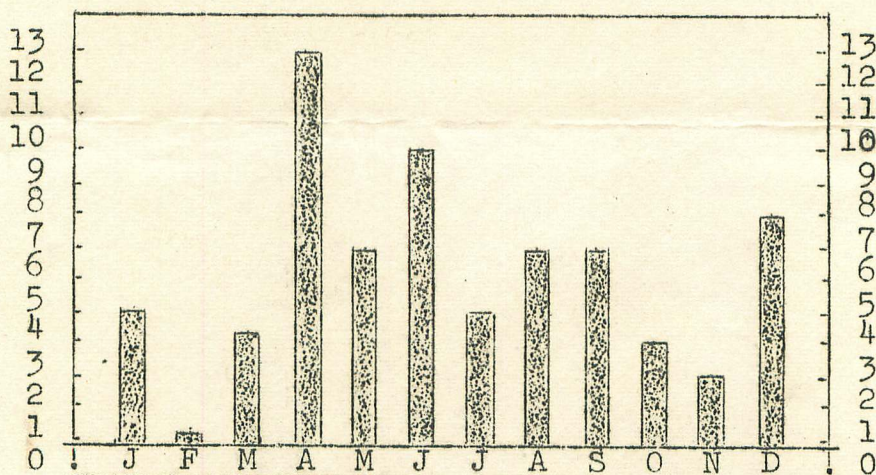


June 1949.
Number 43. Page 101.

560 Broadway.
Paterson 4, New Jersey.



TOTAL NAKED-EYE SUNSPOTS 1948.

The graph above was supplied by Thomas Cragg of 1908 S. Burlington Ave. Los Angeles 7, California. It is plotted to show the number of spots per month, visible to the naked-eye. He writes " Even during a great maximum like this one, few realize how many days there are that a spot should be visible to the unaided-eye, on the sun. ----- It should be pointed out that at least one naked-eye group was visible on every day during April 1948!! . This must be some kind of a record. Naked-eye groups were seen on 202 days out of 366 in the year.

Mr. Cragg was interested in naked-eye spots by Dr. Seth B. Nicholson of Mount Wilson Observatory some years ago and has carried on faithfully. While in the service of his country, unable to transport any instrumentation he faithfully watched for naked-eye spots each day and recorded his findings. Later he sent these to Dr. Nicholson.

If the readers of this Bulletin have any records of naked-eye spots we will be please to receive them. Especially do we desire to determine record possibilities. Other observers who wish to participate in such a study should write this office for contact with Dr. Nicholson.

Dr. J. C. Bartlett, Jr., who heads our Solar Granulations Project, writes; "For several months now, begining well in advance of any marked drop in spot activity, the various observers have consistantly found the granulation fine-grained and increasingly difficult to see. This is perhaps significant, in that it indicates granular activity to be, a possible indicator of a coming change in a current cycle.

MAY 20 1949

A.A.V.S.O.

We have mentioned Dr. Donal H. Menzel's new book several times during the past year. The latest word is that it will be out late June.

Prof. M. Waldmeier's Classification chart has been distributed. In case we have inadvertently overlooked a name please inform this office and the chart will be forwarded.

OBSERVERS.

It will be greatly appreciated if you will resort to Air-Mail if your reports are forwarded to us after the 3rd. of each month where distance is concerned. This does not apply to foreign observers whose reports always reach us in good time. All reports are sent from this office the same day that they arrive and yet 23 out of 56 reports were received in Washington on April 11-12. This is the reason for your having received the Bulletin and other Solar Division Material so late the past two months. Washington also has a dead line and we should do everything within our power to alleviate this condition.

STATISTICS.

The total number of observed groups for the month of April was --- 45.
The total number of days with sunspots for April was ----- 30
Zurich's Provisional Relative Sunspot number for April was ----- 148.9
Mean (monthly) Sunspot Area (U.S. Naval Observatory) for March ---- 3421
*The highest sunspot group number as assigned at Solar Division Headquarters on May the 17th was 203. This was a medium sized group which came from the invisible solar hemisphere in the south belt.
* This information is given in order that the Solar Division observers may check their group counting each month.

ERRATA.

Under STATISTICS, Bulletin for May Page 99, strike out March and enter February. (The value 3429 is correct).

Publications.

"THE PREDICTABILITY OF THE PROBABLE FEATURES OF THE SUNSPOT CYCLES"

By Prof. W. Gleissberg.

The Astrophysical Journal March 1949 Vol. 109 No. 2. pp. 321-26.

Astronomical Information Sheets ----- Dr. Bruce Blair

1059 Sierra St., Reno, Nev.

This service always presents a lot of interesting information for amateur observers.

FOR SALE.

Four Inch Refractor Telescope (In wooden case), with Rack and Pinion focusing, Two eyepieces, 1" and 3/4", 10X Finder, and an erecting-prism device for terrestrial observations. For all other details, write to Mr. W. Schuster, 147 Prospect Street, Irvington, New Jersey.

Each year there is a slightly downward trend in our curve representing the number of observations made by the observers during the vacation months. This is expected. The only way this can be slightly improved is for those of us who are observing to not miss a day when observations are possible. May we take this opportunity to wish you all a very pleasant holiday.

May 17th., 1949.

SUPPLEMENT TO THE JUNE BULLETIN.

1949.

"CONDENSATION-CHAMBER FOR THE PROJECTION OF SUNSPOTS".

We are indebted to Mr.B.C.Parmenter, of, Northwestern Observatory, Route 8, Spokane ,Washington., FOR THE FOLLOWING.

"I recently noted that several of our observers have made use of the "Moving" or "Whirling" white screen in the sunspot projection study method. I have often used this to be rid of the small blurs and spots caused by un-clean optics that often show up on a stationary screen.

However, I wonder if any of the group has made use of the "condensation - Chamber" as a means of holding projection study in great detail? This is one of the best methods I know of for getting absolute clarity in a solar image.

In its simplest form, it consists of a cube-like box having three windows of single-strength glass separated by about equal amounts. These windows should be large enough to contain the size of the solar image to be used (projected from an eyepiece on either reflector or refractor) and may be numbered 1-2-3 respectively. Windows 1-3 are simply there for the purpose of acting as windows, but number 2, being equi-distant between 1-3, divides the box into two portions, the forward portion being the "moister-chamber" and the rear portion the "cold-chamber. The forward portion contains a bit of sponge, which may be moistened at needed intervals through a small hole in the chamber sidewall, as well as a small flash-light bulb (foil-covered to obscure the light) operated from a 10-V. transformer with reostat for control of heat. The rear chamber contains a tiny box having a bit of "dry-ice" in it and a small "vent" for escaping gas fumes.

In use, the chambers are supported and placed in "telescope-balance", at the proper place on the instrument, when a dark cape-cloth may be thrown over the whole, to exclude extraneous light. When the bulb is heated a trifle, moisture in the forward chamber is caused to condense on No.2 window by the action of cold on it's other surface, from the dry-ice. This will form in either small or large "water droplets according to the careful regulation of heat, by the operator. If care is exercised, the "dewing" may be kept very tiny, and will not run down the glass in tiny rivulets, each droplet therefore, will act as a tiny bead similar to the beading on a movie screen, thereby spreading light from the solar image in all directions, and giving the observer a very clear and true picture of the whole. A large, "cool" image, is to be preferred to a "hot" one, as this will have a considerable effect on the dewing. In some climates and at certain times of the day, the heat from the bulb may be done away with entirely and dewing will take place, although, being harder to "stabilize".

I had one of these for years when formerly doing solar work, and the recent remarks on solar projection screens again called it to mind. Many of the group might like to use it, as it is an interesting and useful accessorie to the project."

WRITE MR.PARMENTER, IF CLARIFICATION IS NECESSARY .

SPECIAL ANNOUNCEMENT.

S.D. AURORA PROGRAM. (NEW)

On May 27th., 1949, Mr. Roy A. Seely, former Council Member, Past President of the A.A.V.S.O. and Chairman of the Novae Search Committee, was appointed as Vice-Chairman of the AAVSO Solar Division.

Mr. Seely will be a valuable asset to the Executive committee of the Solar Division, as well as a welcome one.

It will be his duty to tabulate and summarize all Aurora Reports received from observers of the S.D.

All correspondence relative to this work should be addressed to him at, 969 Park Ave., New York 28, N.Y.

Summaries will be printed monthly in the S.D. Bulletin under the heading of STATISTICS. Report forms are in the process of design and will be distributed later. If it is your intention to participate in this work, kindly inform Mr. Seely.

Inquiries from the Research Affiliates of the Solar Division should be sent to Solar Division Headquarters, at 560 Broadway, Paterson 4, N.J.

If you have in mind any suggestions or comments send same to Mr. Seely. They will be very welcome.


Neal J. Heines.

Director AAVSO Solar Division.
July 17th., 1949.

AUG 18 1949

A.A.V.S.O.