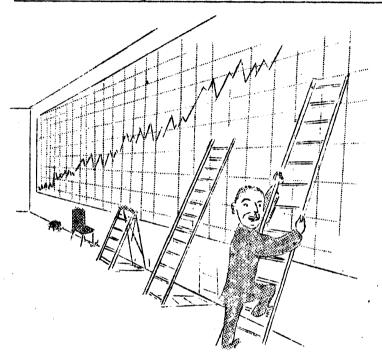
A.A.V.S.O.

SOLAR DIVISION BULLETIN.

Neal J. Heines, Editor.

September 1948. Number 34. Page 74.

560 Broadway. Paterson 4, New Jersey



Akin to the

SUNSPOT CYCLE

What next?

July was another active month with the greatest activity in the North Belt. To date 8-13-48 there has been a shift of activity from belt to belt periodically. Also there have been several high latitude groups. There have been several inquiries concerning the high south latitude group at the central meridian on August 5th., which was long lived for such a small group. It's Latitude was South 33 degrees. (Bureau Of Standards). It was also asked if this group could possibly be on of a new se ies. It is much too early we beleived, however, we made certain and received the following informatiom from Mount Willson Observatory. "The polarities of this group show no change.(A.H.J.)"

We have received word from Mr.Leon Campbell's office that the fall meeting will be held at Harvad Observatory on October 15 -16. All, that possibly can should attend this A.A.V.S.O. meeting for there are many things of interest for all who attend. The AAVSO Council meeting is usually held at 4:00 P.M. and followed in the evening by a secected lecturerer. This constitutes the Friday activity and on Saturday the regular sessions of Reports and Papers Lunsheon at noon and a Dinner at night.

Miss Joanne Anderson one of our observers in Detroit, Michigan, has mailed us the Report of the Solar Conclave wich was promised in an earlier Bulletin. It is as follows;

The Solar Conclave, directed by Mr.Edward Pilsworth, was held at the McMath-Hulbert Observatory, Lake Angulus, Michigan, on Sunday, June 13th. After meeting on the lawn at one o'clock, the group went into the 50 foot sun tower. We first went up to the top of the tower to see the mirrors there, and then we came down and observed the day's sunspots projected on screen 12-inches in diameter. Dr.Orren Mohler also showed us some flares and prominences with the Snow spectrohelioscope.

We then went to see the 24-inch Cassegrain telescope. In the building housing this instrument was a very interesting letter written by Mr.Russel W.Porter to Dr.Robert McMath after Mr.Porter completed a set of cut-away drawungs of the 50 foot sun tower. Dr.Mohler took the group into the 80-foot sun tower and showed us the machine shop, the laboratories, the McGregoer spectroheliograph and the library, where we saw some motion pictures of the sun taken in the light of calcium. The group then went out on the lawn of the observatory and informally discussed the various problems in solar observing. The conclave adjourned at about three o'clock. Among those present were Mr.William Callum, Mr.Frank Weller, Mr.A drew Hay of Chicago. Mr.Owen Gingerich of Goshen, Indiana, Mr.Paul Cross of Pontiac, Michigan, Mr.Edward Pilsworth, Battle Creek, Michigan,

Mr. James Hillebrand, Detroi , Michigan and Miss Joanne Anderson also

Mr.J.E.Thrussell our observer in England whote us as follows, "I hope the sunspot report will be satisfactory it is not up to it!s usual clearness, as I was compelled to finish it from home on a camping holiday and having no fine pen found a gull's quill and cut that for use " (some ingenuity!!). The report was very legible Mr.Thrussell.

STATISTICS.

of Detroit.

The total number of observed groups, here, for the month of july was 54.

The total number of days with sunspots was 31.

Zurich's Provisional Relative Sunspot Number for July, 141.1.

*The highest number, as assigned at Solar Division Headquarters August 12th., was 330. It was a small faint group in the north belt aprox. 2½ days from the central meridian and consisted of three spots in faint faculae. (A, type, Waldmeier Classification.)

* This information is given in order that the Solar Division observers may check their group counting each month.

With this Bulletin you will find a supplement giving, Sunspot Areas as determined by the United States Naval Observatory from January 1938 to June 1948. We will include this data each month in the above section hereafter.

We note from the statistical data for the past three monts that the Relative numbers are slowly waning.

It is our custom each year to provide the Zero Rotation periods for use in the Solar Division. It has been supplied by the Nation-Bureau Of Standards. (Miss J. Virginia Lincoln.). It is as follows.

| nt 12 12 12 12 | otation 276 277 278 279 280 | 1949 GCT Jan. 26.9 Fen. 23.3 Mar. 22.6 Apr. 18.9 May. 16.1 Jun 12.3 | 1284 3 1285 1 1286 4 1287 | 1949 GCT Aug. 5.76 Sep. 2.00 Sep. 29.27 Oct. 26.56 Nov. 22.86 Dec. 20.18 |
|----------------------------|--|---|------------------------------------|--|
| | 585 581 | Jun 12.5 | | Dec. 20.10 |

The dates define the beginning of solar rotation taken from the "American Ephemeris And Nautical Almanac 1949" and are numbered in accordance with the Cuarterly Bulletin of Solar Act vity of the International Astronomical Union ".

PUBLICATIONS.

In our last Bulletin we announced that Dr.Donal H.Menzel's new Book was at the publishers. We were not certain of the title at the time. Miss Catherine J.Barber of Dr.Menzel's office kindly supplied us with the correct title. It is to be "OUR SUN". Release date are not known at this time.

Dr.Curvin H.Gingrich has wwitten us that Dr.James C.Bartlett's paper on "SOLAR BOOKKEEPING" will be published as soon as space can be found for it in a future issue of POPULAR ASTRONOMY.

We invite all those affiliated with the Solar Division to membership in the AAVSO. The dues are \$3.00 a Year and applications can be supplied from this office or from the office of Mr.Leon Campbell, Recorder, Harvard College Observatory, Cambridge 38, Mass. As it is quite near the meeting time it might be wise to adress Mr.Campbell's office.

Satisfactory progress has been made with the LIBRARY project thus far and we hope to give some consrete information in the October or November Bulletin. Mr.James Hillebrand already has received word, and actual gifts of volumes for the proposed library. We greatly appreciate the thoughtfulness of Mr.Emery Radwany, (Research Section) who contacted Mrs.Rachel Huntington who in turn presented a volume from Mr.Ellswoth Huntington (deceased) own Library. But more of this later.

ALL ROADS LEAD TO HARVARD OBSERVATORY FOR THE AAVSO

SPECIAL SUPPLEMENT TO SEPTEMBER BULLETIN

* SUNSPOT AREAS AS DETERMINED BY THE UNITED STATES NAVAL OBSERV MORY.

Values are mean daily areas for 30 days .

| Month | | 1938 | | 1939 - | | 1940 | . (************************************ | 1941 | |
|-----------------|---|--------------|-------------|---------------|-----|------------------------|---|---|-------|
| | | Area | | Area | •, | Area | 2 | Area | |
| January | : | ** 2102 | : | 1227- | -: | 1023 | : | 590 : | |
| February | : | 1718 | : | 1110 | : | 984 | : | 486 : | |
| March | : | 1553 | : | 843 | : | 1518 | : | 529 : | |
| April | : | 222]. | : | 2133 | : | 713 | : | 413 : | |
| May | : | 2292 | : | 1865 | : | 768 | : | 234 : | × . |
| June | • | 1307 | : | 1384 | : | 1432 | : | 828 : | |
| July | : | 293 7 | : | 2189 | : | 1029 | : | 1088: | |
| Augus t | : | 1584 | : | 2589 | : | 7050 | : | 1094 | |
| September | : | 1655 | : | 3377 | ; | 967 | : | 1387 : | |
| October | : | 1951 | : | 2131 | : | 7.00= | : | 984 | |
| November | : | 2382 | : | 1.233 | : | 663 | : | 738 : | |
| Decembe ${f r}$ | : | 1841 | : | 585 | : | 840 | | 396: | |
| | - | 1942 | an especial | 1943 | | 1944 | ~ | 1945 | pro-g |
| January | : | 439 | : | 135 | : | 28 | : | 197 : | |
| February | : | 1095 | | | : | 1 | : | 121 | |
| March | : | 961 | | 696 | - | 130 | : | 581 : | |
| April | : | # O P* A | : | W 4.0 | : | 2 | : | 577 : | |
| May | : | 0710 | : | ` -0- | 4. | 10 | : | 276 : | • |
| June | : | | : | | • | 50 | : | 462 | |
| July | : | | : | 252 | : | 29 | • | 570 : | • |
| August | : | | : | = 0. | 1 | 98 | : | 290 : | |
| September | : | 1,61 | : | 0 | • | | : | 500 | |
| October | : | 272 | | | : | 218 | : | 1231 : | |
| Novembe ${f r}$ | : | 538 | | 7 74.57 | : | Óm a | : | 457 | |
| Decembe ${f r}$ | : | 336 | | 740 | : . | 613 | : | 365 : | |
| | | 1946 | | 1947 | | 1948 | | 1949 | |
| January | : | 1231 | • | 2178 | : | 1356 | | | |
| February | : | 3145 | : | | • | | • | | |
| March | : | | : | 3516 | • | 1348 | : | *************************************** | |
| April | : | | : | | • | 3486 | | | |
| May | : | 1060 | : | em 194 Fr 194 | : | 3249 | : | | |
| June | : | | : | m m a a | : | 2547 | : | | |
| July | : | | : | 2496 | • | 2011 | • | | |
| August | : | 2047 | | m = 1 0 | : | methodomorphic ordered | • | that fight that the state that the state of | |
| September | : | | : | -0 | : | market and an incident | | | |
| Cctober | : | | : | 2517 | • | - | • | * | |
| November | : | | : | | : | | • | | |
| December | • | 00 | : | ;951 | - | | | | |
| | • | | • | , 501 | • | | • | | |

^{*} Areas are corrected for foreshortening and expressed in millionths of the Sun's hemisphere.

^{**} To convert figures to miles multiply same by 1.17 .