A.A.V.S.O.

SOLAR DIVISION BULLETIN.

Neal J.Heines,Editor.

August and September. 560 Broadway.
Number 66. Page 179. Paterson4, New Jersey.

The American Association Of Variable Star Observers will hold its fall Meeting and FORTIETH ANNIVERSARY at Harvard College Observatory on October 12-13th 1951. The Council will meet, as usual, at 4.00 P.M. on the 12th. (Friday). In the evening session there will be a lecture of much interest to all present. On Saturday the 13th., there will be the general business session with the special reports from the Chairmen of the different sections. This will be followed by Papers until noon. After lunch there will be a group photograph taken, and the afternoon session will complete the Papers. Then the usual Tea where ideas and friendliness is exchanged. On Saturday evening there will be a Dinner embodying the Fortieth Anniversary, with appropriate speakers. Sometime during these sessions two Merit Awards will presented. As this is an advance notice it will be followed by the complete details issued by the AAVSO Recorder Mrs.M.Mayall at a later date.

Make plans now to attend this Celebration. It will be well worth your while.

Please note that this bulletin covers two periods , August and September . The next will be the October Issue.

Sadly we report the death of Miss Lois T.Slocum who passed away on May 25th.,1951. Miss Slocum was in charge of the astronomical De - partment at Willson College, Chambersburg,Pennsylvania. Her many colleagues will miss her greatly. Blessed with a host of friends and loved by her classes it will be hard to replace her. Miss Slocum was a very faithful observer for the AAVSO Solar Division who began her observations in January of 1945 and continued until her illness some time ago. Our loss is great.

Many observers will remember seeing the reports of Harold Leinbach some years back. Following his academic work he received his Doctorate at"Cal. Tech." and later received an assignment at the University of Alaska, for the Study of the Night Sky, and Auroraes, along with other Spectrographic work. Be sure to read the reference under PUBLICATIONS which are concerned with Dr.Leinbach's work.

This month we received word from Mr.Oscar A.Anderson, a member of th Popular Astronomy Club of Moline Illinois, that Mr.Carl A.Gamble had been awarded an Honorary Doctorate Degree by Augustana College at Rock Island ,Illinois, in recognition of his exceptional Community services through Astronomy. CONGRATULATIONS Dr.Gamble, It is well deserved!".

Few period bring us such a wealth of Solar Correlations References as those mentioned in this issue under PUBLICATIONS. At a Symposium at the New York Academy Of Sciences, Dr. B.Haurwitz presented an introduction to a series of papers all of which are of great importance to those so interested. Be sure to look these up including The introduction Paper by Dr.Haurwitz.

There has been some misinterpretation of the Zurich Sunspot Numbers as declared in our Bulletin. There are three series of Zurich Numbers. They are (1) Provisional Relative Sunspot Number. (2) Predictions of Smoothed Monthly Sunspot Numbers; (3) Definitive Sunspot Numbers.

The Provisional Numbers are un-smoothed values and are issued for the purpose of revealing the trend of the existing cycle. These should not be used for correlation studies.

Predictions of Smoothed Relative Sunspot Numbers are in the same catagory as (1) and should be employed only in trend movement.

The Definitive Sunspot Numbers are the smoothed numbers. They are determined by the use of a Twelve-Month-Moving Average formula, and are the only ones to be used in Correlation studies, and research, if the Zurich Series are chosen.

A record has been established by one of our assiduous observers, Mr.T.P.Maher of Heppner Oregon who has made 86 consecutive observations of sunspots, and, he writes, " There is a chance of making this over 100 according to state records of weather. Congratulations to you , Mr.Maher, we hope you will surpass the 100 mqrk. It might be well for Professionals to consider this area for a possible site for a Monochrometer for the observations of Solar Prominences.

STATISTICS.

The total number of observed groups for the month of June was		14
The total number of days with spots for the mpnth of June was		30
Zurich's Provisional Relative Sunspot Number for June was		100.6
Mean Monthly Sunspot Area(U.S.Naval Observatory)	for March was	943
Mean " " " "	for April was	1611

The highest sunspot number as assigned at Solar Division Headquarters on July 27 was 134. It represented a small group in the south belt , of higher south latitude, aprox. two days west of the Central Solar Meridian.

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

Jul. 59	Oct. 56
Aug. 58	Nov. 55
Sept. 57	Dec. 54.

Released by Prof. M.Waldmeier, Director Federal Observatory, Zurich, Switzerlan. Transmitted by the Swiss Broadcasting Corporation.

Naked-Eye sunspots were seen on 16 days of June 1951, by observers of R.A.S. Montreal Center. Observers were E.Milton, P.S.Scott, R.Venor, S. Wright and Zorgo. The dates were June 1, 6, 7, 8, 9, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 1951.

PUBLICATIONS.

I. Solar Influences On The Weather ---------- H.C.Willett.

2. Atmospheric Pressure Changes And Solar Activity ---- R.C.Craig.

3. Possible Effects Of Ozono-sphere Heating On Sea Level Pressure.

---------- H. Wexler.

4. Some Notes Concerning the Relationship Between Solar Phenomena And The Weather. ---------- R.Penndorf.

The above four Papers together with an Introduction by B.Haurwitz are published in, The Transactions Of The New York Academy Of Sciences. Ser.2., Vol. 13, May 1951, No.7, pp. 276-290. All were read at a Symposium Of The Influences Of Solar Phenomena On The Weather. If interested write B.J.Henegan, 2 East Sixty-third Street, New York 21, N.Y.

Radiation Effects On Man In Space ---------- Dr.Konrad Buettner .
What is known today of types of radiation, intensity, and, effects. The works of Kiepenheuer; Duell-Duell; and Takata are mentioned and referenced.
Bulletin A.M.S. Vol.32; No. 5; May 1951.
Write, American Meteorological Society, 3 Joy Street, Boston Massachusetts.

A Forecast Of Solar Activity ---------- Prof.W.Gleissberg.
Journal Of Geophysical Research. Vol 56, June 1951, No.2. p.294. An additional forecast to that released before.

"Nereid" , Newest Known Satellite of Neptune, Van Biesbroeck.
Elongated path varies 1 - 6 Million miles, from the parent Planet Neptune.
Science Weekly New Letter for June 30, 1951.,p.409.

Can Always Find Auroras In The Night Sky.

"An Instrumental Surmey of the heavens each night since last November shows that characteristic auroral emissions can be spotted with spectroscopic cameras and can be photographed -- even on moonlight and cloudy nights.

Drs.L.Herman-Dr.H.Leinbach.