A.A.V.S.C.

SOLAR DIVISION BULLETIN.

Neal J. Heines, Editor.

April p948. 560 Broadway.

We received word indirectly that Zurich has proclaimed the passing of sunspot Maximum for the present cycle.

From our own data, to which we have applied the Three Months Moving Averages procedure, the high point was late August or early September 1947.

The present condition of the cycle is unusually inactive. (March 21, 1948) Today there were four groups visible in the solar hemisphere, all on or near the west limb of the sun. These were groups in each belt. Three of the groups were remnants while one was new and only contained one spot. It was entirely surrounded by faculae which was small in area.

This does not mean a cessation of activity (probably a calm before a storm) as we will in all likelihood witness some very active major sunspot groups within the coming year.

We received a very interesting communication from our observer in Wilton, Maine, Mr. Cyrus F. Fornald, (who is also top Variable Star Observer) which bears investigation and warrants your interest.

Mr. Fornald writes "---------- For some time I have been suspicious that there was a correlation between my seeing conditions and the ratio between my sunspot number and that of the median observer. The enclosed tables, covering the years 1946 and 1947 show that when I have poor seeing my spot number is about 85% of median, fair seeing is 95% and good seeing 105% and excellent seeing 115%.

I was rather surprised between the consistency of the two years.

If I had made a fifth division (poor - boiling) I've had even a lower figure for it.

This data on seeing conditions might be important for the records. I doubt if any information for this particular part of Maine exists. The rest of the tables are simply interesting. They would be more interesting if similar correlations could be established for other observers". ----------

We have published the above tables as a supplement to this bulletin for the express purpose of obtaining additional information on this subject from various parts of the country and from other observers. Kindly send your results to this office for further study and records. Simply carry on the work in a similar manner as did Mr. Fornald. We will process the results here and let Mr. Fornald review the entire data and prepare the findings for future use.

Another contribution will then go to our credit, thanks to Mr. Fornald.

Ephemeris birds have again started their flights in the upper atmosphere and we urgently ask for your reports in this project.
Details of the First convention of the Eastern Division of the Astronomical League will be given in our next Bulletin. For a complete coverage watch for *Sky and Telescope*.

As we do not have the actual date of the A.A.V.S.O. Spring Meeting which will be held at Mount Holyoke College we ask that you watch the *Journals and Notices* and *AASO Headquarters* for this information. 5/4

**STATISTICS.**

The total number of observed groups of sunspots for February 1948 was 42. Total number of days with spots was 29.

Solar Division Preliminary Relative sunspot numbers for February see *Reductions Report*.

*Highest sunspot group number as of March 21st., 1948, so far, 100.*

*This information is given in order that the S.D. Observers may check their group counting each month.*

**Publications**

1. *As The Seventeenth Century Saw Them.*  ------  Dr. James C. Bartlett Jr.
   *SKY AND TELESCOPE*  March 1948 Issue.

   Very interesting; be sure to read this.

   *ASTROPHYSICAL JOURNAL*  January 1948

   Technical

3. *Sunspot Groups Of Irregular Magnetic Polarity*  ------  Dr. R.S. Richardson.
   *ASTROPHYSICAL JOURNAL*  January Issue 1948

   This is a survey of 7,880 sunspot groups, from January 1, 1917 to December 31st., 1946.

   Want to know something about sunspot Polarity? Here it is.

   Every one affiliated with the AAVSO Solar Division should read this article.

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**BULLETIN**

Sunspot Cycle
Waning 6
1948
Supplement to the April Bulletin.

Comparison of Sunspot Numbers of Median of Regular Observers with Observations Mr. Cyrus F. Fernald, Wilton Maine.

Grouped by months, and by rating of seeing, as given by CFF.

Numbers given under each heading are: 1. Number of days CFF made observations, with seeing conditions of that rating. Day is placed into the best seeing rating given for the day, where two or more observations are made. 2. Sum of CFF sunspot numbers for days given. 3. Sum of median sunspot numbers for days given.

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<th>Good</th>
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146 Totals 32-2501-2910 71 6507 6636 140 13857 12375 24 2626 2255

% " 85.8 98.4 104.0 116.6

In 1946 observed sun on 287 days.

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147 Totals 51-6649-7468 67-11593-13020 101-18673-17699 21-4624-4199

% " 88.6 92.0 105.5 115.5

In 1947 observed sun on 269 days.