

Solar Bulletin

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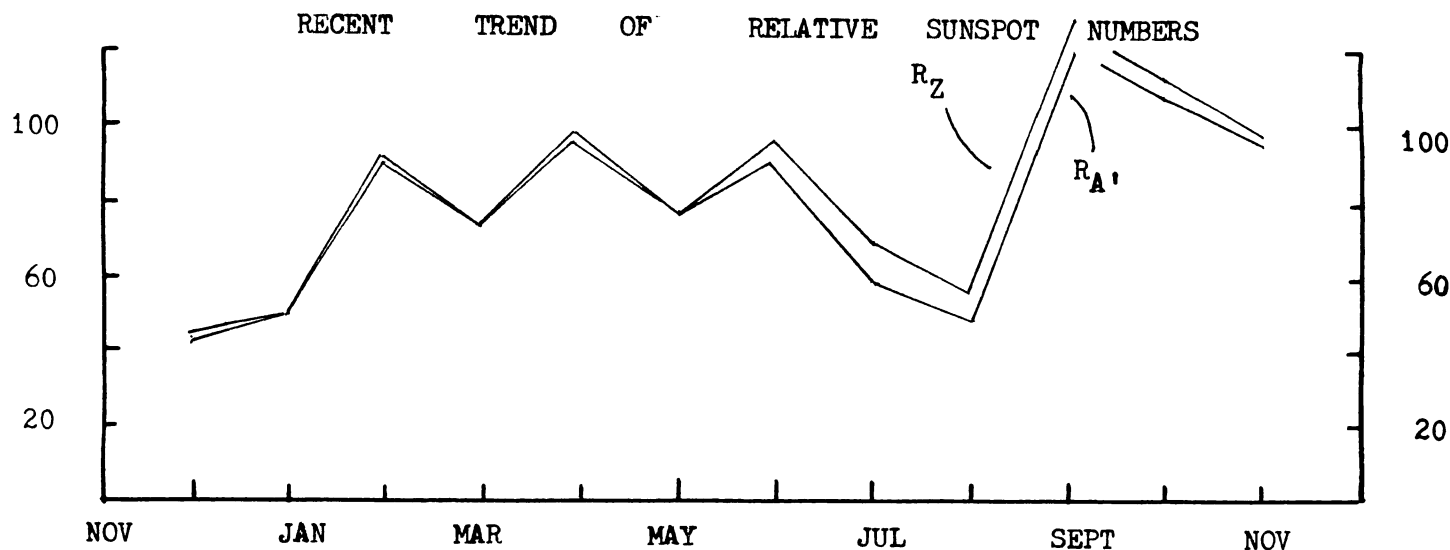
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NOVEMBER 1978

SUNSPOT ACTIVITY FOR NOVEMBER 1978

Sunspot activity during November dropped to a lower level by the middle of the month. The monthly mean of the American sunspot numbers was 92.8 compared to 116.0 last month and 128.1 in September. Spots large enough to be visible to the unaided eye were present on the eighth, ninth and tenth.

Only twenty-two ionospheric disturbances were recorded by the AAVSO indirect flare patrol group during November. Most of these were small and correlated with the higher sunspot numbers at the beginning of the month. The most on any day was four, on the tenth. Four recordings are reproduced on page-two showing events on the tenth and eleventh. The bottom chart shows a time-shared recording by A-19 in which the signal from Nova Scotia produced an inverted response.



SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING NOVEMBER 1978

AMERICAN (R_A) AND ZURICH (R_Z)

RELATIVE SUNSPOT NUMBERS FOR

NOVEMBER 1978

DAY	R _A	R _Z
1	107	109
2	108	122
3	134	125
4	129	129
5	128	116
6	117	103
7	105	110
8	108	118
9	103	108
10	116	116
11	109	122
12	82	99
13	91	90
14	69	78
15	57	59
16	74	77
17	79	92
18	87	88
19	80	85
20	67	76
21	57	62
22	63	77
23	46	53
24	48	57
25	62	85
26	89	101
27	126	118
28	121	118
29	115	109
30	108	96
Mean	92.8	96.6

Day	Max.	SEA	SES	Def.	Observers	Day	Max.	SEA	SES	Def.	Observers
1	1352	2	1	5	A-1,19,26,28	10	1407	1+	1+	5	A-1,3,19,26,28,31,42,45,46
2	2009		1-	5	A-3,19,28	10	1738	1	1	4	A-1,3,19,26,28,31,45
3	0036	1+	1+	5	A-31,43	10	1751	1-	1-	5	A-1,31
3	1731		1-	5	A-1,19,28,31,45	10	1947		1-	5	A-19,28,31,45
5	1525	1-	1	5	A-1,3,19,45	11	1416		1-	5	A-1,19,26,46
5	1930		1	4	A-1,19,28,31,45	12	2123		1	5	A-19,26
7	1515		1	5	A-28,31	15	1937		1	5	A-1,19,31,45,46
7	1630	1	2	5	A-1,3,19,31	16	1815		1	5	A-1,19,31
8	1657	1-	1-	5	A-1,3,19,26,28,31,45	20	0528		1	5	A-43
8	1755		1	5	A-1,3,19,28,31,45	27	1629	1+	2	4	A-1,19,28
10	0121		1	5	A-31	30	0200	1+	1+	5	A-43

Charts from the following observers were received and analyzed:
A-1, 3, 19, 26, 28, 31, 40, 42, 43, 45, 46

