Solar Bulletin

Publisher:

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS — SOLAR DIVISION 540 NORTH CENTRAL AVENUE

Volume 26 Number 7

RAMSEY, NEW JERSEY, U.S.A.

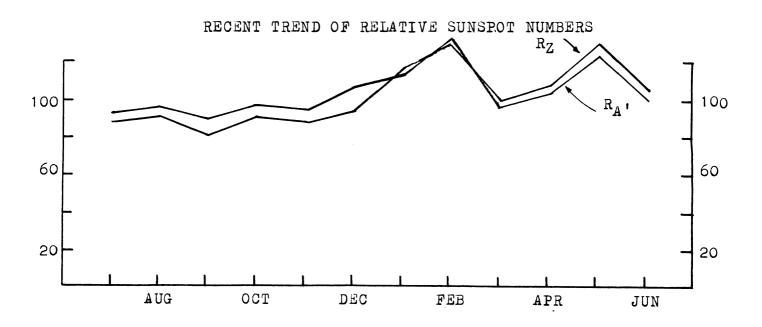
June 1970

SOLAR ACTIVITY DURING JUNE

Thirty separate ionospheric disturbances were recorded by the Solar Division observers during June. Near the middle of the month many large events were recorded. Events followed one another in rapid succession, with new events often starting before the previous event had decayed to the undisturbed ionospheric level.

On page two is reproduced a part of a recording made on the 13th in which many large events were noted. This recording was made by the SES method, recording at Valley Cottage, New York a VLF radio transmission at 24 kHz and located in the Canal Zone, which gave a signal path almost south to north. Since this radio station does transmit "time signals" before the even UT hours, which results in a signal not being trasmitted most of the time, this makes for a "notch" or a decrease in the trace amplitude that tends to interfer with the scaling of the trace. While this interference may be real, it is more often superficial upon close examination. This "notch" is quite noticeable in the decay or downward slope of the event peaking about 1342. It may also be noted that the depth of the "notch" is not nearly as low as that just prior to 1200 UT nor that just prior to 1600 UT. The large event peaking about 1758 shows clearly how the onset of the event almost eliminated the "notch just prior to 1800 UT.

The monthly mean of the American sunspot numbers dropped to 101.3 from a peak of 124.3 in May.



AMERICAN (R_{A}) AND ZURICH (R_{Z}) RELATIVE SUNSPOT NUMBERS, JUNE 1970

DAY	$R_{\mathbf{A}}$.	$^{ m R}{ m z}$		DAY	R _A ,	$R_{\mathbf{Z}}$
1	102	102		16	150	149
2	80	92		17	138	143
3	60	64		18	120	123
4	53	63		19	101	98
5	45	59		20	87	95
6	49	57	Monthly Means $R_{A} \cdot = 101.3$ $R_{Z} = 106.8$	21	112	90
7	45	58		22	102	105
8	62	61		23	92	77
9	66	60		24	109	102
10	81	92		25	118	126
11	107	127		26	113	127
12	126	148		27	107	114
13	149	160		28	108	113
14	153	182		29	118	122
15	154	185		30	132	111

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING JUNE 1970

DAY	MAX	SEA	SES	DEF	OBSERVERS	DAY	MAX	SEA	SES	DEF	OBSERVERS
1	0116		1	4	A21	13	1758	2	2	5	A1,21,22
1	1404	1		3	A1,8,22	13	1901	1	1+	5	A1,21,22
6	1714	1	2+	5	A21,22	13	2208	2	2	5	A1,21,22
6	1923	1	2+	5	A1,21,22	13	2237	1 -	1 -	4	A1,21,22
7	0031		1	1	A21	14	0017		2	5	A1,21,22
7	0709	1		5	A17	14	1225	1	2	5	A1,17,21,22
7	2304		1	2	A21	14	1309	1 -	1	4	A1,21,22
9	1518		1 -	3	A21	14	1427	1+	2+	5	A1,21,22
1 1	2313		1	2	A21	14	1529	1+		1	A17
12	1450	1+	3-	5	A1,21	14	1540		1+	4	A1,21
12	2037		1	2	A21	14	1707	2+	3	5	A1,21,22
13	1232	3	3-	5	A1,17,21,22	16	1030	1 -		1	A17
13	1342	3-	3	5	A1,17,21,22	16	1221	1		3	A17
13	1423	1	1+	5	A1,21,22	16	1358	1+		4	A17
13	1542	1+	2	5	A1,21,22	29	1215	2+		5	A17

