A.A.V.S.O.

SOLAR DIVISION BULLETIN.

Neal J.Haines , Editor.

April p948. 560 Broadway.
Number 29. Page 59. Paterson4, NewJersey .

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 proceedure, 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 on the solar hemisphere, all on or near the west limb of the sun. There were two 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 likelyhood 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 wasa 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 ahve 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 .

Migratory 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 from AAVSO Headquarters for this information. 5/21

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

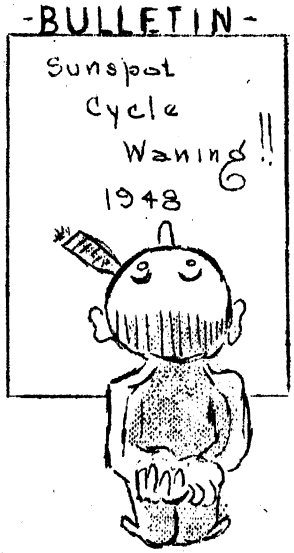
1. As The Seventeenth Century Saw Them. ------- Dr.James C.Bartlett Jr.
SKY AND TELESCOPE March 1948 Issue.

Very interesting be sure to read this.

2. On Noise Arising From Solar Granulation ----- Martin Schwartzschild.
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 7,890 sunspot groups, from January 1, 1917 to December 31 st., 1946.
Want to know something about sunspot Polarity ? Here it is.
Every one affiliated with the AAVSO Solar Division should read this article



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.

Date 1946	Poor			Fair			Good			Excellent		
January	4-	199-	257	6-	273-	343	8-	415-	381-	1-	33-	24
February	2-	126-	162	6-	519-	588	12-	1011-	1022	0-		
March	2-	139-	132	7-	638-	650	15-	1327-	1223	3-	326-	313
Apeil	2-	151-	129	6-	500-	468	11-	883-	754	2-	240-	197
May	1-	132-	132	5-	455-	392	9-	925-	745	5-	484-	360
June	1-	37-	53	5-	356-	336	15-	1381-	1225	5-	492-	445
July	1-	87-	91	3-	273-	281	22-	2630-	2413	1-	176-	126
August	2-	222-	207	8-	949-	900	14-	1559-	1524	2-	224-	202
September	0			8-	719-	776	12-	1236-	1356	4-	489-	432
October	7-	531-	695	6-	475-	513	10-	1050-	1181	1-	162-	156
November	5-	447-	528	5-	592-	626	8-	1028-	1043	0		
December	5-	430-	524	6-	758-	763	4-	412-	408	0		
'46 Totals	32-	2501-	2910	71	6507	6636	140	13857	13275	24	2626	2255
% "		85.8			98.4			104.0			116.8	

In 1946 observed sun on 267 days.

1947												
January	10-	1280-	1381	5-	484-	515	1-	52-	71	0		
February	5-	596-	653	9-	1095-	1129	2-	320-	296	0		
March	2-	344-	339	8-	994-	1077	12-	1614-	1561	1-	109-	102
April	2-	379-	361	7-	918-	908	11-	1681-	1603	1-	155-	138
May	2-	590-	579-	7-	1240-	1296	10-	2441-	2256	2-	399-	336
June	1-	53-	114-	2-	367-	337	12-	2043-	1912	7-	1334-	1180
July	1-	105-	135-	11-	1681-	1716	9-	1629-	1573	4-	981-	755
August	2-	294-	349	8-	1352-	1386	13-	2546-	2499	6-	1846-	1688
September	5-	595-	664	9-	1537-	1705	11-	2528-	2329	0		
October	4-	581-	657	10-	1516-	1673	9-	2154-	2061	0		
November	8-	909-	1111	6-	799-	725	7-	1092-	1009	0		
December	9-	923-	1155	5-	494-	553	4-	583-	527	0		
'47 Totals	51-	6649-	7480	87-	11993-	13020	101-	18673-	17699	21-	4824-	4199
% "		88.8			92.0			105.5			115.5	

In 1947 observed sun on 260 days.