notizie e rassegne 29

327 MHz SOLAR RADIO OBSERVATIONS

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In the following tables are given the total flux densities, expressed in units of 10^{-22} W m^{-2} Hz^{-1}, of the 327 MHz radio sun observed in March, April 1968 at Medicina Station. Observations have been made with the ten meters parabolic antenna, scanning the sun and the surrounding sky, about every five minutes, and taking, as standard, the radio-source Cas A $(S_{327} = 0.737 \times 10^{-22}$ W m^{-2} Hz$^{-1})$.

Table I e Table II show the mean values of the fluxes observed during each hour (usually between $8^h \div 13^h$ U.T.) and the mean daily values. Dashes signify that no observations have been made.

Tabulated quantities are:

N = number of observations;

S = mean density flux $(= \frac{1}{N} \sum_1^N S_i$, where S_i is the flux density of each observation);

VI = variability index.

Making $\mu = \dfrac{\frac{1}{N} \sum_1^N |S - S_i|}{S}$, we put:

VI = 0 if $0 \leqslant \mu \leqslant 0.04$
VI = 1 if $0.04 < \mu \leqslant 0.08$
VI = 2 if $0.08 < \mu \leqslant 0.12$
VI = 3 if $\mu > 0.12$

In the column « MEAN DAILY VALUES » VI is the mean of each hour variability index.

The symbol A signifies some solar activity producing either variations larger than 25 % of the mean value (whatever VI may be), or VI = 3. In this case single observations are given in the following tables.

G. Cavallo, S. Serra, A. Stumpo and F. Tinti have contributed to the observations, reductions, and the maintenance of instruments.

TABLE I

* MARCH   1968 *

DATE	8-9			9-10			10-11			11-12			12-13			MEAN DAILY VALUES			DATE
	S	N	VI	S	N	VI	S	N	VI	S	N	VI	S	N	VI	S	N	VI	
1	16	4	0	16	10	0	16	14	2	19	6	0	–	–	–	16	34	1	1
2	16	8	1	16	12	0	18	13	1	18	11	1	23	1	0	17	45	1	2
3	–	–	–	–	–	–	18	11	1	19	9	0	–	–	–	19	20	1	3
4	15	12	0	18	12	1	17	12	0	16	12	1	16	10	1	16	58	1	4
5	16	12	0	18	12	0	17	12	1	18	10	0	18	9	0	17	55	1	5
6	13	12	1	13	12	0	15	12	0	15	11	0	13	10	0	13	57	0	6
7	13	9	2	15	12	0	15	10	0	15	7	0	15	9	1	15	47	1	7
8	14	11	0	14	12	0	14	12	1	14	11	0	–	–	–	14	46	0	8
9	18	11	0	16	13	0	16	2	0	15	10	1	–	–	–	16	36	0	9
10	16	9	0	15	13	0	15	13	–	–	–	–	–	–	–	15	35	0	10
11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	11
12	–	–	–	13	7	1	15	12	0	15	15	1	15	9	0	15	43	0	12
13	15	6	1	16	12	0	18	12	1	17	2	0	17	9	0	17	41	1	13
14	14	9	0	13	11	0	14	12	0	19	11	1	17	7	0	15	50	1	14
15	19	10	0	15	13	1	18	13	1	17	9	0	19	10	0	17	55	1	15
16	14	11	1	14	13	0	14	12	0	16	11	0	17	11	1	15	58	0	16
17	–	–	–	17	4	0	18	12	0	22	13	1	–	–	–	17	16	0	17
18	20	9	0	19	13	1	20	10	0	16	2	0	–	–	–	20	45	0	18
19	20	7	1	17	11	1	16	12	0	17	12	–	–	–	–	17	32	1	19
20	15	5	1	18	11	1	17	11	0	17	–	–	17	7	0	17	46	1	20
21	17	-12	0	18	12	0	19	8	0	–	–	–	–	–	–	18	32	0	21
22	17	13	0	16	12	0	18	1	1	–	–	–	–	–	–	16	26	0	22
23	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	23
24	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	24
25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25
26	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	26
27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	27
28	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	28
29	–	–	–	22	12	0	22	12	0	24	13	0	25	9	0	25	9	0	29
30	23	13	0	25	11	–	28	13	2	30	3	0	24	10	0	23	60	0	30
31	–	–	–	–	–	–	–	–	–	–	–	–	32 A	12	1	28 A	39	1	31

TABLE II

APRIL   1968

DATE	8–9 S	8–9 N	8–9 VI	9–10 S	9–10 N	9–10 VI	10–11 S	10–11 N	10–11 VI	11–12 S	11–12 N	11–12 VI	12–13 S	12–13 N	12–13 VI	MEAN DAILY VALUES S	MEAN DAILY VALUES N	MEAN DAILY VALUES VI	DATE
1	17	12	1	19	4	0	—	—	—	—	—	—	—	—	—	18	16	1	1
2	17	13	0	18	13	0	19	13	0	20	13	0	20	11	2	19	63	1	2
3	19	5	0	19	13	0	19	11	0	—	—	—	—	—	—	19	29	0	3
4	20	7	0	19	13	0	19	12	0	18	11	0	19	10	0	19	53	0	4
5	18	11	0	18	12	0	18	11	0	19	11	1	—	—	—	18	34	0	5
6	18	11	1	20	13	0	20	12	1	16	2	0	19	11	1	19	58	1	6
7	17	7	0	17	13	0	16	13	0	18	5	0	17	11	0	16	35	0	7
8	19	11	0	18	12	0	19	8	0	18	13	0	17	11	0	18	47	0	8
9	16	13	0	17	13	0	18	12	0	17	12	0	17	11	0	17	62	0	9
10	17	12	0	17	13	0	17	13	0	—	—	—	—	—	—	17	61	0	10
11	18	13	1	17	12	0	17	10	0	17	13	0	19	9	0	18	57	0	11
12	17	10	0	18	8	0	17	13	0	18	13	0	18	8	0	18	52	0	12
13	18	7	0	18	13	0	18	13	0	18	13	0	18	8	0	18	54	0	13
14	16	6	0	17	13	0	18	3	0	—	—	—	—	—	—	17	22	1	14
15	—	—	—	18	5	1	17	13	0	22	13	1 *A	—	13	1 *A	17	18	1	15
16	21	13	2 *A	20	10	0	21	12	1	23	13	1 *A	29	13	1 *A	23	61	1 *A	16
17	28	13	2 *A	22	13	1	21	14	1	23	12	2	21	9	1	23	62	1 *A	17
18	20	14	0	20	13	0	20	13	0	20	13	1	21	8	0	21	60	1 *A	18
19	19	10	1	20	14	2	20	13	0	21	12	0	—	—	—	20	40	0	19
20	20	5	0	20	15	2	21	11	0	—	—	—	20	10	1	21	53	1	20
21	22	9	0	20	11	0	20	13	0	20	13	0	21	12	1	20	33	0	21
22	22	14	0	22	12	0	20	12	0	21	12	0	22	11	0	21	59	0	22
23	20	6	0	20	12	0	21	11	0	21	11	0	21	13	0	21	53	0	23
24	21	4	0	21	10	0	22	12	0	21	12	0	—	—	—	21	50	0	24
25	19	8	0	20	12	0	20	9	0	20	9	0	19	7	0	20	31	0	25
26	19	14	1	—	—	—	19	10	0	19	11	0	19	8	0	19	42	0	26
27	21	11	0	20	13	0	21	14	0	20	10	0	—	—	—	20	56	0	27
28	18	10	0	18	12	0	17	12	0	17	4	0	—	—	—	17	38	0	28
29	17	13	0	—	—	—	—	—	—	—	—	—	—	—	—	17	13	0	29
30	17	12	0	17	4	0	17	1	0	17	12	0	19	9	0	17	38	0	30

* MARCH   31 *

U.T.		S	U.T.		S	U.T.		S	U.T.		S	U.T.		S
H	M		H	M		H	M		H	M		H	M	
12	1	27	12	42	40	12	55	31	13	9	30			
12	12	30	12	46	33	12	60	35	13	14	31			
12	18	29	12	51	31	13	5	32	13	18	31			

* APRIL   2 *

U.T.		S	U.T.		S	U.T.		S	U.T.		S	U.T.		S
H	M		H	M		H	M		H	M		H	M	
12	3	29	12	16	19	12	30	19	12	43	19			
12	8	22	12	21	19	12	34	19	12	47	20			
12	12	18	12	25	19	12	39	19						

* APRIL   16 *

U.T.		S	U.T.		S	U.T.		S	U.T.		S	U.T.		S
H	M		H	M		H	M		H	M		H	M	
8	3	23	8	16	19	8	30	27	8	43	19	8	56	21
8	7	27	8	21	20	8	34	20	8	47	20			
8	12	19	8	25	20	8	39	20	8	52	19			

* APRIL   17 *

U.T.		S	U.T.		S	U.T.		S	U.T.		S	U.T.		S
H	M		H	M		H	M		H	M		H	M	
8	4	37	8	25	30	8	49	23	11	22	30	11	45	22
8	7	31	8	29	26	11	3	24	11	26	22	11	49	22
8	12	28	8	34	23	11	6	24	11	30	22			
8	16	28	8	37	24	11	10	26	11	34	21			
8	19	27	8	41	25	11	14	23	11	37	21			
8	22	29	8	46	27	11	17	25	11	41	22			

* APRIL   18 *

U.T.		S	U.T.		S	U.T.		S	U.T.		S	U.T.		S
H	M		H	M		H	M		H	M		H	M	
11	3	20	11	17	21	11	30	22	11	47	28			
11	8	21	11	21	23	11	39	22	11	52	23			
11	12	21	11	25	21	11	43	28	11	55	21			