

A.A.V.S.O.

SOLAR DIVISION BULLETIN.

Neal J. Heines, Editor.

July 1951.  
Number 65, Page 175.

560 Broadway.  
Paterson 4, New Jersey.

At the A.A.V.S.O. meeting in October 1951. Dr. Harlow Shapley included in his declaration of the Ten Astronomical Highlights of 1950 the "Phenomenal Flare Stars". These are stars which like our sun exhibit flares. Since this declaration considerable interest has been aroused in this field of Astronomy. Literature has brought us several articles concerning this phenomenon. The latest of these is "FLARE STARS AND RADIO", Dr. Harlow Shapley; published in Science, (weekly) June 8, 1951; Vol. 113, No. 2945; p.3. Be sure to read this.

According to Mr. A. Armatage, Robert Hooke, a brilliant English Astronomer was probably the first person to design a helioscope, an instrument used as an accessory to the telescope for observations of the sun and sunspots. This was in 1676.

According to text Sir William Herschel became interested in Astronomy, in England, in 1779 and later exhibited his wedge prism for solar observations. Be sure to read this Armatage paper in Popular Astronomy. ( see item under PUBLICATIONS in this issue.)

Items concerning the activities of the A.A.V.S.O. meetings held in Washington D.C. on May 11-12-13 are to found in the same issue, as mentioned above.

In 1947 Miss Mabel Sterns published, "A Directory Of Astronomical Observatories In The United States". Somehow or other word was passed around that this book was no longer available. While in Washington the writer talked with Miss Sterns about the book and learned that the work is available. See PUBLICATIONS (this issue). This work is a useful tool in your library.

We would very much appreciate it if our observers would mail us photos of themselves and instruments so that these can be on display in our Solar Division Album at Harvard College Observatory during our fortieth anniversary celebration in October. Also if you are not a member of the AAVSO I shall be happy to propose you for membership. Dues are three dollars a year. An application blank will be forwarded to you upon request from this office. This applies to our Research Affiliate Section also.

If you have planned a vacation in the east during the summer months do stop in at the Solar Division Headquarters at 560 Broadway, Paterson N.J. We are only 16 miles from New York City. Telephone Lambert 3 - 0433. Already Howard Le Vaux from California, who, on his way to the European Continent and Mr. and Mrs. Frank De Kinder from Montreal have honored us with a visit. It was a real pleasure to have had them here.

Mr. T. P. Maher has developed an interesting chart which may be of some use to observers. On it he shows "Earth day zones co-inciding with the curvature of the sun, assuming 8 hours of observing for a Day". This should be helpful to those participating in the Gleissberg Foreshortening Project. If you are interested, write Mr. P. T. Maher, at Hotel Heppner, Heppner, Oregon.

We have not mentioned the Solar Division Library for some time, books are available for renting by sending postage for both ways. Write to Miss Helen Stephansky, Harvard Observatory, Cambridge 38, Massachusetts See S.D. Bulletin for rental List. If you wish to make a book or cash donation it would be appreciated. We would like to build up this Library for the use of both sections.

June witnessed the sixth appearance and fifth return of the now famous sunspot group of 1951. Mr. David Rosebrugh, wrote, that on the ninth of May there was a distortion on the east limb encompassing the periphery in the area immediately following the major group. It appeared as though the limb was "bulging". He wrote "probably an optical illusion",. If other observers have notes on this we would appreciate having them. Mr. Rosebrugh, later, wrote "It did not reveal such a condition when the group was on the west limb on the 22nd. of May". Several observers who were fortunate enough to catch this group on the very edge of the east limb in May reported an indentation in the periphery. We observed this condition here at S.D. Headquarters.

To day, June 19th., we received the sad news from Carleton College that Dr. Curvin H. Gingrich had passed away into the eternal beyond on June 17th., Dr. Gingrich for many years has been the Editor of Popular Astronomy. He died of a heart attack after a short illness of six days. We will all feel this loss deeply for he was a true friend to many in the field of Astronomy.

Last month we received word from, executors that Dr. William F. Peterson had died during the latter part of 1950. Dr. Peterson was the author of, "The Weather as Destiny" and, "Man, Weather, Sun". Details are lacking as to the lateness of this report.

In all probability we will be able to forward the the sunspot-number Summary with the next issue of this bulletin. The values for the first two months of 1951 are at hand and are as follows, January 53.8, February 54.0. For the same periods Zurich's numbers were 56.3 and 57.9, respectively. Also with the next issue we hope to forward additional details concerning the change-over to the new plan.

#### STATISTICS.

The total number of observed groups for the month of May was----- 20  
The total number of days with sunspots for the month of May was-- 31  
Zurich's Provisional Relative Sunspot Number for May was----- 108.5  
Mean Monthly Sunspot Area (U.S. Naval Observatory) for January was-- 737  
Mean Monthly Sunspot Area " for February was- 706

\*The highest sunspot group number as assigned at Solar Division Headquarters on June 21st was 109. It represented a medium unipolar spot in the north belt very near the east limb.

\* Group counting reference for observers.

Predictions of smoothed Monthly Sunspot Numbers for the next six months are as follows;

June	60	Sept.	57
July	59	Oct.	56
Aug.	58	Nov.	55

Released by Prof. M. Waldmeier, Director Federal Observatory, Zurich Switzerland, and transmitted by the Swiss Broadcasting Corporation.

Naked-Eye sunspots were observed by observers of the Montreal Centre on 6 days during March by 5 observers; on 7 days during April by 5 observers, and on 19 days during May by 8 Observers. The observers participating, Venor, Zorgo, Williamson, Scitt, DeKinder, Wright, McLennan and Good

PUBLICATIONS.

Astronomical Journal. April 1951, Vol.56., No.2.

This issue contains abstracts of several important Solar Papers,  
pp. 37 - 47,

"Characteristics of the "E" Region at Brisbane" Mc Nicol and Gipps.

"Fine Structure of the Lower Ionosphere", Helliwell-Mallinckrodt-Kruse.

The above two papers are to be found in the Journal Of Geophysical Research, March 1951, Vol 56, No 1.

"A Grating Map of the Solar Spectrum" Chapman-Howard-Oxholm.

Astrophysical Journal, March 1951, Vol.113 No.2, pp.269-278.

New Standards for Landsberg's Glass Rod Method of Integrating Ultra-violet Radiation" Sherrod-Neuberger-Yerg.

Transactions- American Geophysical Union. October 1950,  
Vol. 31 , Number 5, Part 1.

New Sun Energy Theory.

Science Weekly New Letter May 5, 1951, Vol 59, p. 284.

"Some Instrument For Solar Research"

Dr. Donald H. Menzel.

Sky and Telescope. June 1951, Vol X, No 8; pp187-189.

"Observing the Sun"--(Same-is-se-as-above)----- David Rosebrugh.

"Giant Spot is Biggest in Four Years"

Science Weekly News Letter ----- May 26 p. 335.

"Sunspot Activity During 1950"

Publications of the Astronomical Society of the Pacific April 1951

Discusses Spotless days in December 1950.

Vol.63 NO. 371

In the same issue Dr. Pettit has two papers on important prominences, of the sun.

"Directory of Astronomical Observatories In the United States" M. Stern.

Publishers: Edwards Brothers, Inc. Ann Arbor, Michigan.

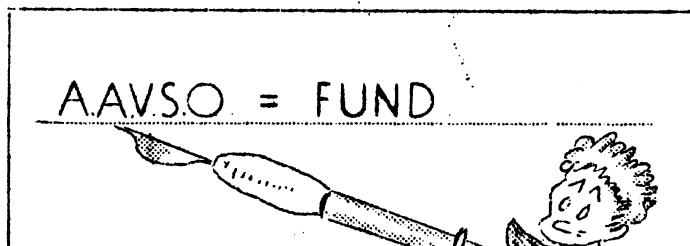
162 pages, Illustrated, Paper Cover, Price \$3.00

"Robert Hooke As An Astronomer" ----- A. Armatage.

Popular Astronomy June 1951, Vol LIX, No.6, pp.287-298.

"Evidence of an Apparent Relationship Between the Formation of Different Sunspot Groups" ----- Gleissberg- Dizer.

Same Issue as above.



YOURS IN ?

MONTHLY SUMMARY OF AURORA REPORTS A.A.V.S.O.  
FOR THE MONTH OF MAY - 1951 -

DATE	TIME USED E.S.T.	RECEIVED IN JUNE										ELEVATION AND DIRECTION	GENERAL OBSERVATIONS	STATION
		G	H	A	R	D	C	P	A	F	D			
May 1951	TIME OF OBSERVATION		H	A	R	D	C	P	A	F	D			
4/27	20:35	II G										North		WILTON MAINE
May 1	0:45 1:05							II			II	30° NORTH		↓
5	22:48		II W									17° N-N 45° E.	6° WIDE	ALBANY N.Y.
	22:57		II W									N-30° E	DIMMING RAPIDLY Shortening Both Ends	
	23:00										I W	10° - 13° N 20° - 30° E		
	23:05		I W										DRIFTING UPWARD	
	23:12		I W									10° - 18° N 18° - 40° E		
✓	23:19										0-1		D.S. DARELY Distinguishable	↓
6	00:30 01:45	III G.Y.										10° 160° - 200°	steady continuous Glow for 75 min	WATERBURY

Reports Received from: C. FERNALD - R. THOMPSON - D. ROSEBROUGH

D. S. Kimball per N.J.H.



I, THE BULLETIN  
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THE  
EMISSARY  
OF THE A.A.V.S.O.  
40TH ANNIVERSARY FUND  
DRIVE