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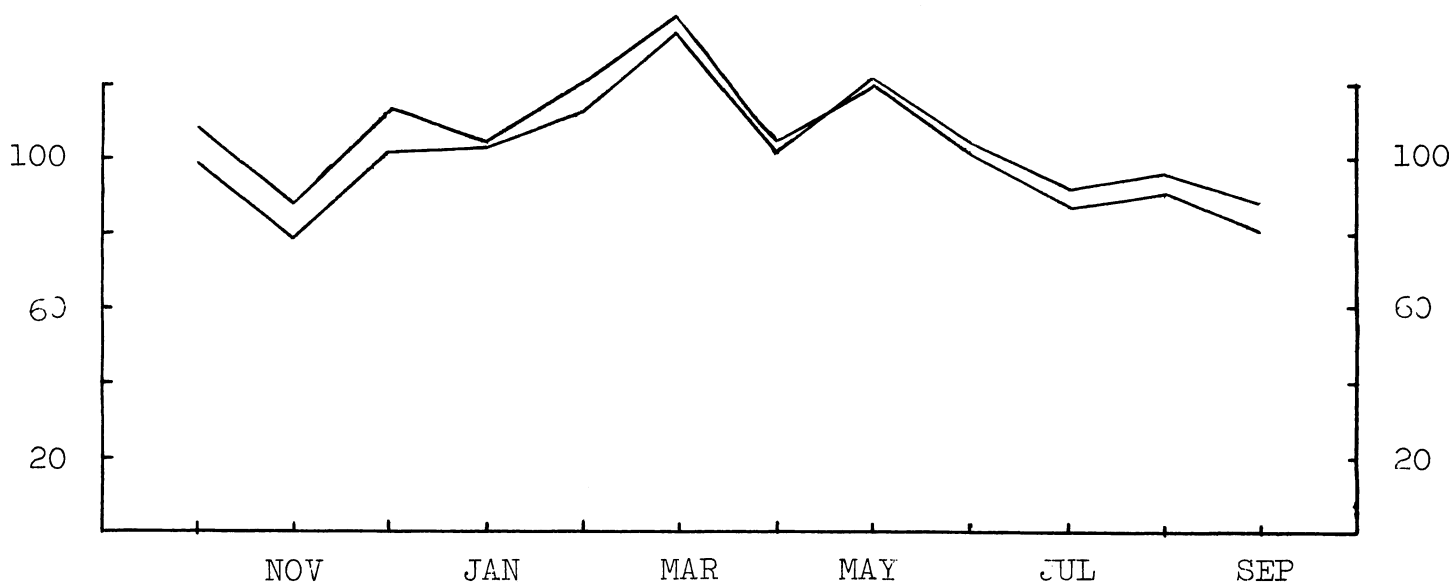
September 1969

SOLAR ACTIVITY DURING SEPTEMBER

Seven ionospheric disturbances were recorded by Solar Division observers during September. An event of modest intensity on the 17th was the most widely recorded. A reproduction of this is shown on page two as a sudden enhancement of signal (SES) of radio station NPM in Hawaii as recorded in Colorado. A more intense disturbance that occurred on the 15th is also shown. Here the enhancement is of 27 kHz atmospheric noise (SEA). This same event was recorded as a very small SEA by two observers in the eastern USA due to it occurring very soon after their sunrise.

Sunspot activity was down slightly. The September mean of the American sunspot numbers fell to 88.9 from 96.3 last month. Several interesting sunspot groups were seen this month. A high southern latitude group first seen on the 6th was notable for its phenomenal growth in longitude. A rather large spot first seen at the east limb on the 20th soon grew to become a group of considerable size. Magnetically this one was a true gamma-type group. On the 28th two small spots were seen in bipolar configuration in the southeast. By the next day these showed considerable development and by the 30th began to resemble two bipolar groups close together. As this group continued to grow in early October it again took on the appearance of a single group.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) AND ZURICH (R_Z) RELATIVE SUNSPOT NUMBERS, SEPTEMBER 1969

day	R_A	R_Z	day	R_A	R_Z
1	97	81	16	128	107
2	87	76	17	126	110
3	63	72	18	113	110
4	75	67	19	71	69
5	74	62	20	54	49
6	72	69	21	82	63
7	69	63	22	67	85
8	63	68	23	79	85
9	45	40	24	106	88
10	51	45	25	119	112
11	75	64	26	112	115
12	88	67	27	111	123
13	99	82	28	101	110
14	113	75	29	96	88
15	132	105	30	100	81

September mean $R_A = 88.9$ September mean $R_Z = 81.0$

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING SEPTEMBER 1969

DAY MAX. SEA SES DEF. OBSERVERS DAY MAX. SEA SES DEF. OBSERVERS

5	2214	1	1+	5	A-21, 23, 19, 1	17	1908	1	2	5	A-21, 22, 23, 24, 6
13	0117	1	1	3	A-21	22	1414	1	2	2	A-17
13	0255	1	1	5	A-21	25	1431	3-	5	5	A-17
15	1233	3			A-17, 22, 19						

