THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS

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Solar Division BULLETIN

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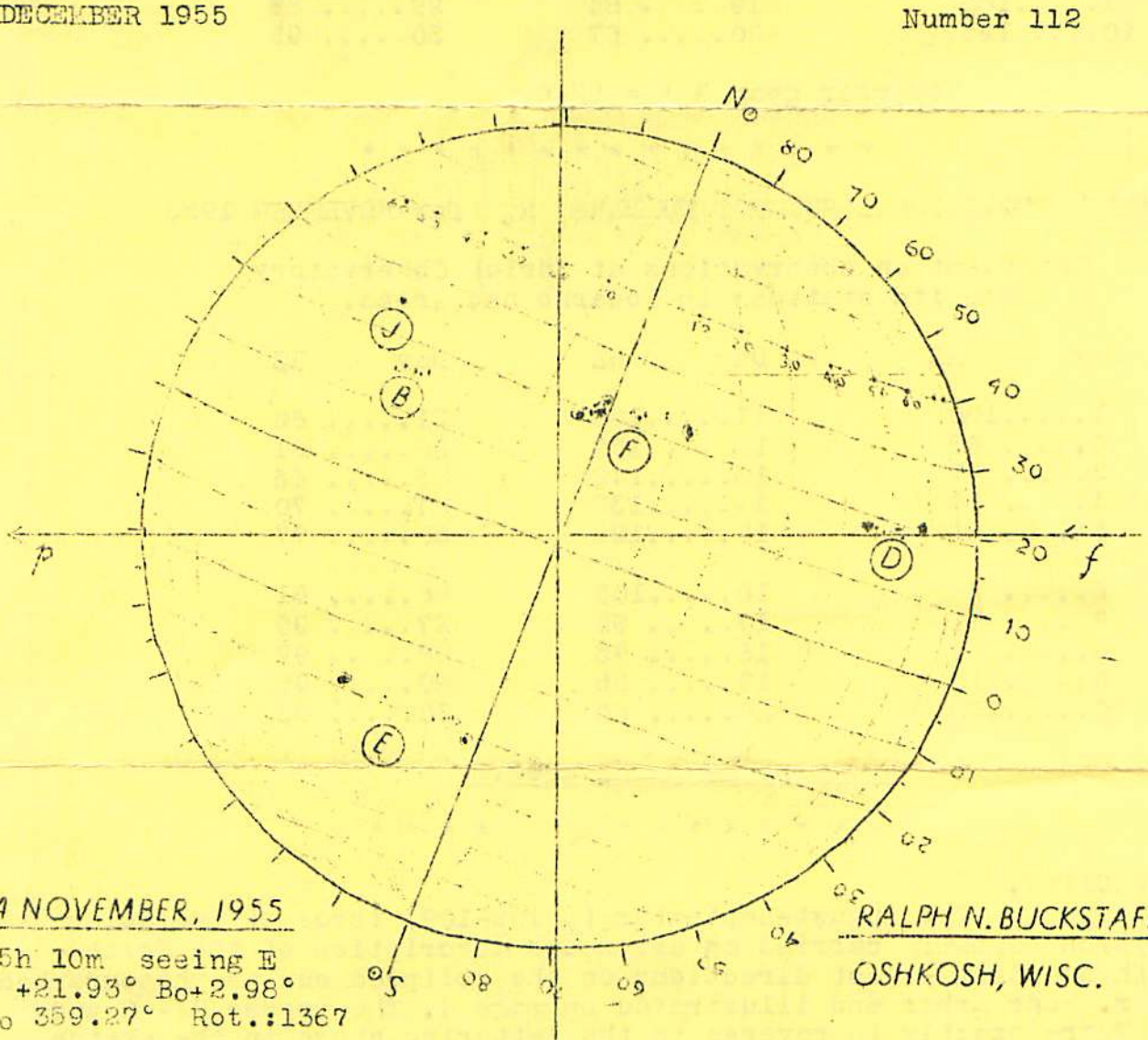

14 NOVEMBER, 1955

15h 10m seeing E
P +21.93° B_o +2.98°
L_o 359.27° Rot.:1367

RALPH N. BUCKSTAFF

OSHKOSH, WISC.

Mr. Ralph N. Buckstaff's routine solar observations are all recorded on "Stonyhurst Sun Discs" as reproduced /roughly/ above.. Note the large F-type group near CM. This group was associated with at least 7 flares /many subflares/, strong coronal activity, active prominences and solar radio noise bursts. In the Southern hemisphere was one of the longest E-type groups. It extended some 25° in longitude. Both of these groups were in new active solar regions.

AMERICAN RELATIVE SUNSPOT NUMBERS R_A' for NOVEMBER 1955

Day	R_A'	Day	R_A'	Day	R_A'
1	103	11	122	21	54
2	88	12	121	22	40
3	66	13	98	23	68
4	58	14	108	24	68
5	53	15	108	25	67
6	51	16	81	26	78
7	64	17	74	27	80
8	85	18	71	28	90
9	105	19	84	29	88
10	125	20	67	30	95

November mean R_A' = 82.0

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ZURICH PROVISIONAL SUNSPOT NUMBERS R_Z for NOVEMBER 1955

Dependent on observations at Zürich Observatory and its stations in Locarno and Arosa.

Day	RZ	Day	RZ	Day	RZ
1	106	11	156	21	60
2	92	12	152	22	61
3	77	13	142	23	63
4	58	14	132	24	70
5	51	15	122	25	77
6	38	16	105	26	81
7	71	17	95	27	90
8	84	18	75	28	97
9	115	19	55	29	95
10	133	20	60	30	93

November Mean RZ = 90.2

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CORRECTION:

The August-September (# 108-109) issue of the Solar Division BULLETIN carried an erroneous description of the North - South and East - West directions on the eclipsed sun as photographed by Mr. Hans Arber and illustrated on page 4. The proper N - S and E - W are exactly in reverse to the lettering shown in the sketch. We are indebted for this correction to Dr. M. Waldmeier, Director Zürich Observatory, who wrote: "The SOUTHERN polar region still shows the undisturbed polar rays, as they are typical of a minimum corona, whereas in the NORTHERN polar zone which appears much brighter than the southern one the rays are going back in a considerable way, probably they are covered by a cloudy /coronal/ structure. This is connected with the fact that after the sunspot minimum of 1954 the solar activity has started much more intensively on the northern hemisphere than on the southern one."

THE RELATIVE SUNSPOT-NUMBER -

A UNIQUE SOLAR INDEX.

(Ed. note: The following paragraphs are a simple reminder of the importance of sunspot-number observations. The next few years will be a particular challenge to all careful solar observers, particularly in our ability to keep our "counts" consistent, homogenous.)

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"It is interesting that the operation of the transatlantic radiotelephone , the study of the "jet stream of electrons" in the ionosphere, and much other practical and scientific work in geophysics all depend in some degree on the faithful, careful and consistent observations of sunspots made visually with small telescopes. There is as yet no better index of general solar activity fluctuations over periods of months or years than the relative sunspot number. It is depended upon by innumerable laboratories, universities and individuals all over the world. The National Bureau of Standards is among these, with its predictions of useful short wave frequencies for radio communications and its many research projects.

"The American Relative Sunspot Number, started by Neal J. Heines to fill the war time gap in the traditional Zürich series, has continued as an index with high short time reliability and is an independently useful indicator of trends in solar activity. It is being used in an increasing number of geophysical studies in the formal literature and in reports of more limited distribution. The NBS Central Radio Propagation Laboratory-- now at Boulder, Colorado-- is but one of these users who are indebted to the AAVSO Solar Division for the American Relative Sunspot Number R$_A$ -- to the far flung observers who ensure that several observations are available for a consensus for each and every day and to those members who reduce and present the observations.

"It is this world distribution of the observers, incidentally, which may make it possible to meet the newest request by geophysicists of the astronomers -- the preparation of solar indices during the International Geophysical Year (IGY) for half or quarter day intervals. This is but one example of the associated purposes to which the AAVSO solar work has and can be put. The sunspot number observations are a much appreciated service to geophysics."

signed: A. H. Shapley
Upper Atmosphere Research Section
Radio Propagation Physics Division

November 30, 1955

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Sunspot Observation Summary.

It was most heartening to learn from all our observers how much they liked the new summaries prepared by Mr. William A. Reid. It now appears that we will be able to supply all our readers with said summary. (hlb)

AMERICAN SUNSPOT NUMBER OBSERVATIONS

A A V S O

MONTHLY MEAN R_A = 56.5

October 1955

SOLAR DIVISION

MONTHLY MEAN R_Z = 58.7

OBSERVER	KL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Adams	070												2,6	2,6	0	0	0	0	0		1,6	2,13	4,20	4,19	5,28			5,34		6,45	6,49	
Arber		2,5	3,10	4,15		5,13		5,13	4,9	5,10	5,10	6,13	6,9				0	0	0		2,7			5,11	4,24	6,16	7,30	7,32	6,13	7,15	7,26	
Beetle	106	3,13	4,32	6,30	5,25	5,26		4,27		5,17	4,27		4,9	4,9	1,3	2,3	0	0	0		3,8	2,11	4,19		4,30	4,52	5,28			6,35		
Bondy	122		5,24	5,16		4,24				6,18		4,19	5,11								2,8			4,21				7,54			6,12
vanBronsvelt	089								7,17	7,22					0			0		1,3				5,25	8,30	8,51				8,54	9,52	
Brown		0							2,8	2,6						0	0						2,14	2,16								
Buckstaff	111		5,13						6,13	5,14	4,16	4,16		2,5											6,29	7,41	5,31					
Chassapis	074								6,29	6,19	4,8	4,20	5,22				0	0	0					4,31	7,34	6,40	5,55	5,62	6,60	7,61	7,60	7,65
Cragg	092	3,13	6,27	4,16	5,16	5,20	5,21	8,36	7,22	6,21	5,20	6,22	5,11	4,6	0	0	0	0	0	1,6	2,5		4,19	4,24	6,32	6,25	6,57	6,54	7,44	7,47	8,63	6,57
DeKinder	080		3,12	4,10		5,12				6,13	5,18		2,5	2,5			0											5,24	7,31			
Elias	043		5,29	5,26	6,23	5,30	5,52						6,21			1,1	1,1	0	0		3,7	4,14		5,35		6,60	5,78	5,69	7,70	6,76	7,87	8,60
Estremadura	080	4,17	3,12	7,27							3,16		5,17						0	1,4					7,42	6,40			7,34	6,45	6,41	6,31
Evans					4,12	4,10									0	0	0	0		2,2	3,4	3,6	5,8			9,20	8,20		7,16		9,18	
Fernald	102	2,7	5,20	8,17	8,18	7,15				6,12		4,13	2,6	2,4		0				2,2									5,21	8,45		
Ikebasai						7,21			8,19	7,16			5,15	4,8		0	0	0	0			2,7	2,10	4,17				5,62		7,44	6,64	
Loebick	102		2,9		3,16	2,13				4,12	4,14	4,19															5,59	8,62				
Loehde				4,21		5,26	7,24		6,18	4,12	4,26	4,20	5,11	4,8	0	1,2		0		1,6	2,7	2,12		4,26	5,25	5,30	7,58	5,53	3,80			
Luft	098		5,23	5,42		5,44				7/23	5,24	6,42	6,22								2,8	2,8	4,18	4,22				7,28	7,57	8,103		9,35
Macris	077	4,11		5,23	4,19	5,25	5,52		6,22		5,25	4,19	4,16			1,2		0	0		2,9	3,9	3,12	4,31	6,38	6,50	5,42	5,63	7,59	6,66	6,65	8,66
Maher	090	2,7	6,21			3,11	3,18	5,15			4,22		2,9	2,3	0		0	0			2,6			4,14			5,39				6,42	
Mandeville K		3,15		5,22	3,19	5,31	5,35		4,23	5,18	4,17	5,24	5,12	3,12	0	1,2		0		1,6	1,6	1,9	2,12	3,21	5,31	4,59	7,74	6,92	8,99	6,82		
Moore	076	3,9		7,35	6,26			8,40	7,17	7,25	6,23	5,25	7,12	3,5	2,4						2,7	2,12			6,25	6,38	5,46	5,49			7,48	8,55
Morrison						7,21	3,11			5,17	5,21	3,12	2,9	2,4															7,41			
Pilsworth	086	3,10	5,14	6,23	8,34		5,18		7,20	7,27	5,28	6,16		6,13	1,7	1,1		0	0		2,10	2,11	3,15	5,14		6,24	7,90	6,74	7,25		7,60	
Olsen	048		5,41	5,43	5,35					5,15	4,24	4,26	4,11						0		3,9		4,12	6,30				5,43	8,85	6,83		
Roseburgh	068	2,3	5,18	5,18	6,26	4,17				5,18	4,10	4,11	4,9					0			2,4	2,8	3,8	4,22	4,16	4,33		6,35	8,48	6,43		6,36
Ruhge		2,6	4,16	3,12	3,18				4,12	4,15	3,10	2,13		2,6	1,1	0			0		6,4	4,7	2,11				3,45		4,35			
Thomas	084	2,23					5,23				4,25		2,5	2,5	0	0		0		1,6	2,8	2,11	4,16		6,10				5,28			
Thrussell	047	2,6	3,20	3,13	3,14	3,14	3,9	4,13	4,17	4,15	3,13	3,13		2,5		0	0	0	0	0					4,7	5,28		5,13	5,18	6,28	7,33	5,30
Trathen	120	2,3	2,7	3,6	3,7	6,11	3,5	4,9		5,9		4,9	2,5	2,2	0	0	0				2,4	2,6	5,9	5,11	8,14	7,21	7,15	6,15	7,14	8,21	8,17	9,16
Warren	119	1,1	1,3	1,8	1,8				2,4	2,4	2,9	2,10						0		1,2	2,4		3,12	4,14			6,16	4,12			4,18	4,18
Wells					4,7							3,7											4,8						5,18			
Williams	092	1,3	1,4	3,13	4,14	3,12			2,5	4,12	4,12	4,15	2,8								2,8	3,13		4,21			5,40	4,30	5,40			4,25
Wendelboe		2,7	3,13																		2,4	3,7	4,8	4,15	5,12	7,19	5,15			5,18		4,25
R_A		32	54	69	68	61	58	82	64	69	61	64	43	36	10	6	0	0	0	15	26	30	47	57	81	95	102	92	97	120	109	107
R_Z		37	54	58	64	62	60	71	71	79	56	55	61	41	22	7	0	0	0	11	21	31	42	57	86	95	107	98	108	119	124	123

OBSERVATIONS MADE UNDER ADVERSE SEEING CONDITIONS

NUMBER BEFORE COMMA INDICATES TOTAL GROUPS
NUMBER AFTER COMMA INDICATES TOTAL SPOTS