SOLAR DIVISION BULLETIN.

Neal J. Heines, Editor.

September 1947. Number 22. Page 42. 560 Broadway.

Paterson.4, N.J.

August 1947, which had a number of peak days, will surely make some cyclic records in sunspot history. The present cycle has yielded three of the largest sunspots ever photographed. In the <u>Publications Of The Astronomical Society Of The Pacific Vol59</u>, No.348, June 1947, Edison Hoge states, "The great sunspot group of March and April, 1947, ----, has the distinction of having maintained a larger area for a longer period of time than any previous group. According to this paper,p,lll, the four largest groups are given below with other pertinent data;

| Dtae first seen | Dato Last seen | Lati- tude | Duration in days | Maximum Area* | Length in miles |
|--------------------|-------------------|---------------|------------------|------------------|--------------------|
| 1925 Dec 3 | 1926 Feb 27 | - 23 | 87 - | 3700 | 160.000 |
| 1946 Jan 29 | 1946 May 8 | -27 | 99 - | 4900 | 200,000 |
| 1946 July 19 | 1946 Aug 30 | - 23 | 43 - | 3950 | 150,000 |
| 1947 Feb 5 | 1947 May 11 | - 23 | 96 - | 4300 | 200,000 |

* Millionths of a solar hemisphere measured at Greenwich Observatory. To express the area in units of a million square miles multiply these figures by 1.17.

Mr.Walter G.Bowerman, of our Research Section, writes, "Is an alternative to the observation of annual sunspots maxima, it is interesting to know the maxima for various months. The Provisional Figure (Zurich) 206.5, for May 1947 is greater than that of any previous month on record with the exception of May 1778 which was 238.9. It was, however, only slightly greater than the 206.2 final figure in December 1836. Of the 21 monthly maxima, there were 4 which appear in May, about twice the expected number.

While dealing with records, we are happy to add that Dr.Helen Sawyer Hogg. of the David Dunlop Observatory, Ontario, Canada, has made available in The Journal of The Royal Astronomical Society Of Canada, Vol.XLI, No.5, Whole Number 364,pp. 193-196, May-June 1947, under the Section "Out Of Old Books", which she edits, "Chinese Observations Of Solar Spots", from 301 to 1205 A.D., a period of 904 years. These were extracted from the Encyclopedia of Ma Twan Lin, and gives the dates when spots were seen, with the naked eye, and what they resembled. In general solar text, mention is made of the early observations of sunspots by the Chinese, but in the above paper important details are provided. We are greatly indebted to Dr.Hogg for making this information available.

Let us not forget to investigate the work of Dr.Walter M.Mitchell, "History of the Discovery of Sunspots", Popular Astronomy Vol.XXIV. Much can be learned from this contribution to help solve present day observational problems with which the novice is confronted in his first few years of sunspot observations.

We received the report of chairm m Mr.H.B.Chase on the observing "Conclave" held in New England on July 12th.,1947. Said report serves as a supplement to this month's Bulletin. An excellent start has been made and we look forward to similar attempts by other observers throughout the domains of the Solar Division. We greatly acknowlege the interest manifested by Dr.Albert E.Navex, Director of the Observatory at the Milton Academy who arranged for many of the dotails and contacts. The importance of such a project is emphasized by the fact that Science, the Scientists Newsweekly, Vol.106 No.2745, Lugust 8-1947 p.126, under "News and Notes" gave a detailed account of the gathering. Let us have more of these meetings arranged in the various sections where our solar observers are found.

Be sure to read Dr.J.C.Bertlett's article " " NEW ASPECT OF THE SUN AS A VARIABLE STAR" in the August issue of <u>Popular Astronomy</u> Vol.LV, No.7,pp367-375. According to Dr.Donal H.Menzel, Harvard College Observatory, this granulations project of the Solar Division is becoming increasingly important. It could easily be that this group will open up a new avenue of approach to newer solar problems. We invite other observers of the Solar Division to participate in this work. Multiple observations, well scattered throughout the country or the world for that matter, are desireous. Write to Dr.J.C?Bartlett Jr.,300 N.Eutaw Street,Baltimore 1,Maryland.

A few days ago we received from Dr.Bruce Blair, 1059 Soerra, Reno, Nevada, our mailing of his Astronomical Information Sheets. In this issue there is an articla on a Polarizing Helioscope, used for observing the sun, by, Mr.Arthur Hegel, 1945 Magnolia Avenue, Los Angeles 7, California. A Bluer Print of the Helioscope came with the issue. If you are interested write Mr.Hegel. Dr.Blair's publication is well worth subscribing to. Fifteen issues cost \$1.00. We reccomend them.

Do not fail to obtain a copy of Sky and Telescope No.10 August Issue and read CONVENTION AT PHILADELPHIA. "

Quite often we receive communications from observers of the Solar Division telling us about the enjoyment they are experiencing with the work. We received one this month that is a WIZEROO (new word). It was from Mr.Goorge R.Warren,R.D.2. Westchester, Pennsylvania, (Mind you - this is not a sales talk, nor a message from Mars, But ----- you judge)

"Dear Mr.Heines:

I just can't help telling you how glad I am that I joined your "Solar Division" -- I am having a wonderful time ''' You are aware that I spend my life doing reasearch and development work for a living - this includes my telescope (see Sky and Tel. Feb.1947)outside and I would like to tell you of a few improvements I have made lately. " ------"

WELL SAY --- on he goes --- telling of his new optical train and what it accomplishes --- when a man is lost in his interest there is no telling where it will end or what he will accomplish --- of this, I am sure, that this type of interest, which prevails in the Solar Division, is self attained, and, we are happy about it. Are you inquisitive? Write Warren.

The October meeting of the A.A.V.S.O. will be held on October 10th and 11th at Harvard College Observatory. We expect a goodly number of the S.D. to be present as at the former meetings. The meeting on the 12th., same place, will concern the organization of the New England Region of the Amateur Astronomers League.

If you are interested in obtaining the previous months' Relative Sunspot Number, prior to it publication, tune in to Swiss Broadcasting Corp., wave lengths 31.46, 25.28, and 19.59 or 15.315, 11.865, and 9.535 Mc respectively, at 01 40 and 03 105 GMT (Greenwich Mean Time). You will receive the Provisional Number as the Final Relative Number is not issued until aprox. 6-8 months after Jan.1, each year The broadcasts are in the English language.

August Releases in publications.

Future Release

Sunspots In Action ------ Dr. Harlan T. Stetson.
Will be printed in September. (change of title)

SUPPLIMENT TO BULLETIN NO. 32.

SOLAR OBSERVERS MEETING.

The first meeting of the Solar Observers in New England was held at Milton Academy on July 12,1947. The main purpose of the meeting was to obtain a common understanding of the methods of observing and counting of sunspots and sunspot groups. Considerable progress was made in that direction, and many interesting and valuable contacts were made. Although the number in attendence was small, it was a good cross section of the New England observers including both amateurs and professionals.

The Meeting opened with an indoor session which included welcoming of the delegates by Dr.A.E.Navex on behalf of Milton Academy. The program for the day was then outlined by Dr.Navex. Mr.H.B.Chase, (observer of the Solar Division), explained in detail the reasons for the meeting and what it was expected to accomplish.

A very interesting discussion followed the showing of a latern slide which had been made previously and which showed a most difficult assortment of groups and spots.

The next feature was the observing program. For this the group resorted to the observatory where instruments were set up. This activity was a little dissappointing in that no regularity could be followed on account of intermittent cloudiness and lack of sufficient instruments. Many of those present had no portable equipment. However some very good counts were obtained. Comparisons of counts were made by groups of observers at each instrument discussing the spots group by group, because there was insufficient time for counting the whole disc between clouds. It seems that the committee had just neglected to invite the sun to be present at the meeting.

At one o'clock the luncheon party was organized and everyone present was transported to a local resturant and ice-cream establishment where a really delicious luncheon was served. Candid camera shots, of some of the delicacies, were made by the amateur press representatives.

The group then returned to the lecture hall to hear mr.I.F.Hand of the Blue Hill Meteorological Observatory of Harvard University. Mr Hand gave a very thorough review of his observatory's Solar Program. This was illustrated by lantern slides including graphic curves of solar radiation as well as interesting pictures. At the close of this talk the group was transported to the top of Blue Hill, which is also in Milton, to inspect the observatory above mentioned. The party was greeted upon arrival by Dr.C.F.Brooks, Director. An extremely interesting two hours elapsed during which the 'Weather Men' explained their activities. Also a considerable amount of candid film was expendedhere.

After descending from Blue Hill the party began to disintegrate and head for homes in various directions. Those who were present are Miss Alyce Farnsworth, Miss Hendrie, Mr. Percy Whitherell, Mr. Fred Pflug, Mr. George Soule, Mr. George Mumford, Mr. William Rotch, Mr. I. F. Hand, Mr. S. W. Becroft, Mr. J. J. Neale, Mr. Gordon Newkirk, students Chardon, Wales, and Gamble, Dr. A. E. Navex and Mr. H. B? Chase.

Mr. Harold B. Chase. Chairman of the Solar Observers Meeting.

40 Hummock Road, Quincy, Massachusetts. August 12th.,1947.