

Solar Bulletin

Publisher:

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS — SOLAR DIVISION
540 NORTH CENTRAL AVENUE
RAMSEY, NEW JERSEY, U.S.A.



Volume 30 Number 4

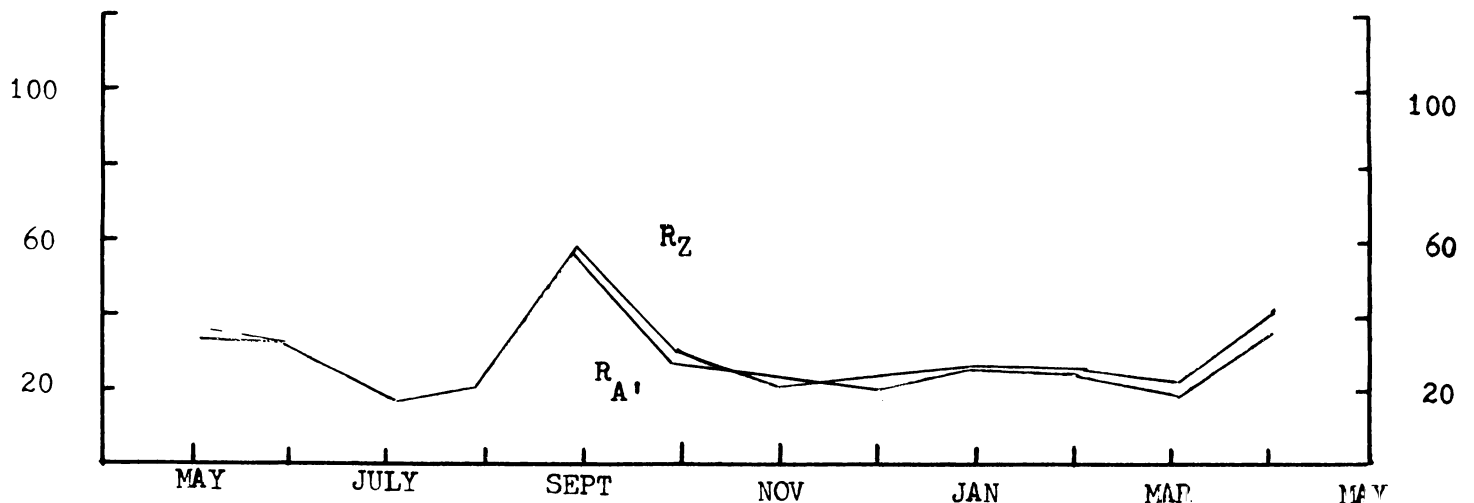
APRIL 1974

SOLAR ACTIVITY DURING APRIL

Sunspot activity rose considerably during April. The mean of 36.6 for the American sunspot numbers was well above the level of recent months. There were no spotless days in April. Most of the activity centered around the middle of the month when a large interesting group was present. This started as a small spot in the southeast on the 6th and grew rapidly until it was visible to the unaided eye by the 10th. This large group was responsible for the many ionospheric disturbances starting on the 13th.

The number of ionospheric disturbances in April was far in excess of anything seen in recent months. Some of these are reproduced on page two. At the bottom of the page is an interesting chart showing two very-low-frequency signals recorded on the same chart by a time-sharing process. The ionospheric disturbances are easy to pick out because the 73.6 signal is diminished in intensity while the 34.5 khz signal is enhanced. An exception is the strong disturbance starting at 1620 UT. It can be seen that the 73.6 khz signal began to fall but then reversed itself and became enhanced like 34.5 khz. Later while the ionosphere was still disturbed, another flare produced a small disturbance starting at 1713 UT which enhanced both signals. Things had returned to normal by 1920 UT when another small disturbance produced the usual opposite effects on the two signals.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



(R_Z) RELATIVE SUNSPOT

DAY MAX SEA SES DEF OBSERVERS

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NUMBERS FOR APRIL 1974

Day R_A R_Z

1 16 26
2 18 20
3 18 19
4 21 22
5 18 21

6 22 23
7 23 28
8 43 38
9 45 58
10 64 70

11 73 75
12 68 78
13 76 83
14 72 87
15 91 98

16 74 93
17 62 75
18 57 64
19 41 51
20 39 49

21 31 43
22 8 28
23 13 17
24 15 19
25 18 20

26 18 20
27 17 38
28 7 30
29 12 22
30 18 16

Means 36.6 44.4

DAY	MAX	SEA	SES	DEF	OBSERVERS
14	1410		1	4	A19
14	1502	2	1	5	A19,26,29
14	1801		1-	3	A31,37,29,1,30
14	1918		2	5	A37,31,1,30
14	2125		1-	3	A37,19,30
14	2158		1	5	A37,19,30
14	2401		2	5	A31,37,30

DAY	MAX	SEA	SES	DEF	OBSERVERS
13	0015		1	4	A31,37
13	0025		1	4	A31,37
13	1325	2	3	5	A19,26,1
13	1550	1	3	5	A31,19,26,29,30
13	1717		1	4	A19,37,31,1
13	1755		1	5	A31,37,19,29,30
13	1814		2	5	A19,37,1,29,30
13	1913		1	5	A31,37,19,1,30
13	2020		1-	5	A31,37,19,1,30
13	2212		1-	4	A19,30

