

Solar Bulletin

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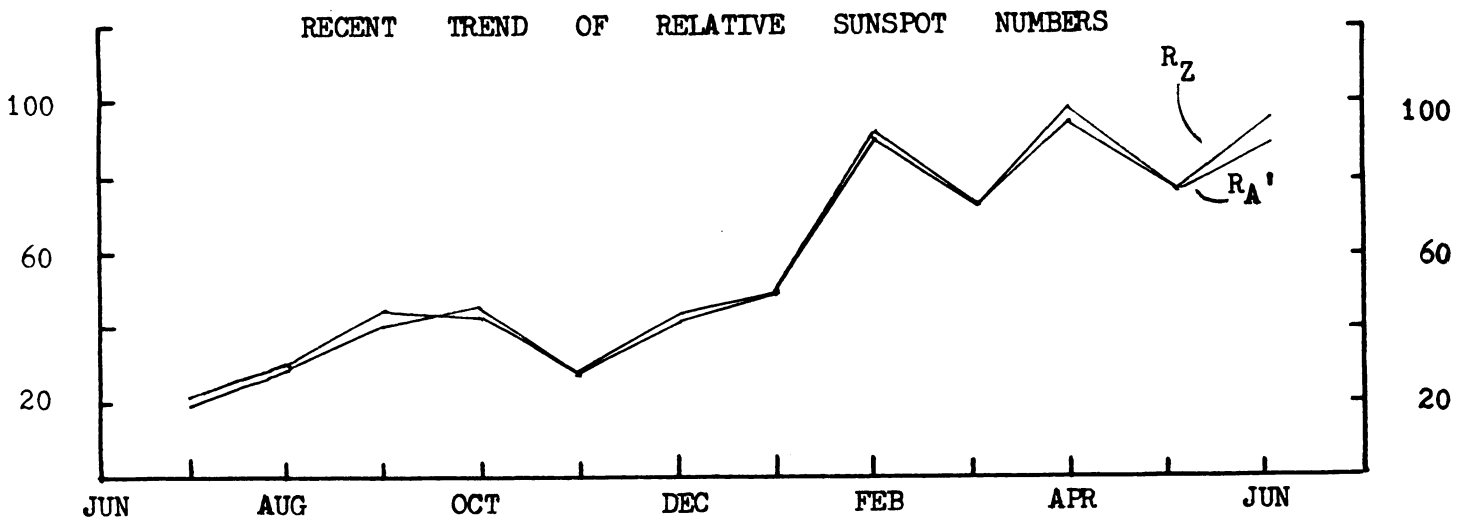
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JUNE 1978

SUNSPOT ACTIVITY FOR JUNE

The monthly mean of the American sunspot numbers rose from 79.6 in May to 88.0 this month. This brought the twelve-month smoothed mean for December 1977 up to 54.7. These smoothed means rose steadily from 15.2 in January 1977 to give a yearly mean for 1977 of 30.2. The 1976 yearly mean was 12.4 and 1975 was 16.4.

There were twenty-eight ionospheric disturbances recorded by AAVSO observers near the last half of the month when the relative numbers were over one-hundred. The most active days were the 22nd and 30th, with four events each. Thirteen observers sent charts for analysis. Three charts are reproduced on page two showing events that occurred on the twenty-first, twenty-ninth and 30th. All three used the strong 21.4 KHZ signal to detect the disturbances.



SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING JUNE 1978

AMERICAN (R_A) AND ZURICH (R_Z)

RELATIVE SUNSPOT NUMBERS FOR

JUNE 1978

DAY	R _A	R _Z
1	126	119
2	111	93
3	76	74
4	55	60
5	49	51
6	29	29
7	37	39
8	33	45
9	21	36
10	21	29
11	46	57
12	39	62
13	59	56
14	54	62
15	83	89
16	73	97
17	104	103
18	106	115
19	101	109
20	117	109
21	149	154
22	157	158
23	153	158
24	138	154
25	114	135
26	133	152
27	130	134
28	128	130
29	110	115
30	87	99
MEAN	88.0	94.1

Day	Max.	SEA	SES	Def.	Observers	Day	Max.	SEA	SES	Def.	Observers
1	2111	1+	1+	5	A-1,19,26,31,34,37,45	22	1959	1-	1	5	A-1,19,26,31,34,37,45,46
2	1542			1	A-1,19,46	22	2023	1	1+	5	A-1,19,26,31,34,37,45,46
5	1309	1-	1-	5	A-1,19,34,45,46	24	1831	1-	1	5	A-1,19,26,31,34,45,46
5	1321	1-	1-	5	A-1,19,26,34,45,46	26	1444	1-	1-	5	A-1,19,26,34,45,46,3
11	0213			1+	A-31	26	1553	1	3	5	A-1,19,26,31,34,37,45,46,3
12	1645			1	A-19,31,34,37,45,46	28	0254		2	5	A-31
13	1143	1+		4	A-42	28	1617		1	5	A-19,34
17	1832			1	A-1,19,31,34,45	29	1423		1	5	A-1,19,34,45,46
17	1842			1-	A-1,19,31,34,45	29	2222		1	5	A-19,31,34,45
18	0130			1+	A-31	30	1502		1	5	A-1,19,26,34,37,45,46
20	1733			1	A-1,19,34,46	30	1641		1	5	A-1,19,31,34,45,46
20	1930	1	2	5	A-1,19,28,31,34,45,46	30	1723	1-	1	5	A-1,19,31,34,45,46
21	1546	1	1+	5	A-1,19,26,31,34,37,45	30	1809	1-	1	5	A-1,19,26,31,34,37,45
22	0244	1+	1+	5	A-31,43						
22	1711			2+	A-1,19,26,31,34,37,45,46						

Charts from the following observers were received and analyzed:

A-1, 19, 26, 28, 31, 34, 37, 40, 42, 43, 45, 46, 3

