

A.A.V.S.O.

SOLAR DIVISION BULLETIN.

Neal J. Heines, Editor.

February 1949.
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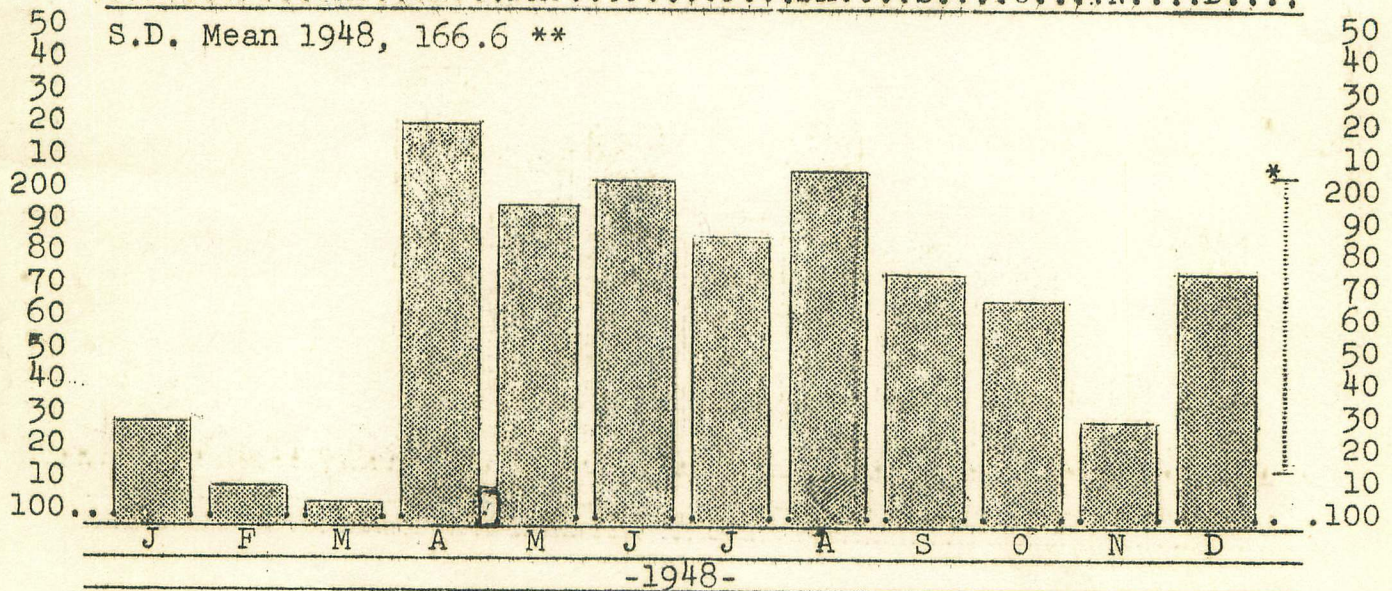
560 Broadway.
Paterson 4, New Jersey.

AAVSO SOLAR DIVISION PRELIMINARY RELATIVE SUNSPOT NUMBERS .

-1948-

...J...F...M...A...M...J...J...A...S...O...N...D...

S.D. Mean 1948, 166.6 **



Jan. 130.1

Jul. 184.3

Feb. 107.3

Aug. 205.0

Mar. 103.8

Sep. 174.6

Apr. 222.5

Oct. 166.3

May. 194.8

Nov. 129.9

Jun. 203.6

Dec. 177.1

* 1947 range.

** Nat'l. Bureau Of Standards

If we count the sunspot groups, and, spots new each day, as in the
Wolfner method, then for 1948, we have the following;

(As observed at S.D. Headquarters)

Number of groups whole disc	2939
" " sunspots	31794
" " groups Central Zone	1247

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Number of sunspots Central Zone -----	17407
" " groups north of solar equator -----	1421
" " " south " " -----	1518
" " sunspots north " " -----	15219
" " " south " " -----	16575
" " days with sunspots -----	366
" " " without sunspots -----	0
" " Solar observations for 1948 -----	693
" " Observing days for 1948 -----	300
" " Groups gone -----	536
" " New Groups -----	530

SUNSPOT GROUP HISTORY.

This information differs from the wolfer method in that it counts each group but once, gives its place of origin, as observed, and, its place of disappearance, to all of which time values are shown.
(535 groups were observed here, 1948)

Total of all north groups -----	259
Total " " south " -----	276
Combined Totals	535

Total of all minus groups, ie. groups having died on the visible hemisphere 341

Total of all plus groups, ie. groups that have passed on, to the invisible hemisphere 187

Total of all doubtful groups -----	7
Combined totals	535

Total of all groups giving their visible period in terms of days.
(North groups above the line, South below)

D. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 ? (doubtful)	
N 4 34 26 21 10 20 13 22 11 12 15 8 20 19 11 1 5	
S 5 47 35 22 13 21 12 15 13 12 12 16 26 22 11	

T. 9 81 61 43 23 41 25 37 24 24 28 24 46 41 22 1 5 -- T --	535
(D. days, N. north, S. south, T. totals.)	

Total of all groups born on the visible northern hemisphere --	171
" " " " " " " " southern " --	168
" " " " " " " " invisible northern " --	98
" " " " " " " " southern " --	98
Combined totals	535

Total of all groups born on the N. visible hemisphere & died on	
" " " " " " " " same	106
" " " " " " " " S. " " "	128
" " " " " " " " N. vis. hemis & passed on to	
" " " " " " " " N. invisible hemis.	57
" " " " " " " " S. vis. hemis & passed on to	
" " " " " " " " S. invisible hemis.	43
" " " " " " " " N. invis hemis. and died on	
" " " " " " " " the north visible hem.	48
" " " " " " " " S. invis hemis. and died on	
" " " " " " " " the south visible hem	45



IN THE HEARTS
OF MY COUNTRY-
MEN.

February 22nd.



THE WORLD WILL
LITTLE NOTE
WHAT WE SAY HERE.

February 12th.

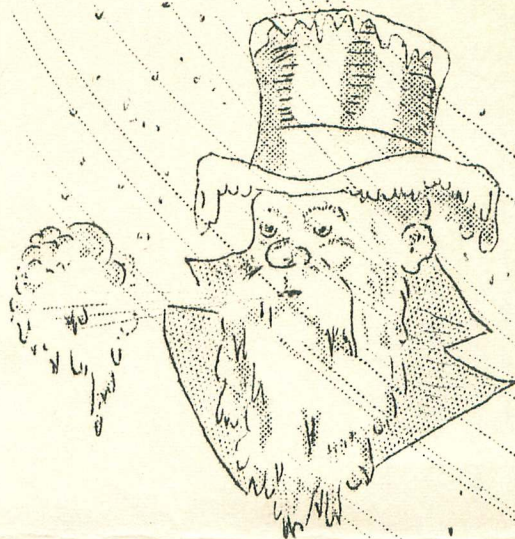
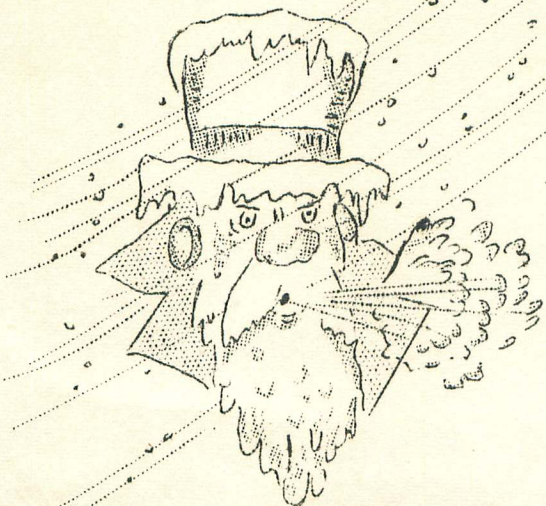
GROUP THAT MADE ITS APPEARANCE on the edge of the east limb on January 16th. This is the first large group in the north belt for quite some time.

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

PUBLICATIONS.

"SOME CONSIDERATIONS OF BIRD MIGRATION" ----- Dean Amadon.
Another very interesting article on the work and views
of various top Ornithologists. "Science" Dec. 24, 48, pp 705-707.

"THE UPPER ATMOSPHERE" ----- David I. Blumenstock.
Here is the second article in Scientific American
which is of great importance to observers of the
Solar Division. This is a must.
Scientific American since its reorganization has
produced a magazine that is second to none. It is
thoroughly edited and beautifully illustrated.
We cannot help but mention the work of MR. ALBERT G. INGALS
in this magazine. For years he has supplied valuable
information, in his column, "The Amateur Astronomer".
I doubt if there is another individual in this country
who has helped the amateur so much and for so long.



REPORT
OF

HAROLD LEINBACH.

SEEING CONDITIONS AT BROOKINGS, S.DAK. AS COMPARED TO THE AMERICAN
RELATIVE SUNSPOT NUMBER.

Observations made with a 4.25" refractor, using the projection method,
giving a 10" image.

	POOR	FAIR	GOOD	EXCELLENT
<u>1947</u>				
Oct.	1- 68-106	2- 333-373	10-1461-1567	0- 0- 0
Nov.	7- 726-775	3- 476- 446	2- 253- 222	0- 0- 0
Dec.	8- 881-1014	10-1297-1305	1- 138- 145	0- 0- 0
Totals	16-1675-1895	15-2016-2124	13-1852-1934	0- 0- 0
<u>1948</u>				
Jan.	8- 795-1042	10-967-1214	4- 514- 468	0- 0- 0
Feb.	5- 347- 495	6- 470- 654	2- 246- 204	0- 0- 0
Mar.	3- 222- 291	8- 659- 770	7- 601- 612	2- 202- 184
Apr.	4- 630- 762	3- 702- 749	9-1928-2082	3- 758- 659
May.	1- 173- 251	6- 934-1200	7-1071-1269	5- 644- 653
Jun.	4- 728- 854	4- 803- 736	9-1904-1799	3- 645- 658
Jul.	1- 124- 143	7-1261-1282	12-2298-2347	7-1244- 1200
Aug.	4- 705- 789	5-1021-1008	9-2148-2046	4- 798- 731
Sep.	2- 318- 316	3-4443- 397	11-2113-1809	7-1376- 1172
Oct.	2- 145- 197	11-1994-2079	4- 788- 737	2- 283- 262
Totals	34-4187-5104	52-9194-10089	74-13611-13373	33-5950-5519

1947 % ----88.4----- 99.2-----95.8
1948 % ----81.9----- 91.1-----101.9-----107.0

When we receive a sufficient ammount of these reports we will then present a composit picture of the seeing conditions of the observers of the Solar Division. We would greatly appreciate reports such as these from our foreign observers.