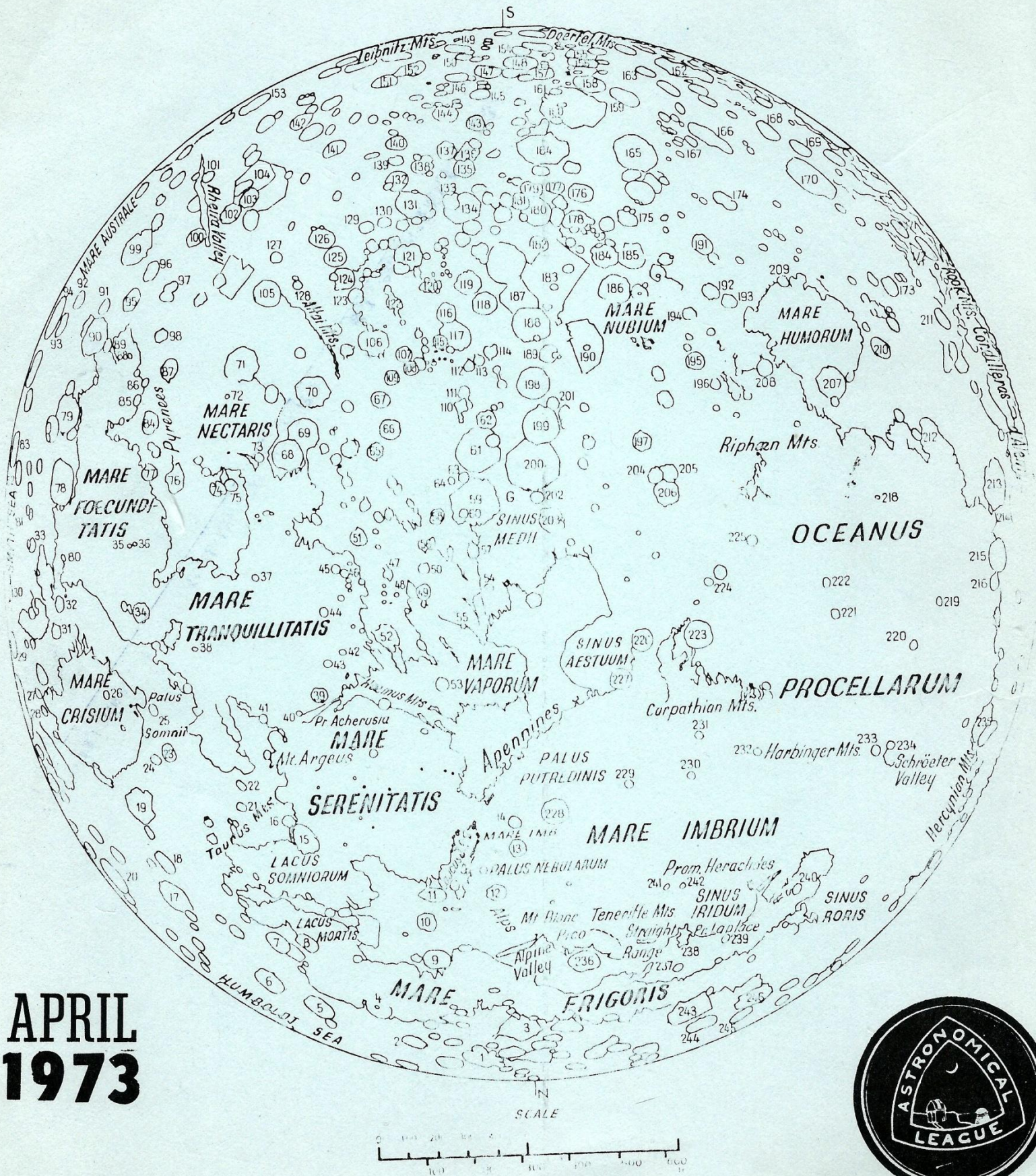


the WASP

The Journal of the Warren Astronomical Society



APRIL
1973



MARCH
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Warren Astronomical Society

APRIL

1973

Meeting Guide

MAY
S M T W T F S
1 2 3 4 5
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27 28 29 30 31

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5 Messier E CLUB E T I N G 791-8752 INFORM.	6 KALAMAZOO MEETING DETROIT MEETING	7
8	9	10	11	12 ASTRO PHOTO MEETING 771-3283 INFORM.	13 DETROIT MEETING	14
15 Palm Sunday	16	17 Passover	18	* 19 WAS GENERAL MEETING 791-8752 INFORM. SOUTH MACOMB College	20 DETROIT Good Friday GRAND RAPIDS GENERAL MEETING	21
22 Easter Sunday	23	24	25	26 OPTICS CLUB CALL FOR APPOINTMENT OR CONSULTATION 751-4115	27 DETROIT MEETING	28
29	30 OAKLAND ASTRONOMY MEETING OAKLAND UNIVERSITY					

* All at Ted Kuentz's House this month

APRIL

CONSTELLATIONS OF SPRING

In early spring, eleven 1st magnitude stars are in the sky at once. The eleven are Arcturus, Spica, Regulus, Procyon, Castor, Pollux, Sirius, Betelgeuse, Rigel, Aldebaran, and Auriga.

Each night, at the same hour, a star appears slightly to the west of its former position. Hence, stars seen in the east at 9:00 p.m., appear higher and higher in the sky at that hour as the season advances. Before April 1, spring constellations are farther to the east, and farther west after that date.

Latitude, as well as season and time of night, determines star positions. The Pole Star's height above the horizon, for example, is the same as your latitude. The seasonal maps are for about 40 degrees north latitude.

In addition to the constellations, look for a number of smaller ones. Between Gemini and Leo lies Cancer, the Crab, a constellation of 4th and 5th magnitude stars. At the center of Cancer, note the fuzzy spot. Field glasses or a small telescope bring out details of this open cluster of some 300 stars; it is Praesepe, one of the near-by clusters in our galaxy. Another large cluster is Coma Berenices, Berenice's hair. This is on a line between the tail star of Leo and the end of the big Dipper's handle. Use field glasses.

In the southern sky are the fainter Corvus, the Crow; Crater, the Cup; and Hydra, the Sea Serpent. Hydra sprawls below Leo and Virgo, the Virgin. It has one 2nd-magnitude star, the reddish Alphard. Corvus, a lop-sided square of 3rd-magnitude stars, is close to Spica in Virgo. Crater is near-by, south of Leo. It has one 3rd-magnitude star. South of Corvus is the Southern Cross.

Here is a rundown on what to find in the spring sky for beginner and advanced amateur alike.

GEMINI, THE TWINS are often considered winter stars, though they are still high in the western sky at the first signs of spring. The bright stars Castor (2nd magnitude, white) and Pollux (1st magnitude, yellow), mark the twins' heads. They are a scant 5 degrees apart, making good measuring points. Castor is a triple star, and each of its three components is a double star (six in all). The bottom stars in the Big Dipper's bowl point in the direction of Castor. A line through Rigel and Betelgeuse in Orion points to Pollux. The cluster M35 in Gemini is worth locating with glasses.

LEO, THE LION is the best known and most conspicuous of the Zodian constellations. The Sickle, which clearly forms the Lion's head, is found by following a line through the back stars of the Dipper's bowl southward. Regulus, a blue-white star, 86 light yers away, marks the base of the sickle. The pointers of the Big Dipper point in one direction to the North Star; in the other direction, to the triangle that makes up the rear of Leo. The Leonid meteors, a once-spectacular group of "shooting stars" radiate from this part of the sky in mid-November.

BOOTES, THE HERDSMAN is found by following the curve of the handle of the Big Dipper 30 degrees to the bright, orange Arcturus. The other stars in Bootes are of 3rd and 4th magnitude. Most of them form a kite-shaped figure extending close to Dipper's handle. Arcturus (magnitude 0.0), one of the few stars mentioned by name in the Bible, is a giant, about 24 times the sun's diameter, 32 light years away. Bootes is chasing the Bears with a pair of Hunting Dogs, which make a small constellation between Arcturus and the Dipper's Bowl.

CONSTELLATIONS OF SPRING (CONT>)

VIRGO, THE VIRGIN begins as a Y-shaped line of stars of 3rd and 4th magnitude extending toward Denebola, tail star of Leo. Spica ends this group; it is blue-white, 1st-magnitude star 230 light years away. The rest of Virgo is a line of three stars extending on from Spica, and a parallel line of three stars to the north. In Virgo lies a cluster of several hundred galaxies about 14 million light years away. A few of the brighter spiral nebulae can be seen with a small telescope. Follow the curve of the Dipper's handle through Arcturus to Spica.

Addresses for Telescope Dealers

Submitted by: Jim Trombly

Crystal Products Company
375 S. Ogden St.
Denver, Colorado 80209

Pacific Instruments
9766 Laurel Canyon Blvd.
Pacoima, Calif. 91331

Celestron Pacific
2430 Amsler
Torrance, Calif. 90505

Colonial Optical Co., Inc.
1954 So. La Cienega Blvd.
Los Angeles, Calif. 90034

A. Jaegers
691 Merrick Rd.
Lynbrook, N.Y. 11563

Optica b/c
4100 MacArthur Blvd.
Oakland, California 94619
(8000[↑] A.S.A. Speed films)
& Spectroscopic film

Telescopics
6565 Romaine St.
Los Angeles, Calif. 90038

Optics for Industry
1929 North Buffum St.
Milwaukee, Wisconsin 53212

Astroscopics
521 California Dr.
Claremont, Calif. 91711

"These are listings of
telescope companies I believe
you may enjoy having. They
are very new to me."

Jim Trombly

Advertisements

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12 1/2" f 6 Reflector

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Includes 12x40 & 6x35 Unitron finders

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35mm Color slides (C4-200-500ASA) developed and mounted for only 50¢; 36 exposure roll developed for only 75¢.

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I'll give you 5 pounds of coffee if you can beat my best deal.
(Note: my coffee takes 6months to a year for delivery.)

Black & white film processed & printed for only 3¢ a print.

Processing Free!

Call Frank McCullough 791-8752

For Sale; 12 1/2" Cave Reflector
Tim Skonieczny
751-2649

Fri.

4:00 - Regular Opens - Orientation

7:30 - Happy Hour! B.Y.O.B.

↓ Time for slide shows
?

OBserving at Kalamazoo Junior
Astronomer's Observatory

Sat.

9:30 - opening - First paper session

12:00 - Lunch (1972-73 eclipse Report)

1:00 - Second Session

4:00 - Star Bowl Championship

4:45 - Regional Business Meeting

6:00 - Dinner

7:30 - Informal papers

Trip to P.M.O. Soc. Obs.

Bring your own scope

Observing on campus

Sun.

10:00 - Final Papers

2:30 - Banquet → Guest Speaker
not yet determined

Note:

Constellations of Spring was

written by:

Frank McCullough (Sorry Frank)

COMET DATA

Below are two of the graphs used in my talk last month on comets. Due to the lack of an opaque projector, I was unable to show them and therefore recopied them for this month's W.A.S.P. The first chart is of the distributions of cometary solar elongations (E. and W.) vs. frequency of discovery. It comes from the November, 1969 issue of "Sky & Telescope" (Page 301). The other chart is of the elliptical orbital inclinations of cometary orbits vs. frequency of discovery. The shaded areas represent short period comets and the dotted sine curve represents the theoretical distribution of inclinations if comets appeared at random.

-Ken Wilson

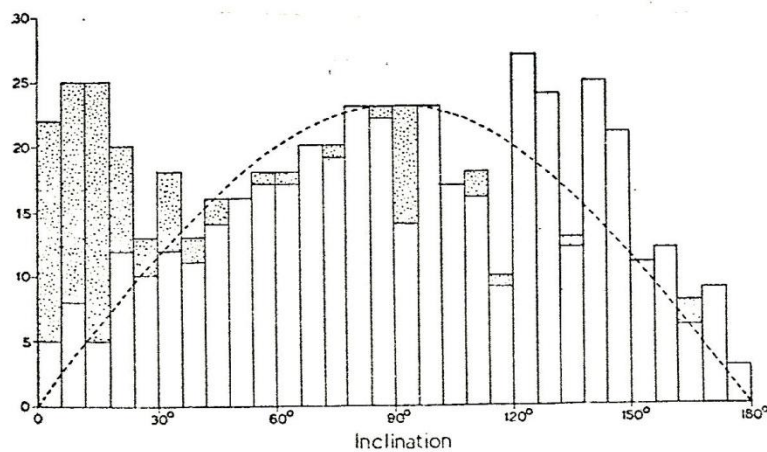
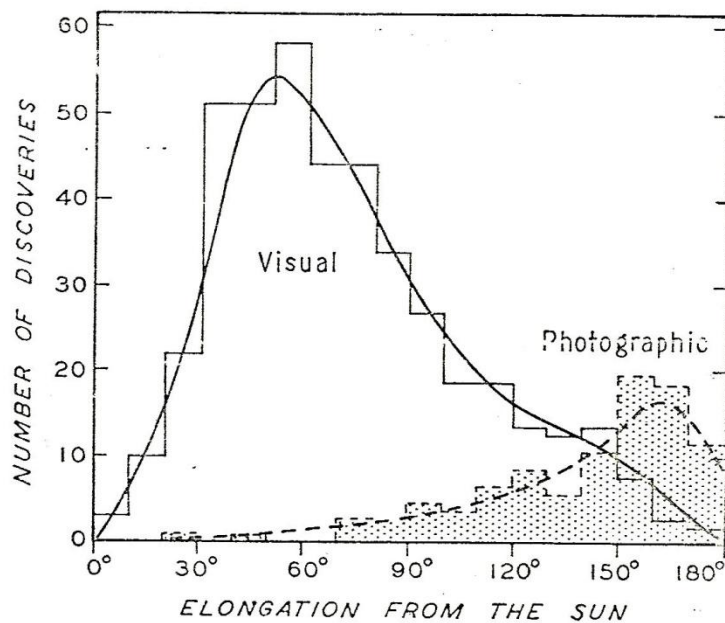


FIG. 16.—Distribution of inclinations in cometary orbits. (The shaded areas represent short-period comets.)