 8pm 2, 16, 30	GENERAL OBSERVATION SECTION Mr R A Lobbett, [redacted], Felixstowe. Mr J Hood, [redacted], Ipswich. Mr M Harlow, [redacted], Felixstowe	Tel: Fel. [redacted] Tel: Ips. [redacted] Tel: Fel. [redacted]

1986 COMMITTEE

CHAIRMAN	D Payne	[redacted], Wickham Market, IP13 OSD	Works: [redacted] Home: [redacted]
VICE CHAIRMAN	R Cheesman	[redacted], Corringham, Essex SS17 9BU	Works: [redacted] Extn: [redacted]
SECRETARY	R Gooding	[redacted], Ipswich IP1 6AE	Works: [redacted] Home: [redacted]
TREASURER	M Nicholls	[redacted], Capel St. Mary, Ipswich, IP9 2EX	Works: [redacted] Home: [redacted]
MEMBERSHIP SEC. /P.R.D	D Barnard	[redacted], Ipswich, IP4 5PP	Home: [redacted] Works: [redacted]
MAINTENANCE	M Cook	[redacted], Ipswich, IP4 5QA	Home: [redacted] Works: [redacted]
LIBRARIAN	E Sims	[redacted], Ipswich, IP1 4HA	Home: [redacted]
SOCIETY EVENTS	R Lobbett	[redacted], Felixstowe	WORK: [redacted] Home: [redacted]
F.A.S. ARTICLES	M Harlow	[redacted], Felixstowe	Home: [redacted]