

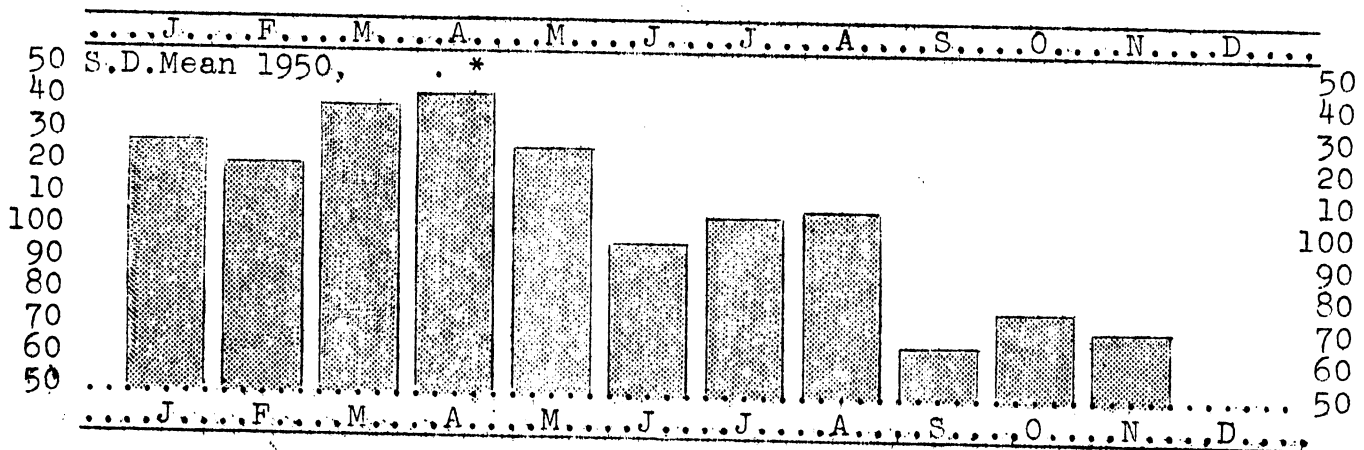
A.A.V.S.O.
SOLAR DIVISION BULLETIN.
Neal J. Heines, Editor.

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560 Broadway.
Paterson 4, New Jersey.

AAVSO SOLAR DIVISION PRELIMINARY RELATIVE SUNSPOT NUMBERS.

- 1950 -



* C.R.P.L. National Bureau of Standards.

If we count the sunspot groups, and spots, as new each day, as in the Wolfer method, then for 1950, as observed at Solar Division Headquarters, we have the following;

Number of groups whole disk	-----	1393
Number of Sunspots " "	-----	9006
Number of groups Central Zone	-----	569
Number of sunspots " "	-----	4890
Number of groups north of solar equator	-----	828
Number " " south " " " "	-----	565

Number of sunspots north of the solar equator	-----	5572
Number " " south " " " "	-----	3434
Number " days with sunspots	-----	356
Number " without " "	-----	5
Number " doubtful days	-----	4
Number of solar observations for 1950	-----	564
Number of observing days for 1950	-----	260
Number of groups gone	-----	275
Number of new groups	-----	261

SUNSPOT GROUP HISTORY.

This information differs from that of the Wolfer method in that it counts each group but once, gives its place of origin, as observed, and, its place of disappearance besides the length of life where it is possible. Solar division Headquarters observed 274 groups during 1950 as against 490 during 1949.

Total of all north groups	-----	165
Total of all south groups	-----	109
" " " doubtful groups	-----	10
Combined totals		<u>274</u>

Total of all minus groups; ie, groups having died on the visible solar hemisphere	-----	103
Total of all plus groups; ie; groups that have passed on to the invisible solar hemisphere	-----	164
Total of all doubtful cases in the above		10
Combined totals		<u>274</u>

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	?	(doubtful)
N	0	16	23	21	9	11	9	10	9	3	10	9	17	10	1		
S	1	10	11	11	7	9	4	2	3	8	7	8	9	10	6		

T	1	26	34	32	16	20	13	12	12	11	17	17	26	20	7	10	----- 274
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*D, days; N. North; S, South ; T, Combined N-S Totals.

Total of all groups born on the visible northern hemisphere	-----	110
" " " " " " " " " southern	-----	68
" " " " " " " " " invisible northern	-----	55
" " " " " " " " " southern	-----	41
Combined totals		<u>274</u>

Total of all groups born on the N. visible hemisphere & died on same	73
" " " " " " " " " S. " " " " " "	52
" " " " " " " " " N. " " " " " "	
" " " " " " " " " & passed on to the N. invisible hemisphere	-----34
" " " " " " " " " S. visible hemisphere & passed on to the S. invisible hemisphere	-----16
" " " " " " " " " N. invisible hemisphere and died on the north visible hemisphere	-----21

Total of all groups born on the S. Invisible hemisphere & died on	
south visible hemisphere-----	15
" " " " " " " N. invisible hemisphere & passed onto	
the N invisible hemisphere again	31
" " " " " " " S. invisible hemisphere & passed on	
to the S invisible hemisphere again	24
" " " doubtful cases in the above -----	8
Combined totals -----	<u>274</u>

Quite a number of our observers enter the mean monthly value of total "R" on their report form each month. Due to the growth of the organization and my own additional responsibilities in the near future I would greatly appreciate it if all the observers will enter these mean values on the bottom line of the REMARKS Column after total R. Also place on this line the total days observed (not total number of observations which is under "b").

MONTHLY STATISTICS.

The total number of observed groups for the month of Dec. was--- 10
The total number of days with sunspots for the month Dec. was--- 25
Zurich's Provisional Relative Sunspot Number in Dec. was ----- 54.5
Mean(month;y) Sunspot Area(US Naval Obs) for September was---- 580
* The highest sunspot group number as assigned at Solar Division
Headquarters was observed on January 12. It represented a higher
latitude group in the north belt about three days past the central
solar meridian and was assigned number 6.
* Group counting reference for observers.

Predictions of the smoothed monthly Sunspot Numbers for the coming six months are as follows:

Jan.	60	Apr.	52
Feb.	57	May.	50
Mar.	54	Jun.	48

Swiss Broadcasting Corporation.
Released by M.Waldmeier, Director
Federal Observatory-Switzerland,
Zurich.

No Auroræas were reported during the month of December 1950.
T.Cragg our Naked-Eye Sunspot enthusiast observed 40 N.E. spots
during the year 1950.

Film orders come in regularly. Be sure to order well in advance of your requirements.

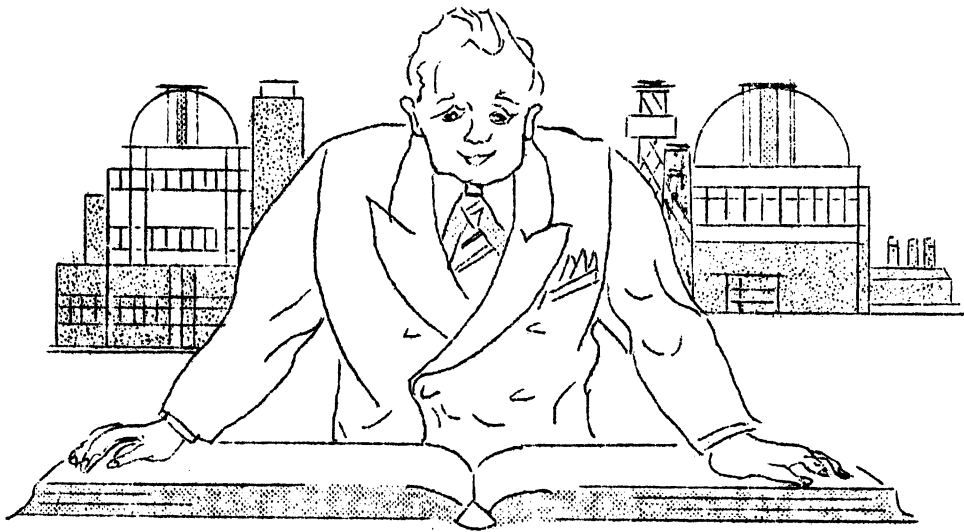
WE REGRET TO ANNOUNCE THE DEATH OF Mr.H.B.Rumrill on Jan 22,1951.

FUND DRIVE

FORTIETH ANNIVERSARY AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS



1911 — — — 1951



Take this deathless torch of song
 Take thou the splendour, carry it out of sight
 Into the great new age I must not know
 Into the great new realm I must not tread.

alfred noyes

FROM "Watchers of the Sky."

HERE IS ANOTHER HEART TO HEART TALK BY YOUR AAVSO PRESIDENT.

At the October AAVSO Council meeting, last fall, Dr. Harlow Shapley made the following motion, It is moved " that the president appoint a special committee to examine the needs and opportunities of the Association, plan provisionally suitable new projects, and outline methods of meeting financially the special and general requirements of the Association. "

Your Council unanimously passed this motion.

Since that time a great many hours have been spent in studying plans of procedure etc., On the pages that follow items will be found that will incite the interest of members, and, friends of the American association Of Variable Star observers.

Last year we attempted to obtain an important need of the AAVSO. This need was nobly met by you, and we still hear appreciative remarks concerning the gifts.

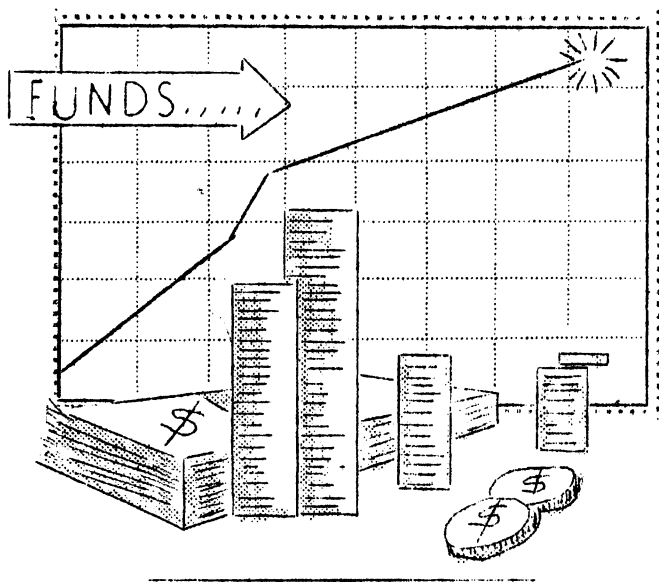
On this, our Fortieth Anniversary, again, with your assistance, both moral and financial, we are endeavouring to set our house in better order; and in addition, to provide facilities, and financial aid to worthy students; to increase our Endowment Fund, or, establish new additional ones.

In addition to your own contributions, members can give strong financial backing by contacting individuals and groups who "applaud the operations and high motives of the AAVSO." This can be accomplished by yourself or by a small Fund Committee in your community to solicit funds to this end.

You witnessed, last year, what one individual effort accomplished. You will be surprised what collective interests will accomplish, and; in addition, experience great delight and satisfaction of having done something extra for the organization of which you are an integral part.

The newly established PUBLIC RELATIONS COMMITTEE will endeavour to obtain "Grants In Aid" from such sources that have available funds, will contact Observatories and Institutions that have assignable funds for special research which can be carried on at AAVSO Headquarters, or possibly by other AAVSO members using their own facilities, but continue under the direction of the originator of the fund so allotted.

The Survey which you have at hand, issued by the Solar Division for their observers, was sent out for this purpose, requiring as it did, information concerning educational background and available astronomical equipment.



Under the heading,

AAVSO ENTERPRISES

YOU WILL FIND LISTED :

items for which we need funds. Let us endeavour to make 1951 a year that will long be remembered as an outstanding epoch in the history of the A.A.V.S.O.

Public Relations Committee.

Dr.H.Shapley, Advisory Master.
Mrs. M.Mayall, P.W.Witherell,
Dr.J.Ashbrook, N.J.Heines (Ch)

A.A.V.S.O. ENTERPRISES.

1. Library overhauling and cataloguing :

a) Bindings	\$100.00
b) Reclassifying and shelving	250.00
c) New Books of practical use and interest	150.00
d) Book ends and locked case for "treasures"	50.00

Total \$550.00

2. Slide collection overhauled with addition of new slides, like some of the new 200-inch and the ADH; new strategic light curves; permanent displays representing the activity of each section in the AAVSO, so organized by the Chairman of that section.

\$100.00

3. Part time assistants for special researches on the AAVSO Variable Stars, and for other special details; \$300.00 each

\$600.00

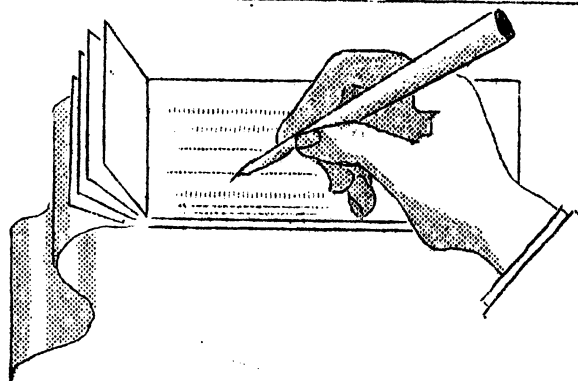
This plan is important in two respects. There is a possibility of assisting with their college expenses Students in Radcliff, MIT, Harvard, Boston University, who are interested especially in Astronomy; and second, it would permit the undertaking of limited but important research projects that are not now possible to carry through without such help. There are many students who need to and would like to work some ten hours a week under direction. If they carry full courses in their college they should not be permitted to work more than fifteen hours a week. The Projects they could assist in are the following types;

- a) hunting down early photographic maxima for long-period variables suspected of period variation. (the Harvard photographic plate collection is available for such researches).
- b) special observation with photometers of quickly changing stars like AE Aquarii (visually or photographically) in order to supplement the incoming AAVSO observations.
- c) special bibliographic studies in the Harvard library and in Miss Cannon's card catalogue of variable stars that need special treatment.
- d) work similar to that above, and of other sorts, that might be specially wanted by some of the AAVSO Members who have not ready access to all of the observational and library material on special stars, including stars suspected by AAVSO observers of variability.
- e.) typing master copies for the Multilith in order to catch up on the quarterly reports.

There are numerous other enterprises in each of the sections aside from the Variable Star Section, which will be made known later.

KINDLY SEND YOUR CONTRIBUTIONS TO THE TREASURER OF THE AAVSO,
DRAWN TO HIS ORDER. Address as follows;

Mr. P. W. Witherell, 84 Prince Street, Jamaica Plain, Mass.



Sincerely yours,

Neal J. Heines
Neal J. Heines.
AAVSO President.

\$25.00 has been sent from
this office to start the
DRIVE !!

NJH/jm.