ATMOSPHERIC NOISE MEASUREMENTS

Data Summary Nº 4 - Station ARN-2 Nº 10

by

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The measurements reported herein were performed in cooperation with the Electromagnetic Interference Environment Section, Tropospheric Telecommunications Laboratory of ESSA-Boulder, Colorado.

Comissão Nacional de Atividades Espaciais
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ABSTRACT

Under the designation of Project "OBRA", one of the sixteen Atmospheric Radio Noise Receiving Stations of the world-wide network coordinated by the Environmental Science Services Administration, has been in operation at this Laboratory since August 1963.

This report presents the data collected during the period July-65 June 1966.

I. DESCRIPTION OF DATA

This is a continuation of the reports LAFE 13, LAFE 23 and LAFE 24 of this Laboratory.

The data presented were acquired through the standard ARN-2 equipment developed by the National Bureau of Standards. Also the processing and presentation of data follow their recommendations. An exhaustive description can be found in the references.

It follows some pertinent information on the data:

Receiving site: São José dos Campos - Brazil (23.3°S, 45.8°W)
Time used: GMT minus 3 hours
Receiver: ARN-2 (NBS) with a vertical omnidirectional whip antenna above a ground plane.
Effective noise bandwidth: 200 c.p.s.
Data is presented in tables 1 to 11, as:
F_{am} = median value of daily F_a figures for a given hour (local time) over the month.
D_u and D_l = upper and lower deciles of the distribution of daily values of F_a for a given hour.
L_{dm} = median value of daily L_d figures for a given hour over the month.
V_{dm} = the same for V_d figures.

where

F_a = effective noise figure = external noise available from an equivalent short, lossless vertical antenna, in db above kTB (Boltzmann's constant, absolute room temperature, taken as 288°C, and receiver bandwidth) this can be converted to:
E_n (equivalent vertically polarized ground wave rms noise field strength in db above 1 V/m for a 1kc/s bandwidth) through
$E_n = F_a\ 20 \log_{10} f\ (mc/s) - 65.5$
L_d = db value of the ratio between the rms value and the logarithmic average of the noise envelope.
V_d = db value of the ratio between the rms value and the average of the noise envelope.

A detailed description of the equipment and measurement technique employed can be found in the references.

The power measurements (F_a) are obtained by integration on a 15 minutes interval, and this value is taken as representative of the conditions for the whole hour.

The eight channels are scanned two at a time, so that the four lower frequencies are recorded in successive intervals of fifteen minutes during one hour; the same for the four higher one, through another recorder. L_D and V_D are recorded simultaneously, one week with the high frequency channels and the next with the low frequency ones.

Hence, the measurements related to a given hour, for 51 kc/s and 2.5 mc/s were obtained between this hour and the hour plus fifteen minutes. The next two frequencies (113 kc/s and 5.0 mc/s) between the hour plus fifteen minutes and the hour plus thirty minutes, and so on for the other pairs of simultaneous frequencies (246 kc/s with 10.0 mc/s, and 545 kc/s with 20.0 mc/s) until the eight channels were scanned during one hour. This time difference between measurements was considered when the values of F_{am} were plotted (Figs. 1 to 11).

Although special care is taken to avoid interference of man-made noise in the measurements, it is possible that sometimes the received signal is contaminated with fields other than atmospheric noise. In this case it has been verified (Crichlow, et al., 1960) that the first parameter to reflect this is the log deviation (L_D), whose absolute value will decrease so that, with the corresponding value of V_D they will not provide a solution for the amplitude probability as concluded from experimental data by Crichlow, et al. (1960). The NBS has published (Crichlow, Disney and Jenkins, 1959) curves that, for a given value of V_D, give the minimum value of L_D providing a solution of the amplitude probability distribution curve of the kind proper to atmospheric noise; also, the value of L_D that will give a best-fit to this solution. The above authors suggest that, whenever a value of L_D is found to be smaller than the minimum required, implying in a possible contamination of the signal, the most probable value of L_D should be used instead of the actually recorded one. This suggestion has been followed throughout this summary; a small circle above an L_{Dm} value indicates a quantity which is not the actually measured value, but a quantity obtained from the corresponding V_D from the above referred curves.

An asterisk above a median value indicates it was obtained from less than fifteen measurements for F_{am} or less than seven measurements for L_{Dm} and V_{Dm} .

II. REFERENCES

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MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month July 1965

Frequency (Mc)

Hour (LST)	.051					.113					.246					.545					2.5					5.0					10.0					20.0				
	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm
00	129	12	10	7.0	14.0	116	13	12	5.5	11.5	103	10	10	5.0	13.0	92	13	8	4.5	10.0	63	12	8	6.0	12.0	65	6	10	5.0	9.5	41	15	11	3.0	6.0	23	2	2	4.0	7.5
01	133	9	14	9.5	17.0	116	13	12	6.5	13.0	103	10	10	7.0	14.0	90	13	6	5.0	12.0	63	11	10	7.0	14.0	61	12	7	6.0	11.0	41	13	9	3.0	6.0	23	2	2	3.0	6.0
02	131	10	10	9.5	16.0	116	13	11	7.0	13.5	101	13	9	7.0	13.0	90	15	7	6.0	12.0	63	11	8	5.0	9.0	59	13	7	5.5	10.5	41	15	10	3.0	6.0	23	2	2	4.0	7.5
03	131	11	11	11.5	19.0	116	11	11	9.5	15.5	101	13	10	9.0	16.0	90	14	8	6.0	11.0	63	13	8	5.0	10.0	59	11	6	5.5	10.0	39	15	9	2.5	5.0	23	4	2	4.0	7.5
04	129	15	10	10.0	16.0	116	10	12	9.5	18.0	101	12	9	5.0	10.5	90	13	10	5.0	12.0	65	9	12	5.0	10.0	57	9	8	5.0	9.5	37	17	10	3.5	7.0	23	3	4	5.0	9.5
05	129	10	10	11.0	19.5	114	12	10	9.5	17.0	97	10	10	9.0	15.0	86	19	6	7.5	16.5	61	9	9	5.5	10.5	59	7	10	5.0	9.0	31	19	5	2.5	5.0	21	5	2	4.5	8.5
06	129	11	9	10.0	16.0	110	18	10	6.5	14.0	89	17	9	6.0	11.0	96	6	11	6.0	13.0	63	11	13	4.0	8.0	55	13	11	6.0	11.0	35	11	9	5.0	9.5	21	6	2	6.0	11.0
07	121	13	12	9.5	17.0	96	21	8	6.5	12.0	79	19	4	5.0	9.5	96	7	5	3.0	6.0	49	16	11	5.0	10.0	61	10	12	5.5	9.5	39	13	8	3.5	7.0	23	4	2	6.5	10.0
08	119	18	12	8.0	14.5	96	24	8	9.0	16.0	79	22	4	5.5	9.5	92	4	4	5.5	11.0	45	13	12	6.0	11.0	55	10	14	4.5	10.0	41	14	12	6.5	11.0	21	2	4	4.5	8.0
09	119	14	14	8.0	15.0	102	12	10	7.5	13.0	81	10	6	5.0	9.5	94	6	9	5.0	9.0	37	12	4	7.5	13.5	49	14	12	4.5	8.5	37	18	12	9.0	14.5	21	4	2	4.0	8.0
10	119	12	14	5.0	11.5	98	10	6	6.5	11.0	81	10	4	7.0	12.0	94	6	6	4.0	8.0	35	6	4	6.0	13.0	49	6	14	7.0	12.5	39	14	10	8.5	14.0	23	4	2	5.5	10.0
11	119	19	10	9.5	17.0	98	18	6	8.0	14.5	79	20	4	5.0	9.0	94	6	7	5.0	12.0	37	6	4	6.5	11.5	49	10	14	6.0	11.0	37	16	10	5.0	10.5	23	2	4	6.0	11.0
12	117	15	10	10.5	16.5	96	13	7	10.0	17.5	79	8	4	5.5	10.0	94	4	10	4.0	9.0	33	5	3	4.5	8.5	47	10	11	6.0	11.0	39	13	16	6.5	12.0	23	3	4	5.5	10.0
13	119	11	10	8.5	15.0	98	13	9	7.0	12.0	79	9	4	6.0	11.0	96	4	12	4.5	10.0	35	7	3	5.0	9.5	45	9	12	6.5	11.0	33	14	9	8.0	14.5	23	6	4	5.5	10.0
14	123	12	14	8.0	14.5	100	14	10	6.5	12.0	81	12	6	6.5	12.0	94	4	9	4.5	10.0	37	8	6	8.0	14.5	45	10	14	6.5	12.0	41	10	12	8.5	15.0	25	2	6	5.5	10.0
15	123	10	14	9.0	16.0	100	14	10	9.5	17.0	79	14		6.5	11.5	74	14	6	4.5	11.0	37	11	7	6.0	11.0	51	8	14	5.5	10.0	41	14	8	7.0	12.5	27	2	4	6.0	11.0
16	123	15	13	7.5	13.5	102	16	14	4.0	7.5	81	19	7	7.0	12.5	76	19	7	8.0	13.0	39	15	10	5.0	9.5	57	6	16	5.5	10.0	45	14	10	5.5	10.0	29	4	6	5.0	9.5
17	121	14	11	6.5	14.0	100	19	9	7.0	14.0	83	16	8	5.5	10.0	78	16	8	4.5	10.0	31	14	10	5.0	9.5	69	6	17	5.0	10.5	43	16	10	5.5	10.0	25	6	3	5.0	9.5
18	125	15	15	10.0	17.5	106	17	15	8.5	15.5	93	15	14	4.0	8.5	88	15	14	5.0	11.0	59	9	14	6.5	11.0	65	8	14	5.0	10.0	43	19	13	4.0	7.5	25	4	2	5.5	10.0
19	129	12	15	9.5	17.0	112	15	17	9.0	16.0	95	13	12	7.0	12.5	88	14	10	4.0	7.5	61	12	12	6.0	11.0	63	10	16	3.5	7.0	45	14	12	3.0	6.0	23	4	2	6.0	11.0
20	129	14	17	9.0	16.0	114	14	18	8.5	15.0	97	15	11	9.0	16.0	92	15	11	4.0	10.0	63	12	11	5.0	10.0	67	6	14	2.5	7.5	47	11	12	2.5	6.0	23	2	2	5.0	9.5
21	131	11	15	9.5	15.5	119	16	14	7.0	12.5	101	13	13	6.0	12.5	96	13	13	2.0	7.0	64	11	11	5.0	10.0	67	7	13	6.0	11.0	43	16	8	2.5	5.0	23	2	2	4.0	7.5
22	131	12	15	8.0	15.0	116	14	14	6.0	14.5	103	10	13	5.5	11.5	98	10	13	4.0	9.5	65	10	12	3.5	7.0	67	8	16	4.0	8.0	47	14	6	3.0	6.0	25	0	4	5.0	9.5
23	131	12	14	8.5	16.0	116	13	14	7.0	12.0	101	14	8	5.5	10.0	96	14	8	4.5	9.5	65	9	10	6.0	11.0	69	3	19	4.0	9.0	45	11	12	3.0	6.0	23	2	4	3.5	6.5

F_{am} = median value of effective antenna noise in db above kTb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month August 1965

Frequency (Mc)

Hour (LST)	.051					.113					.246					.545					2.5					5.0					10.0					20.0				
	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm
00	131	9	12	8.0	13.0	118	11	12	5.5	10.5	104	10	15	4.5	11.0	84	12	13	2.5	7.5	66	12	11	5.5	10.0	66	9	14	3.5*	6.5*	49	9	8	2.0	4.5	22	6	5	2.0	4.0
01	131	8	14	8.0	14.5	115	12	10	6.0	12.0	104	13	16	4.0	10.0	85	11	16	4.5	9.5	62	20	11	6.0	11.0	52	11	4	5.0	9.0	48	10	7	3.5	6.5	23	8	5	1.5	3.5
02	132	7	12	8.0*	16.0*	120	6	14	6.0	11.0	104	11	13	6.0	12.0	86	11	20	4.5	12.0	62	18	6	7.0	13.0	54	12	6	4.0	9.0	49	13	7	3.0	6.0	22	5	6	1.5	3.5
03	133	9	15	8.5	15.0	120	10	17	6.5	11.0	102	13	13	5.5*	11.5*	84	14	15	5.0	9.0	67	15	16	5.0	10.0	54	13	6	4.0	7.5	47	6	7	3.0	6.0	22	4	6	1.5	3.5
04	133	8	14	9.0	15.0	117	11	13	7.0	13.5	102	11	17	4.5	10.0	84	11	16	4.0	10.0	69	9	15	5.0	10.5	53	7	11	3.5	8.0	43	7	2	2.5	5.0	22	5	6	1.5	3.5
05	133	9	14	9.5*	16.0*	120	5	18	6.0	12.5	98	15	16	7.0	14.0	85	6	18	6.0	12.0	66	12	15	4.5	9.0	50	8	9	4.5	8.5	41	9	4	2.5	5.0	22	5	5	1.5	4.0
06	131	10	12	11.0	18.5	114	10	17	5.0	9.5	89	12	13	8.0	17.5	82	8	6	5.0*	9.5*	67	8	13	4.5	9.0	55	15	10	3.0*	6.5*	44	6	6	2.0	4.0	22	4	2	2.0	4.0
07	121	9	15	8.0*	14.0*	107	12	12	11.0*	21.0*	83	17	6	8.0	16.5	86	4	8	3.5*	7.5*	55	24	15	3.5	11.0	61	9	3	5.5*	11.0*	47	9	5	6.5	11.0	24	3	5	2.5*	5.5*
08	121	12	11	6.0	11.0	106	13	11	6.0*	11.0*	82	16	7	7.0	13.0	80	6	4	3.0*	6.0*	46	18	11	4.5	8.5	54	8	6	5.0*	10.5*	46	10	8	6.0	11.0	22	2	7	2.0	4.5
09	123	12	11	4.0*	7.5*	106	11	10	7.0*	13.0*	84	7	6	7.5*	13.5*	82	4	11	2.5*	6.0*	39	19	10	3.5	6.5	48	11	4	5.0*	12.0*	47	9	8	6.0*	12.5*	22	4	3	3.5	6.5
10	125	7	10	6.0*	11.0*	104	11	9	8.0*	14.5*	84	11	6			84	9	7	4.0*	8.0*	38	14	6	4.0	7.5	45	6	7	4.0*	8.5*	47	9	7	6.0*	11.0*	22	4	6	3.0	6.0
11	123	9	12	5.5	9.5*	104	11	11	5.0*	9.5*	82	10	5	5.5	9.0	86	4	15	3.0*	8.0*	37	10	6	3.5	6.5	42	8	4	5.0*	11.0*	51	6	13	7.0	12.5	22	3	4	2.5	5.0
12	122	10	16	9.0	16.0	106	3	15	8.0	14.5	82	10	8	8.0*	14.5*	83	6	9	2.5*	8.0*	34	9	4	3.0*	6.0*	38	8	5	6.0*	12.5*	41	9	11	5.0*	10.0*	20	6	3	2.0*	4.0*
13	123	7	11	6.5*	12.0*	105	8	12	9.0*	16.0*	80	10	6	10.0*	17.5*	84	7	10	5.5*	10.0*	34	9	2	2.5	5.0	38	6	4	4.5*	10.5*	49	7	11	4.6*	9.5*	28	8	8	2.5*	5.0*
14	123	8	12	8.0	14.0	105	8	11	11.0	19.5	84	14	8	8.5	15.0	84	7	10	4.5	10.0	36	9	4	3.0	6.0	42	7	12	4.5*	9.5*	60	6	9	6.0	11.0	22	6	7	2.5*	5.0*
15	125	8	13	8.0	14.5	106	7	16	9.0	16.0	84	19	10	9.0	19.5	82	7	11	3.0*	8.5*	36	20	4	4.0	7.5	46	8	6	7.0*	14.0*	51	8	9	6.0*	11.0*	26	5	7	3.5	6.5
16	123	9	12	6.5	12.0	108	5	13	8.0	13.5	84	9	12	8.0*	13.0*	80	12	12	4.0	11.0	41	11	7	3.0*	6.0*	52	7	8	5.5*	10.0*	51	8	6	4.5	8.5	27	3	8	4.5	8.6
17	120	12	10	8.0	14.5	102	14	10	9.0	17.5	86	12	13	7.0	12.0	80	7	11	4.5*	10.0*	46	10	10	4.5	8.0	60	9	8	2.5*	5.0*	53	13	7	4.5	8.0	24	11	4	3.0	6.0
18	125	10	12	9.5	17.0	110	8	13	6.0	11.5	90	15	12	5.5	12.0	84	8	10	2.0	5.0	58	10	13	4.5	8.5	62	7	11	5.5*	10.0*	51	8	5	4.5	8.5	24	12	4	2.5	5.0
19	121	9	17	6.5	14.0	112	14	14	6.0	11.0	96	16	14	4.0	10.0	86	8	13	3.0	7.0	62	13	13	4.5	8.5	58	11	10	5.0*	9.0*	52	7	7	3.5	6.5	24	9	4	2.5	6.0
20	131	6	10	7.0	14.0	114	11	13	5.5	12.0	101	14	13	5.0	9.5	88	8	11	4.0	7.5	68	10	16	5.5*	10.0*	64	11	9	5.5*	12.5*	51	11	4	3.0	6.5	22	10	6	2.0	4.5
21	131	10	11	7.5	13.0	115	16	13	5.5	11.0	100	15	9	5.0	9.5	86	10	8	2.5	6.5	65	13	14	6.5	11.0	64	10	10	5.0*	10.0*	50	9	4	3.0	6.0	22	4	6	2.0	4.0
22	131	10	12	7.5	12.5	114	13	8	5.0	10.0	106	10	15	4.5	10.5	89	8	9	3.0	6.0	66	13	16	5.5	11.0	66	8	16	4.0*	7.5*	51	7	8	3.0	6.0	22	4	7	2.0*	4.0*
23	130	9	11	7.0	12.5	116	14	13	6.5	12.5	105	12	15	5.0	11.5	86	10	12	4.0	8.5	62	19	15	6.5*	11.5*	66	6	19	4.0*	7.5*	48	10	12	2.0	5.0	24	4	4	2.0	4.0

F_{am} = median value of effective antenna noise in db above kTb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month September 1965

Frequency (Mc)

Hour (LST)	.051 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	.113 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	.246 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	.545 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}
00	130	8	12			120	6	18			104	6	12			72	20	10		
01	134	6	12			118	8	14			104	6	16			74	18	14		
02	132	8	10			118	10	14			104	4	16			69	23	7		
03	132	8	12			120	8	16			100	12	14			69	20	11		
04	130	10	8			122	6	18			102	8	12			70	20	12		
05	132	10	12			116	12	14			100	8	16			64	24	14		
06	128	6	12			104	14	12			80	16	10			67	13	5		
07	130	0	18			102	14	12			80	14	10			68	10	6		
08	118	16	8			102	12	8			80	14	8			65	15	7		
09	122	10	12			104	10	8			81	17	8			66	12	4		
10	124	8	12			104	12	9			80	14	6			66	8	8		
11	124	10	16			104	10	10			78	20	4			64	10	4		
12	124	12	14			106	14	10			78	16	6			64	12	8		
13	122	10	12			100	14	6			82	10	10			64	10	6		
14	128	12	12			108	10	12			85	9	13			67	11	12		
15	130	18	15			108	14	12			86	14	14			66	17	5		
16	128	10	13			111	15	15			90	16	16			64	12	4		
17	128	10	14			106	12	14			86	14	12			66	8	6		
18	128	7	14			114	10	14			90	12	12			68	10	6		
19	126	10	8			114	10	14			96	10	12			72	10	10		
20	130	10	10			114	10	16			96	16	10			72	14	8		
21	130	6	10			116	12	12			100	12	14			73	17	9		
22	132	6	10			118	6	14			102	6	14			72	16	6		
23	131	7	11			118	8	14			102	6	14			74	14	10		

Hour (LST)	2.5 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	5.0 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	10.0 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	20.0 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}
00	64	10	16			66	6	10			43	14	8			22	5	4		
01	65	11	19			60	6	16			45	6	6			22	3	5		
02	63	13	15			59	7	13			43	12	10			22	2	4		
03	64	10	16			58	8	12			39	10	8			24	4	6		
04	62	12	18			54	12	10			35	8	6			22	4	4		
05	61	13	11			56	10	12			35	10	6			24	2	3		
06	61	11	13			69	5	17			43	12	6			24	4	6		
07	48	10	12			60	16	10			45	6	12			24	7	4		
08	42	10	8			56	4	14			43	12	12			24	5	6		
09	38	13	6			48	6	10			43	8	10			24	4	4		
10	38	8	8			44	4	4			39	10	6			22	6	4		
11	36	8	6			44	4	18			41	6	12			23	3	5		
12	36	12	6			38	10	4			39	8	12			22	7	6		
13	36	13	8			40	4	8			39	10	6			22	4	6		
14	36	8	8			40	10	8			41	8	6			24	6	8		
15	40	19	8			48	8	22			43	8	10			24	4	4		
16	40	24	12			52	10	22			43	10	4			26	4	5		
17	44	26	10			62	6	24			43	8	4			30	2	6		
18	56	14	18			62	10	8			48	15	5			28	4	7		
19	66	8	19			66	4	10			49	8	6			28	5	7		
20	64	10	15			68	10	6			49	12	6			26	7	4		
21	66	12	16			72	4	12			45	14	4			24	7	3		
22	64	10	14			70	8	10			45	8	8			24	6	6		
23	68	4	18			70	6	10			45	12	6			22	11	2		

F_{am} = median value of effective antenna noise in db above ktb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José   Lat. 23.3°S Long. 45.8°W   Month October 19 65

Frequency (Mc)

Hour (LST)	.051 Fam	.051 Du	.051 Dl	.051 Vdm	.051 Ldm	.113 Fam	.113 Du	.113 Dl	.113 Vdm	.113 Ldm	.246 Fam	.246 Du	.246 Dl	.246 Vdm	.246 Ldm
00	135	10	12	7.0	12.0	125	10	8	6.0	11.5	108	8	8	6.0	11.0
01	135	10	8	8.5	14.0	127	10	12	7.0	13.0	108	6	8	7.5	14.0
02	134	11	5	8.0	13.0	124	13	7	7.5	13.0	108	7	8	7.0	13.0
03	133	12	6	9.0	16.0	123	12	8	6.5	12.0	106	6	8	6.0	12.0
04	135	8	10	6.5	12.0	121	14	8	7.0	13.0	104	12	8	6.5	12.5
05	131	10	8	9.0	15.5	119	8	14	7.0	12.0	86	20	6	10.5	19.0
06	127	14	14	9.5	17.0	101	24	6	6.0	11.0	76	22	2	4.0	7.5
07	123	14	10	7.0	12.5	105	12	10	9.5	16.0	80	12	4	4.5	7.5
08	123	14	10	7.0	12.5	103	10	6	8.0	13.0	80	12	6	7.5	12.5
09	125	10	14	6.0	11.0	105	12	8	8.0	14.5	80	20	6	4.0	7.5
10	125	12	10	6.0	11.0	107	14	10	7.5	12.5	84	14	8	6.5	13.0
11	129	10	14	9.0	16.0	113	12	16	5.5	10.0	82	24	4	5.5	10.0
12	129	12	10	7.0	12.5	113	18	14	5.5	10.0	84	30	8	6.0	10.5
13	133	14	12	6.0	11.0	117	18	14	5.0	10.0	94	26	18	5.5	11.5
14	135	11	9	4.5	8.5	119	15	15	5.5	9.5	95	17	17	5.0	9.5
15	139	8	12	4.0	7.5	121	16	16	4.0	7.5	95	20	18	6.5	12.0
16	134	11	8	5.0	9.5	120	15	15	6.5	12.0	85	29	9	5.5	11.0
17	137	8	12	5.0	9.5	122	9	19	7.0	12.5	96	14	20	6.5	11.0
18	136	5	13	5.5	9.5	120	11	15	6.5	12.0	101	11	9	6.5	12.0
19	137	8	12	5.0	9.5	123	12	10	4.5	9.0	106	6	10	4.0	8.0
20	138	7	11	5.5	9.5	127	8	10	4.0	8.5	109	5	13	4.0	8.0
21	137	10	12	6.0	10.5	125	12	8	5.5	10.0	108	8	6	5.0	10.0
22	137	12	10	6.0	11.0	125	12	6	6.0	11.0	110	8	10	5.0	10.5
23	134	13	7	7.0	13.0	126	11	11	5.0	11.0	108	8	8	5.0	9.5

Hour (LST)	.545 Fam	.545 Du	.545 Dl	.545 Vdm	.545 Ldm	2.5 Fam	2.5 Du	2.5 Dl	2.5 Vdm	2.5 Ldm	5.0 Fam	5.0 Du	5.0 Dl	5.0 Vdm	5.0 Ldm	10.0 Fam	10.0 Du	10.0 Dl	10.0 Vdm	10.0 Ldm	20.0 Fam	20.0 Du	20.0 Dl	20.0 Vdm	20.0 Ldm
00				2.5	5.5	67	9	7	4.0	8.0	62	6	6	3.6	7.0	45	3	6	4.5	8.5	23	4	2	2.0	4.5
01				3.0	7.5	69	6	13	3.5	7.0	62	6	6	2.0	5.0	45	6	7	3.5	7.5	23	9	3	3.0	6.0
02				3.5	7.0	67	8	11	4.0	7.5	62	5	7	3.0	7.0	45	5	8	4.0	8.5	23	6	5	1.5	4.5
03				4.0	8.5	65	11	15	3.5	7.5	60	7	9	3.0	6.5	41	8	10	3.0	6.0	21	3	3	1.5	3.5
04				6.0	11.0	63	13	15	3.5	7.0	58	13	9	3.0	6.0	37	9	4	3.5	7.0	21	7	2	1.5	3.5
05						59	19	23	5.0	9.5	58	11	9	3.0	7.0	37	10	6	3.5	7.0	23	9	7	1.0	2.5
06				5.5	9.5	43	19	13	3.0	6.5	64	5	9	5.5	12.0	39	10	7	6.0	9.0	23	4	4	2.5	5.0
07				3.0	6.0	39	17	8	3.5	7.0	52	9	6	6.5	14.0	33	13	3	6.0	11.0	23	5	3	3.5	7.0
08				7.0	12.0	37	11	7	5.0	10.0	46	11	8	4.0	9.5	33	11	6	5.0	9.5	23	5	7	2.5	5.0
09						36	12	5	5.0	9.5	42	9	6	5.5	10.0	33	9	8	8.0	13.0	23	6	4	2.0	4.5
10						37	15	8	7.0	12.5	40	10	8	5.0	9.5	29	18	2	9.0	16.0	23	6	6	3.0	6.0
11				8.0	14.5	39	22	9	6.0	11.5	40	13	5	6.0	10.5	33	10	6	7.0	12.5	23	8	8	4.0	7.5
12				9.0	15.5	39	27	7	4.0	7.5	40	16	5	5.0	9.0	33	11	6	5.5	9.5	23	8	4	3.0	6.0
13				3.0	6.0	41	27	4	6.5	12.0	41	11	5	4.0	11.0	35	11	4	6.0	11.0	25	4	8	3.0	6.0
14						47	27	13	3.0	12.0	42	10	6	5.0	11.0	38	7	3	4.0	7.5	27	7	4	2.0	4.5
15				4.0	7.5	50	25	15	3.5	11.5	48	8	4	2.5	6.5	45	6	6	2.5	5.0	29	6	4	3.0	6.0
16						50	14	11	8.0	14.5	55	5	5	5.5	11.5	45	4	2	4.0	7.5	32	3	3	2.5	5.0
17				4.0	10.0	55	14	10	6.0	10.0	64	2	6	3.5	7.0	47	6	6	4.5	9.5	31	6	3	3.0	6.0
18				5.0	10.0	65	8	12	3.5	7.5	66	4	8	4.0	9.0	49	6	6	3.0	6.0	31	4	9	3.0	6.0
19				3.0	7.0	67	10	6	5.0	10.5	66	6	6	4.0	8.0	51	2	6	3.0	7.0	29	5	5	3.0	6.0
20				2.5	7.0	69	8	6	6.0	11.5	68	6	8	4.5	9.5	49	4	6	3.0	7.0	26	5	7	4.5	8.5
21				3.0	7.0	69	6	6	5.5	12.0	68	4	6	5.5	11.0	45	6	6	3.0	6.0	25	5	5	3.5	7.0
22				3.5	10.5	67	10	6	5.0	9.5	68	6	5	5.0	9.0	45	8	6	3.5	7.0	25	4	7	2.0	4.5
23				5.0	11.0	67	8	6	6.0	11.0	69	3	9	8.5	15.0	45	6	8	4.5	9.0	23	7	2	1.5	3.5

F_{am} = median value of effective antenna noise in db above ktb
D_u = ratio of upper decile to median in db
D_l = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

USCOMM-NBS-BL

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month November 1965

Frequency (Mc)

Hour (LST)	.051 Fam	.051 Du	.051 Dℓ	.051 Vdm	.051 Ldm	.113 Fam	.113 Du	.113 Dℓ	.113 Vdm	.113 Ldm	.246 Fam	.246 Du	.246 Dℓ	.246 Vdm	.246 Ldm	.545 Fam	.545 Du	.545 Dℓ	.545 Vdm	.545 Ldm
00	134	5	11	9.0	15.0	111	6	11	5.5	10.0	90	8	8	7.0	12.5	78	5	5	5.0	9.0
01	133	5	8	9.0	15.5	110	4	7	8.0	14.5	90	6	6	7.5	13.0	79	4	8	5.5	10.0
02	134	5	10	8.0	14.0	110	4	8	7.5	12.5	90	4	6	7.5	13.5	77	6	6	6.5	12.0
03	133	6	14	9.5	15.5	110	7	8	8.0	14.0	88	8	6	6.0	12.0	77	6	10	6.5	11.5
04	133	6	13	10.0	16.0	109	5	8	9.0	16.0	88	4	8	9.0	16.0	75	4	8	6.5	13.5
05	127	8	10	7.0	12.5	96	11	6	8.5	15.0	66	12	4	13.5	23.5		14	4	6.0	11.0
06	123	8	12	10.5	18.5	90	13	3	9.0	14.5	64	14	4	5.5	10.0	77	8	12	6.0	11.0
07	121	10	8	9.0	15.0	92	12	4	9.0	16.0	66	10	4	7.0	12.5	81	4	10	5.0	9.5
08	121	8	10	9.0	16.0	90	11	2	7.0	12.5	66	5	4	5.5	10.0	77	8	16		
09	123	8	11	10.6	18.5	94	11	6	8.0	13.0	66	14	4	6.5	12.0	75	8	10	8.0	16.5
10	123	8	14	10.0	18.0	94	12	6	10.0	16.0	68	10	6	5.5	10.0	77	8	12	5.0	9.5
11	125	6	12	7.5	13.5	97	7	7	8.5	15.0	72	16	8	11.0	17.5	75	8	6	5.6	11.0
12	131	8	20	9.0	16.0	100	16	8	12.0	21.0	76	28	10	7.0	12.5	78	9	19	6.0	10.0
13	133	10	10	9.0	16.0	106	14	12	7.5	13.5	90	10	22	8.0	13.0	79	14	14	5.0	8.5
14	137	8	10	9.0	16.0	112	12	14	13.0	23.0	96	12	16	11.0	18.0	81	14	9	6.5	11.5
15	138	9	9	10.5	17.0	114	10	16	7.5	13.5	92	18	22	11.5	22.5	83	16	14	7.5	13.5
16	137	14	10	12.0	18.6	116	14	16	12.0	21.0	95	15	21	14.5	23.0	87	12	14	12.5	22.0
17	137	11	10	12.0	21.0	113	15	14	12.5	22.0	90	14	19	11.5	20.0	79	14	6	12.0	21.0
18	136	6	10	9.0	16.0	111	13	16	7.5	13.5	88	18	11	10.0	17.0	77	17	3	8.5	14.5
19	135	15	8	8.0	13.5	112	15	7	7.0	14.0	90	19	4	9.0	16.0	83	15	4	4.0	7.5
20	135	11	6	7.0	11.5	112	17	4	7.0	11.5	92	17	4	5.5	11.5	83	8	6	5.0	9.5
21	135	7	5	8.0	14.5	112	10	6	6.0	10.0	94	8	10	7.5	15.0	83	6	4	5.0	9.0
22	135	6	6	9.0	16.0	112	10	6	7.5	14.0	92	8	6	7.5	13.5	85	4	6	6.0	11.0
23	134	5	5	9.0	15.0	112	6	8	9.0	15.0	92	6	6	7.5	13.0	81	6	4	5.0	10.0

Hour (LST)	2.5 Fam	2.5 Du	2.5 Dℓ	2.5 Vdm	2.5 Ldm	5.0 Fam	5.0 Du	5.0 Dℓ	5.0 Vdm	5.0 Ldm	10.0 Fam	10.0 Du	10.0 Dℓ	10.0 Vdm	10.0 Ldm	20.0 Fam	20.0 Du	20.0 Dℓ	20.0 Vdm	20.0 Ldm
00	73			8.5	16.0	61			7.5	13.0	45			5.5	10.5	22			3.0	6.0
01	70	10	12	6.5	12.5	58	6	6	6.0	10.0	45	4	8	6.0	9.5	28			7.5	13.5
02	68	4	9	9.0	16.0	56	6	10	7.0	12.0	43	4	12	7.0	12.5	25			2.5	5.0
03	68	4	10	8.0	14.5	56	6	4	7.0	12.5	43	6	8	6.5	10.0	24			4.0	7.5
04	67	5	8	8.0	14.5	55	11	27	4.0	7.5	51			5.0	9.0	26			2.5	5.0
05	78			7.5	16.0	63			7.0	12.5	49			5.0	9.5	26			2.0	4.0
06	52	10	18	10.0	16.0	58	8	10	8.0	14.5	39	6	8	7.0	12.5	23			4.0	7.5
07	44	6	7	5.0	9.5	46	8	6	5.5	10.0	46			7.0	12.5	26			6.0	11.0
08	42	8	10	3.0	6.5	38	8	4	6.5	11.0	33	10	4	8.0	13.0	26			3.0	6.0
09	42	15	6	2.0	5.0	38	6	4	5.5	10.5	31	12	2	7.5	13.5	24	6	8	3.5	6.5
10	41	5	5	7.0	12.5	34	6	4	9.0	16.0	33	8	4	8.0	14.5	30			3.5	7.0
11	44			4.5	8.5	43			7.5	13.5	35	4	6	7.5	13.5	24	10	10	7.0	12.5
12	44	12	8	6.0	11.0	36	16	8	10.0	17.5	37	6	10	7.0	12.5	24	8	8	3.5	6.6
13	52	16	14	7.5	13.5	40	18	10	11.5	20.0	39	10	10	9.0	16.0	30	8	10	5.0	9.5
14	64	22	24	8.0	13.0				7.0	12.5	43	12	8	10.0	17.5	32	12	10	5.0	9.5
15	66	24	26	10.0	17.5	50	18	12	8.5	15.0	47	12	10	5.5	9.5	50			3.0	6.0
16	62	24	22	7.5	12.5	65			7.0	12.0	49	18	12	4.5	8.0	40			7.0	12.5
17	68	32	18	7.5	13.5	60	24	12	7.0	12.5	47	18	6	5.0	9.5	36			5.0	9.5
18	74	9	17	6.0	11.0	60	10	34	6.0	10.5	47	6	4	4.0	7.5	28	16	6	4.5	8.5
19	74	7	10	6.0	11.0	62	10	12	4.5	8.5	49	16	8	4.0	7.5	30	20	10	4.0	7.5
20	74	8	8	6.0	10.5	64	8	10	4.5	8.0	47	6	8	4.5	8.0	30			3.0	6.0
21	78			5.0	9.0	69			5.5	10.0	49			5.0	9.5	27			5.5	10.0
22	78			13.0	23.0	68			4.0	7.5	46			5.0	9.0	27			2.0	4.0
23	74			3.0	7.5	74			4.0	8.0	48			5.0	9.0	26			3.0	6.0

F_{am} = median value of effective antenna noise in db above ktb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month January 19 66

Frequency (Mc)

Hour (LST)	.051					.117					.246					.545					2.5					5.0					10.0					20.0				
	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm
00	139	6	6	5.5*	10.0*	122	9	3	5.5*	10.0*	99	8	4	5.0*	9.5*	83	4	6	7.0*	12.5*	67	3	9	5.0*	9.5*	56	6	8	4.5	8.5	44	4	6	2.5*	5.0*	24	6	2	2.0*	4.5*
01	137	8	4	5.5*	11.0*	121	12	4	6.0*	11.0*	99	4	4	7.5	13.0	83	6	8	4.0*	7.5*	66	4	8	4.0*	8.0*	55	7	7	2.5*	5.5*	42	6	2	3.0*	6.0*	24	6	2	2.0*	4.5*
02	137	8	6	8.5	15.5	121	8	8	7.0*	12.0*	98	7	9	5.0*	9.0*	81	4	7	4.5*	8.0*	66	2	10	4.0*	7.5*	55	9	7	2.5*	5.5*	44	2	4	3.5*	6.5*	24	4	4	2.5*	5.0*
03	136	7	5	6.0*	10.5*	122	5	11	5.0*	9.5*	97	4	8	7.0*	12.5*	81	4	8	6.0*	9.5*	66	2	12	4.5*	8.5*	55	7	7	3.5*	7.0*	44	2	6	3.0*	6.0*	24	4	4	1.5*	3.5*
04	137	6	6	8.0*	13.5*	122	5	11	7.5*	13.5*	97	2	10	6.5*	12.0*	83	2	6	5.5*	10.0*	66	4	12	4.0*	7.5*	60	8	15	4.0*	7.5*	40	8	4	4.0*	7.5*	24	2	4	4.0*	7.5*
05	137	4	8	8.0*	14.5*	116	7	11	6.0*	11.5*	79	12	4	7.5*	13.5*	85	2	8			63	5	7	3.0*	6.0*	59	5	7	3.0*	6.0*	39	5	5	3.5*	6.5*	24	2	3	2.0*	4.5*
06	129	8	14	10.5*	18.5*	108	13	11	12.0*	21.0*	78	13	7	5.5*	10.5*	81	6	8	7.0*	12.5*	52	8	4	5.0*	9.5*	56	8	8	4.0*	8.0*	41	6	4	3.5*	6.5*	24	8	2	1.5*	3.5*
07	130	7	17	9.5*	17.5*	107	12	8	2.0*	4.0*	79	6	6			79	4	10	5.5*	10.5*	47	5	3	5.0*	9.5*	51	7	9	2.0*	5.0*	36	4	8	7.0*	12.5*	24	4	2	1.0*	2.5*
08	125			10.0*	16.0*	106			3.5*	7.5*	73			5.5*	10.0*	80			3.5*	7.5*	42					45					33			5.0*	9.5*	24			1.5*	3.5*
09	126			3.0*	6.0*	103			8.5*	15.0*	73			6.0*	11.0*	79			6.0*	11.0*	40			3.0*	6.0*	40			3.5*	7.0*	33			6.5*	12.0*	24			0.5*	2.5*
10	127			9.0*	15.0*	105			10.5*	18.5*	75	10	6			78			8.0*	17.0*	40			6.5*	12.0*	38					31	3	5	6.0*	11.0*	24	4	8	2.5*	5.0*
11	131	6	6	9.0*	15.0*	109	14	10	4.0*	7.5*	77	20	6	12.0*	19.0*	79	8	4	6.0*	11.0*	38	10	8	0.5*	2.5*	36	10	10	3.5*	12.5*	30	6	6	5.0*	9.5*	24	4	10	2.0*	4.5*
12	135	12	10	7.0*	13.0*	115			13.5*	20.5*	85			10.5*	17.5*	81			4.5*	10.0*	42	30	12	2.0*	5.0*	40			5.0*	9.5*	36			4.5*	8.0*	26			3.5*	7.0*
13	140			8.5*	15.5*	122			9.0*	16.0*	95			8.5*	15.5*	83					50			13.0*	22.5*	41			13.0*	22.5*	32			7.5*	13.5*	26			1.0*	2.6*
14	141			9.5*	15.5*	123			9.5*	16.0*	95			5.0*	9.5*	79			6.0*	11.0*	50			8.0*	14.5*	46			7.0*	12.5*	38			5.5*	10.0*	30			3.0*	6.0*
15	137			8.5*	15.0*	122			10.0*	17.5*	98			10.5*	19.5*	88	19	5	11.0*	19.5*	49			11.0*	19.5*	49			6.5*	12.0*	41			4.0*	7.5*	38			13.5*	23.5*
16	145	14	12	12.0*	19.0*	130	17	21	11.0*	17.5*	105	14	18	12.0*	19.5	89	18	8	12.0*	20.0*	64	22	16	9.5*	16.0*	56	20	12	6.5*	11.0*	46	8	8	4.5*	8.5*	36	10	6	3.5*	7.0*
17	145	12	10	11.5*	17.5*	131	12	12	10.5*	18.5*	109	13	15	12.5*	21.0*	89	14	10	14.0*	24.5*	66	20	14	8.5*	14.0*	57	11	7	6.0*	11.0*	48	10	8	7.0*	12.5*	34	8	6	5.0*	9.0*
18	143	14	8	13.0*	20.5*	127	16	12	14.0*	21.5*	99	16	10	13.5*	21.0*	91	12	14	11.0*	19.0*	66	20	6	6.5*	12.0*	58	14	6	6.0*	11.0*	48	5	6	6.0*	11.0*	34	8	8	3.5*	7.0*
19	143	10	10	13.5*	24.5	129	8	18	10.5*	17.0*	103	12	14	9.5*	16.5*	89	10	6	6.0*	11.0*	72	10	8	6.5*	12.0*	64	10	4	5.0*	9.0*	46	8	4	2.5*	5.0*	30	10	8	3.5*	7.0*
20	141	8	12	13.5*	23.5*	127	6	18	7.0*	13.0*	100	9	11	7.5	13.0	87	6	4	6.0*	11.0*	72	4	8	4.0*	8.0*	64	6	6	1.0*	2.5*	46	6	2	3.5*	7.0*	29	9	7	5.5*	10.0*
21	141	4	10	11.0*	19.5*	125	8	18	8.0*	13.5*	99	12	10	11.0*	17.5*	81	8	4	5.0*	9.5*	70	2	8	4.0*	8.0*	68	4	10	0.5*	2.5*	46	4	4	3.0*	6.0*	26	8	4	2.5*	5.0*
22	139	10	12	7.5*	13.5*	123	14	16	6.5*	12.0*	99	10	8	7.5*	13.5*	85	8	6	6.0	11.0	70	2	8	4.0*	8.0*	66	6	8	1.5*	3.5*	45	3	7	2.0*	4.5*	24	10	4	2.0*	4.5*
23	139	6	6	11.0*	19.5*	125	6	6	7.0*	12.5*	99	8	4	9.0*	16.0	85	4	6	6.0*	11.0*	68	4	8	5.0*	9.0*	65	5	9	2.0*	5.0*	43	5	9	2.0*	5.0*	24	4	4	1.0*	2.5*

F_{am} = median value of effective antenna noise in db above ktb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month February 19 66

Frequency (Mc)

Hour (LST)	.051					.113					.246					.545					2.5					5.0					10.0					20.0				
	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm
00	135	8	11	10.5	17.5	121	9	19	8.5	14.0	96	10	13	8.0	14.0	85	9	14	6.0	10.5	65	8	6	6.0	11.0	54	8	6	5.0	9.0	44	4	4	3.5	6.5	29	6	6	2.0	4.5
01	134	12	22	9.0	16.0	123	7	15	7.0	12.0	96	7	21	6.0	11.5	83	8	15	8.0	13.0	65	8	14	5.0	10.0	56	6	4	2.0	4.5	44	6	6	1.5	4.0	29	8	4	2.0	4.5
02	135	8	7	9.5	16.5	119	11	13	8.0	13.0	92	10	12	7.5	12.5	81	8	14	6.0	10.5	65	8	10	4.5	8.5	56	6	4	4.0	8.0	44	14	4	4.0	7.5	29	8	8	3.0	6.0
03	134	9	24	11.0	19.5	119	6	15	10.0	17.0	92	8	15	10.0	17.0	81	6	13	9.0	14.5	63	12	8	6.5	11.5	54	8	10	4.5	8.5	42	4	6	3.5	7.0	27	4	6	1.5	3.5
04	135	9	25	12.5	19.5	117	7	15	10.0	16.0	88	11	11	10.0	17.0	83	8	14	5.5	9.5	63	8	10	5.0	10.0	60	6	8	3.0	6.0	40	4	4	3.0	6.0	26	7	7	2.0	4.5
05	131	11	23			113	9	14	10.0	16.0	84	8	13	9.5	17.0	83	9	13	6.0	12.0	60	13	9	5.5	10.0	57	7	9	5.0	9.0	38	2	4	2.0	4.5	28	3	5	2.0	4.5
06	129	6	23			103	15	11	10.5	18.5	72	14	6	13.0	22.5	87	6	21	2.5	5.0	55	8	14	4.5	8.5	56	6	6	4.0	8.5	41	7	5	4.0	7.5	27	4	6	1.5	3.5
07	128	6	22	12.5	22.0	103	8	12	11.0	19.5	72	6	6	7.0	11.5	79	11	11			44	9	5	5.0	9.0	52	6	10	4.0	7.5	38	8	6	4.0	7.5	25	4	8		
08	123	8	14	7.5	12.5	105	7	11	9.0	14.5	72	11	7	6.0	10.6	85	9	14	5.0	9.0	37	4	6	3.5	6.5	42	10	6	4.5	9.0	36	8	6	6.0	10.5	27	6	12	1.0	2.5
09	127	4	22	9.5	16.5	103	6	13	10.0	16.0	70	10	6	6.0	10.5	83	10	16	7.5	12.5	36	3	5	2.0	4.5	37	7	9	4.0	8.0	36	8	8	5.0	9.0	29	4	12	2.5	5.0
10	127	4	21	10.0	16.0	103	7	10	8.5	14.0	71	10	5	8.0	13.0	79	9	12	7.5	13.0	37	2	2	3.5	6.5	34	6	7	6.0	11.0	34	9	6	6.5	11.0	27	4	8	2.0	4.5
11	125	9	17	11.0	19.5	103	6	11	8.0	13.0	72	7	8	7.0	11.6		8	9	2.0	5.5	37	16	6	4.0	7.5	32	10	6	5.0	9.0	34	10	10	6.0	10.5	27	4	10	2.5	5.0
12	129	6	23	7.0	12.0	103	12	13	6.5	11.0	79	15	13	5.5	10.0	82	11	12			37	30	4	4.5	9.0	36	13	7	7.0	11.5	37	11	13	9.0	14.5	29	10	8	7.0	11.5
13	133	16	16	7.5	12.5	111	20	17	10.0	16.0	84	28	12	13.0	21.0	88	15	17	8.0	16.0	46	27	13	11.5	20.0	37	24	6	7.5	12.5	38	17	5	7.0	11.5	29	18	8	5.5	9.5
14	135	8	10	12.0	21.0	119	20	16	12.0	21.0	92	22	16	14.5	23.0	85	12	11			49	28	10	11.0	17.5	46	22	10	8.5	14.0	42	14	6	6.5	11.0	33	8	8	5.0	9.0
15	138	15	10	12.0	21.0	123	17	11	10.5	18.5	103	17	17	12.0	21.0	89	14	8	7.0	11.5	59	18	16	13.0	23.0	48	17	8	7.0	13.0	44	12	4	6.0	10.5	39	12	14	4.5	8.0
16	141	16	10	9.0	14.5	123	16	12	9.0	14.5	102	18	18	11.5	20.0	95	14	22	7.0	15.5	63	20	20	10.5	18.5	56	16	10	8.0	13.0	48	12	4	8.0	13.0	37	22	6	6.0	10.5
17	141	16	8	14.0	24.5	125	14	14	9.0	14.5	96	18	18	9.5	15.5	87	18	26	8.5	15.5	66	15	11	10.0	17.0	60	6	8	6.0	11.0	49	9	5	5.5	9.5	35	12	6	4.0	7.5
18	141	12	10	9.0	14.5	127	8	23	11.0	19.5	97	19	19	10.5	18.5	86	15	25	5.5	10.0	61	12	8	7.0	12.0	59	9	5	5.0	9.0	48	6	4	3.0	6.0	35	12	8	3.0	6.0
19	141	12	10	8.5	14.0	123	13	19	7.0	12.0	96	18	18	7.0	12.0	88	13	15	6.5	11.0	68	7	5	5.5	9.5	66	4	8	5.0	9.0	48	6	4	2.5	5.0	33	12	6	4.0	7.5
20	139	14	8	9.0	14.5	123	14	16	7.5	12.5	97	17	17	7.0	13.5	87	14	16	6.0	10.5	69	10	4	3.5	7.0	64	5	6	3.5	6.5	50	4	4	3.0	6.0	31	6	4	3.5	6.5
21	135	16	8	9.0	15.0	121	14	8	7.5	12.5	96	12	12	10.0	17.0	89	12	20	6.0	10.5	67	10	4	4.5	9.0	64	6	2	5.0	9.0	46	4	6	3.5	6.5	29	8	2	3.5	6.5
22	135	14	6	9.5	15.5	122	13	13	9.0	14.5	96	16	16	10.0	17.5	87	6	18	8.5	14.0	65	8	4	5.0	9.0	65	3	5	3.5	7.5	46	8	4	4.0	7.5	28	7	3	3.0	6.0
23	135	8	18	10.0	16.0	122	9	13	8.5	14.0	96	12	12	11.0	17.5	85	6	16	11.0	17.5	65	6	8	4.5	8.0	64	6	2	2.5	5.0	46	4	4	3.5	6.5	29	6	4	3.5	6.5

F_{am} = median value of effective antenna noise in db above kTb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month March 1966

Hour (LST)	Frequency (Mc)																																					
	.051					.115					.246					.545					2.5					5.0					10.0					20.0				
	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm
00	133	16	15	10.5*	18.5*	117	13	12	8.0	14.5	99	11	9	8.0	14.5	80	13	6	5.5*	10.0*	66	6	10	5.5	10.0	69	9	9	5.0*	9.0*	47	6	6	4.5	8.5	28	6	4	2.5	5.0
01	135	8	5	8.5*	15.0*	117	15	13	6.5*	12.0*	97	12	10	7.0	12.5	78	13	11	5.0	9.0	66	6	12	5.0	9.5	61	6	8	5.0	9.0	45	8	4	4.0	7.5	28	6	4	3.0	6.0
02	131	11	16	9.0*	16.0*	117	11	14	7.0*	12.5*	97	11	15	7.5	13.5	79	8	7	4.5	9.0	64	8	12	4.0	8.5	59	6	10	5.0	9.5	47	5	6	4.5*	8.5*	28	6	4	2.0	4.5
03	131	12	15	10.0*	17.5*	117	9	14	8.0	14.5	97	9	13	6.5*	11.0*	80	5	13	4.0*	10.0*	64	6	10	5.5	10.5	59	4	12	5.0	10.0	47	6	8	3.0*	6.0*	26	4	4	2.0	4.5
04	133	13	16	12.0	21.0	115	12	21	7.0*	13.0*	99	6	21	8.0	13.0	80	6	17	4.5*	8.5*	64	6	14	5.0	10.0	59	6	12	5.0	9.5	43	12	6	3.5	6.5	26	4	4	1.5	3.5
05	133	9	21	11.0	18.5	111	11	17	7.5*	14.0*	91	8	17	8.0*	16.0*	78	9	8	6.5*	14.0*	62	8	10	5.5	10.5	61	14	8	5.0*	9.0*	39	14	4	4.0	8.0	28	2	4	2.0	4.5
06	123	9	16	10.5*	17.5*	99	9	9	10.5	18.5	75	9	8	6.0*	11.0*	84	5	16	5.0*	12.0*	54	8	8	5.5*	9.5*	61	12	4	5.0*	9.0*	45	14	4	4.0*	7.5*	28	2	4	3.0	6.0
07	123	8	14	9.5*	16.5*	101	8	10	9.5*	17.0*	75	11	5	9.0*	14.5*	82	6	16	5.0*	11.5*	44	6	4	6.5	12.0	55	10	6	8.0*	14.0*	43	4	6	4.0*	7.5*	30	6	4	4.0*	7.5*
08	117	13	11	11.0*	19.5*	99	9	9	5.5*	10.0*	71	13	3	9.5*	17.0*	78	8	14	5.0*	11.0*	41	5	4	4.0*	7.5*	47	10	8	5.0*	9.0*	37	8	2	4.5	8.5	30	2	6	5.0	9.5
09	119	12	9	5.0*	10.5*	97	10	8	8.5*	15.0*	73	10	6	4.0*	7.5*	80	6	14	6.0*	11.5*	41	7	5	6.0	11.0	41	14	12	6.0*	11.0*	37	6	12	5.5	10.5	26	6	6	3.5	6.5
10	121	10	10	8.0*	13.0*	97	12	10	7.0*	12.5*	75	10	8	5.0*	9.5*	78	6	12	5.5*	10.5*	40	4	6	6.0	11.0	39	6	10	5.0	9.5	35	6	4	7.0	12.0	28	4	6	4.0	7.5*
11	123	8	13	8.5*	14.5*	101	11	9	8.0*	14.5*	79	10	10	4.5*	6.5*	76	7	8	5.0*	10.0*	40	6	6	5.0*	9.5*	37	10	10	5.0*	9.5*	35	6	4	6.5	12.0	28	4	8	4.5	8.5
12	127	6	18	9.0*	16.0*	105	11	15	5.0*	9.5*	82	24	12	3.5*	6.5*	78	11	7	6.0*	11.0*	42	13	5	4.0*	7.5*	39	6	10	4.5	8.0	35	7	4	5.5	10.0	27	9	7	4.0	7.5
13	129	12	10	9.5	17.0	107	16	11	8.0*	14.5*	86	26	16	8.5*	15.0*	82	11	7	8.0*	13.5*	44	17	7	6.0	11.0	39	16	11	7.0	12.5	39	6	8	7.5	13.5	32	8	10	5.0	9.5
14	131	11	13	8.5	15.0	110	25	11	7.5	13.5	86	29	13	6.0*	11.0*	78	16	5	7.5*	15.0*	46	31	8	10.0	17.5	45	11	15	6.0	11.0	41	8	6	6.5	11.0	34	6	8	4.5	8.5
15	134	12	12	9.5	17.0	113	23	11	9.0	16.0	91	27	17	7.0*	12.0*	79	7	6			48	17	10	9.0	16.0	51	16	20	7.5	13.5	43	8	6	5.5	9.5	32	8	12	6.0	11.0
16	136	12	12	9.0	14.5	113	25	10	8.0	14.5	93	31	15	9.5*	17.0*	82	17	7	3.0*	8.5*	52	20	12	8.0	13.0	54	11	15	6.0	11.0	45	14	4	7.0	12.0	33	7	11	7.5	13.5
17	135	27	9	10.0	16.0	114	25	12	9.0	15.0	92	32	14	8.5	14.0*	80	27	8	5.0*	9.5*	59	21	13	8.5	14.0	61	12	16	5.0	9.0	49	4	4	5.0	9.5	36	4	8	6.0	11.0
18	136	16	15	11.0	19.5	117	17	15	10.0	17.5	95	21	12	10.5*	18.0*	82	17	4	7.0*	12.5*	68	12	12	10.0	17.5	67	6	8	6.5	11.0	49	6	4	6.0	11.0	34	6	4	4.5	8.5
19	136	12	9	8.5	15.0	119	10	13	7.5	13.5	99	13	9	8.0	13.0	84	11	7	3.0*	7.0*	72	4	6	6.0	11.0	65	8	12	5.0	9.5	51	6	4	3.0	6.0	34	6	4	4.5	8.0
20	137	10	11	9.0	15.0	121	11	11	9.5	17.0*	103	13	10	5.0*	9.0*	86	8	6	5.5	10.0	72	4	8	6.0	11.0	67	10	10	4.0*	7.0*	53	6	6	3.5	6.5	32	6	4	6.0	11.0
21	137	11	12	6.5*	11.5*	119	15	10	9.0	16.0	103	15	7	8.5	15.0	86	11	6	2.5	7.5	68	8	6	6.0	10.5	71	6	8	5.5*	10.0*	51	8	6	4.0	6.5	32	8	6	4.0	7.5
22	136	12	10	10.0	17.5	119	13	9	10.0	16.0	103	9	9	7.0	14.0	86	4	5	4.5*	8.5*	66	6	6	7.0	12.5	71	10	10	4.5	8.5	51	4	6	3.5	6.5	30	6	4	3.5	6.5
23	135	9	13	10.0	17.0	119	8	13	8.0	13.5	103	7	15	7.5	14.5	84	6	6	4.5*	8.0*	66	6	6	5.5	10.5	71	8	12	3.0*	6.0*	47	6	4	3.0	6.0	29	7	3	4.0	7.5

F_{am} = median value of effective antenna noise in db above kTb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

RN-13

MONTH-HOUR VALUES OF RADIO NOISE

Station São José   Lat. 23.3° S Long. 45.8° W Month April 1966

Frequency (Mc)

Hour (LST)	.051 Fam	.051 Du	.051 Dℓ	.051 Vdm	.051 Ldm	.113 Fam	.113 Du	.113 Dℓ	.113 Vdm	.113 Ldm	.246 Fam	.246 Du	.246 Dℓ	.246 Vdm	.246 Ldm	.545 Fam	.545 Du	.545 Dℓ	.545 Vdm	.545 Ldm
00	137	8	10	10.0	17.0	114	10	8	8.0	16.0	98	6	10	8.0	15.5	81	8	8	6.0	11.0
01	135	10	14	9.5	17.0	114	10	6	9.0	16.0	96	8	10	9.0	16.5	79	8	6	6.5	11.5
02	135	10	10	10.0	16.5	112	10	6	9.0	15.5	96	8	10	7.0	15.0	79	8	8	6.0	11.0
03	135	10	10	10.5	17.0	112	12	10	8.0	15.0	94	8	10	8.0	16.0	79	6	10	7.5	13.5
04	133	10	8	9.5	15.5	112	8	8	9.0	16.5	94	6	8	8.0	15.0	77	10	6	4.0	9.0
05	133	12	20	10.5	17.0	112	6	10	8.5	15.0	92	4	16	8.5	16.5	79	6	8	7.5	13.5
06	129	10	10	10.5	16.5	98	12	10	9.5	17.0	68	16	6	4.5	17.0	83	4	26	4.5	10.5
07	125	10	12	9.0	15.0	94	12	8	11.0	19.5	70	12	8	13.0	22.5	81	4	24	5.5	12.5
08	123	8	10	9.5	15.0	96	12	4	7.5	13.5	68	14	6	8.0	13.0	81	4	26	8.5	16.5
09	127	6	10	8.0	14.0	94	14	12	10.0	17.5	68	16	10	2.5	5.0	81	4	24	5.0	10.0
10	127	8	16	9.5	15.0	94	14	6	5.0	9.5	70	10	10	4.0	9.0	81	4	23	4.0	10.0
11	127	8	8	9.0	15.0	98	14	8	10.0	17.5	70	12	4	15.0	26.0	77	4	16	6.0	13.0
12	127	8	14	9.0	14.5	96	14	14	6.0	11.0	70	18	10	6.0	10.5	79	2	14	5.0	9.0
13	129	8	8	9.0	15.0	100	12	14	8.0	14.5	71	23	11	12.0	20.5	77	8	10	7.0	12.5
14	131	12	10	8.0	14.0	102	14	12	8.5	15.0	76	20	14	10.0	17.5	74	7	11	5.5	9.5
15	133	10	20	7.0	12.0	102	20	14	12.0	19.0	76	22	12	13.0	22.5	77	10	12	8.5	18.0
16	131	18	10	7.0	13.0	102	26	12	7.5	13.5	74	24	12	8.5	14.0	77	12	12	13.5	22.0
17	131	16	10	5.5	11.0	102	26	16	7.0	12.5	76	22	12	5.5	10.0	75	10	6	9.0	15.5
18	131	12	8	6.5	12.0	110	14	14	6.5	12.0	88	14	10	5.0	10.0	79	8	6	5.0	9.5
19	137	6	10	8.0	14.0	110	12	8	7.5	14.0	92	8	8	6.5	13.0	79	8	6	2.0	5.0
20	137	6	4	8.0	14.0	112	12	8	6.0	12.0	96	4	10	5.0	10.5	83	4	6	3.0	7.0
21	137	4	8	9.0	15.0	114	10	4	7.0	13.0	96	8	8	7.5	14.0	83	4	8	3.5	7.5
22	137	6	10	9.0	15.0	112	12	6	7.0	12.5	96	8	8	5.0	11.0	83	4	6	3.0	6.5
23	135	8	6	8.0	14.0	112	12	6	7.5	15.0	96	8	10	7.0	14.0	83	6	8	5.0	10.0

Hour (LST)	2.5 Fam	2.5 Du	2.5 Dℓ	2.5 Vdm	2.5 Ldm	5.0 Fam	5.0 Du	5.0 Dℓ	5.0 Vdm	5.0 Ldm	10.0 Fam	10.0 Du	10.0 Dℓ	10.0 Vdm	10.0 Ldm	20.0 Fam	20.0 Du	20.0 Dℓ	20.0 Vdm	20.0 Ldm
00	64	6	10	6.5	12.0	63	6	14	3.5	7.0	38	10	8	2.5	5.0	21	12	4	2.0	4.5
01	64	6	12	5.5	10.0	53	14	12	4.0	8.0	38	6	4	3.0	6.0	21	12	6	1.0	2.5
02	62	8	12	6.5	12.0	53	8	16	6.5	11.0	38	10	4	2.5	5.0	21	14	6	1.5	3.5
03	62	8	12	6.5	12.0	51	6	16	6.0	10.5	38	8	8	3.0	6.0	21	12	4	1.5	3.5
04	60	10	12	7.0	12.5	51	8	14	5.0	9.0	34	10	4	3.0	6.0	21	8	4	1.0	2.5
05	60	12	24	6.0	11.0	53	16	14	5.0	9.0	32	20	6	2.0	4.5	21	10	6	1.5	3.5
06	54	12	16	7.0	12.5	63	8	14	4.5	8.5	38	8	8	3.0	6.0	23	10	6	2.0	4.5
07	44	8	10	4.5	8.5	55	14	16	5.0	10.0	32	10	8	4.5	8.5	23	12	8	2.0	4.5
08	39	9	9	4.0	7.5	47	10	10	3.5	6.5	28	10	6	4.0	7.5	25	8	9	2.5	5.0
09	40	8	6	5.0	9.5	39	6	14	—	—	26	12	12	4.5	8.5	23	10	6	2.0	4.5
10	38	8	4	4.0	7.5	33	10	10	3.5	6.5	32	4	6	5.0	9.5	25	6	10	4.0	7.5
11	39	8	6	2.5	5.0	33	6	6	7.5	13.0	30	4	12	5.0	9.0	23	8	8	3.5	7.0
12	40	4	8	4.5	8.5	29	10	4	5.5	10.0	26	10	10	4.5	8.5	21	8	6	4.0	7.5
13	38	12	10	4.0	7.5	31	12	10	7.0	12.5	24	14	8	7.0	12.5	23	10	8	3.0	6.0
14	38	18	8	4.5	8.5	33	12	8	3.5	6.5	32	14	10	5.0	10.5	23	22	8	3.0	6.0
15	42	18	13	5.0	9.0	37	16	12	3.5	6.5	34	20	8	6.5	12.0	25	12	8	3.0	6.0
16	42	20	14	5.0	9.5	43	18	16	5.5	10.0	38	18	10	3.0	6.0	25	14	10	3.0	6.0
17	48	24	18	6.5	11.0	53	14	6	4.0	8.0	42	10	12	5.0	9.5	27	16	8	4.0	7.5
18	58	14	8	7.5	13.5	57	10	10	5.0	9.5	40	10	10	4.0	7.5	25	12	8	3.0	6.0
19	66	8	14	6.0	13.0	59	8	12	5.0	9.0	42	8	8	3.0	6.0	25	10	8	2.5	5.0
20	66	8	14	5.0	9.5	65	10	12	4.0	8.0	44	10	8	5.0	9.5	23	12	6	3.0	6.0
21	66	8	8	6.5	11.0	65	10	14	4.0	7.5	42	8	4	3.0	6.0	23	12	4	3.0	6.0
22	66	8	10	5.0	9.5	63	12	10	3.5	7.0	42	6	6	2.5	5.0	23	18	6	2.5	5.0
23	64	10	8	6.0	11.0	61	12	10	4.5	8.5	40	8	8	3.0	6.0	21	10	6	2.5	5.0

F_{am} = median value of effective antenna noise in db above ktb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month May 1966

Frequency (Mc)

Hour (LST)	.051 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	.113 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	.246 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	.545 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}
00	122	15	9	11.5	18.0	104	13	10	9.0	15.0	75	13	7	10.5	17.5	72	10	6	7.0	18.0
01	122	15	7	11.0	18.0	102	14	8	9.5	13.5	74	12	6	10.0	18.0	72	6	6	7.0	12.0
02	123	14	8	11.0	17.0	104	14	10	9.0	15.5	76	10	10	8.0	18.5	72	8	8	7.5	15.0
03	122	13	9	10.5	16.5	100	16	10	9.0	15.0	74	10	12	9.0	17.0	70	10	10	6.0	12.5
04	122	13	7	10.0	17.5	102	14	12	10.0	17.5	71	11	11	11.5	20.0	73	8	13	6.5	10.0
05	122	14	8	10.0	16.0	102	11	12	9.5	16.0	70	14	14	11.0	18.5	78	4	8	5.0	11.0
06	119	11	6	10.0	20.0	94	19	6	9.0	14.5	54	16	4	11.0	17.0	82	2	12		
07	113	16	6	11.5	16.0	94	10	10	10.0	16.0	52	18	2	5.0	9.5	80	2	4		
08	113	16	8	9.0	20.0	95	11	11	10.0	17.5	54	13	4	8.0	14.5	78	4	7	7.5	15.0
09	113	14	8	11.5	17.0	92	14	11	9.0	16.0	54	16	4	13.5	23.5	78	2	2	6.0	18.0
10	117	10	12	10.5	18.5	94	9	10	11.0	20.0	55	16	5	3.5	6.5	80	2	8	4.5	10.0
11	117	10	10	10.0	16.5	93	11	5	6.5	11.5	55	13	5	8.5	15.0	72	4	4	6.5	18.0
12	115	12	10	11.0	19.5	94	11	8	8.5	15.0	54	13	4	7.0	12.5	74	6	4	7.5	14.5
13	115	14	8	8.5	15.0	91	15	5	8.5	13.5	52	12	2	6.0	11.0	76	2	4	4.0	9.0
14	121	10	14	8.0	13.5	92	16	8	8.0	13.5	53	14	5	5.5	10.0	74	6	4	5.0	17.0
15	121	12	12	6.5	12.0	94	16	8	9.0	16.0	58	15	10	8.5	15.0	76	4	2	6.5	11.0
16	119	14	14	9.0	15.5	94	12	8	6.0	11.0	66	10	6	10.0	17.5	78	4	6	4.5	12.5
17	119	16	12	9.5	15.0	98	12	12	7.0	11.5	67	14	15	9.0	15.0	76	2	6	5.5	11.0
18	124	13	13	9.0	16.0	104	12	14	6.5	11.0	73	15	17	7.0	13.0	78	4	4	3.0	6.0
19	123	10	12	8.5	14.5	105	12	15	6.5	11.0	79	11	19	7.0	13.0	78	6	10	4.5	9.0
20	123	14	12	9.0	15.0	105	12	13	7.0	12.4	75	7	11	9.5	17.0	79	5	5	5.0	9.0
21	124	13	13	11.0	19.5	104	13	12	8.5	14.6	78	13	14	8.0	15.0	80	4	6	4.0	8.0
22	124	13	11	10.5	18.5	104	11	10	7.5	13.5	76	10	8	9.0	16.5	80	6	6	4.0	8.5
23	121	14	8	10.5	17.5	102	13	8	8.5	14.0	74	12	8	8.0	17.0	81	1	11	6.0	12.0

Hour (LST)	2.5 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	5.0 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	10.0 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}	20.0 F_{am}	D_u	D_ℓ	V_{dm}	L_{dm}
00	57	14	5	4.5	8.0	60	9	15	4.0	7.5	41	12	8	3.0	6.0	21	2	6	1.0	2.5
01	56	15	6	5.5	10.0	51	18	18	4.0	7.5	41	8	6	3.5	6.5	21	2	4	1.0	3.0
02	58	8	6	5.0	9.5	50	9	9	5.0	9.0	41	6	8	3.0	6.0	21	2	4	1.5	3.0
03	57	8	5	5.5	10.0	49	12	6	4.0	8.0	38	13	7	2.6	5.0	19	4	4	1.5	3.0
04	58	10	10	6.5	11.5	47	6	6	4.5	7.5	34	15	6	2.5	5.0	20	3	3	1.5	3.0
05	54	10	6	5.5	10.0	49	4	6	3.5	7.5	34	10	4	1.5	3.5	20	3	5	1.0	2.5
06	55	8	9	5.5	10.0	51	12	6	5.0	8.5	39	2	8	2.5	5.0	20	3	1	2.5	5.0
07	42	10	7	4.5	8.5	52	15	9	5.5	10.0	37	8	6	5.0	9.6	22	3	3	2.0	4.0
08	40	8	5	6.0	11.0	49	4	18	6.0	10.0	36	7	7	6.5	12.0	21	8	4	2.0	4.0
09	38	5	5	5.0	9.5	40	7	9	8.0	14.0	33	8	8	6.5	12.0	23	2	4	2.0	4.0
10	38	5	5	5.0	9.6	35	8	8	5.5	10.0	34	10	7	10.5	18.5	23	2	8	2.0	4.0
11	38	1	3	7.0	12.4	35	2	10	5.0	9.5	37	4	10	6.0	12.0	21	6	6	3.0	6.0
12	38	5	3	3.5	6.5	31	12	16	3.0	6.0	29	12	6	2.5	5.0	23	4	8	2.5	5.0
13	38	2	2	4.0	7.5	31	12	10	4.0	7.5	33	8	6	3.0	6.0	23	6	4	3.0	6.0
14	38	5	9	3.5	6.5	35	8	9	6.0	10.0	37	8	10	5.0	9.0	23	4	8	3.0	6.0
15	40	5	5	3.0	6.0	40	8	10	6.5	12.0	39	8	10	6.0	11.0	23	4	6	2.5	5.0
16	40	12	4	4.0	7.5	47	10	10	5.0	10.0	41	7	9	5.0	9.5	24	3	7	3.5	6.5
17	52	7	12	5.0	8.5	54	11	9	4.5	8.5	42	9	5	5.5	8.0	23	4	4	3.0	6.0
18	58	10	10	6.0	11.0	56	9	11	4.0	9.0	42	8	3	4.0	7.5	23	2	8	2.5	5.0
19	61	11	10	6.0	10.5	54	8	7	5.0	9.0	43	10	6	6.0	8.5	22	5	3	2.0	4.5
20	61	11	7	6.0	11.0	61	8	11	3.5	7.0	44	7	5	5.5	9.6	24	3	5	2.5	5.0
21	61	11	8	6.0	11.0	61	9	9	3.0	6.0	44	9	3	3.5	6.5	21	4	6	2.5	5.0
22	60	12	4	5.0	9.5	62	9	9	3.0	6.0	43	8	4	3.5	7.0	22	3	7	2.0	4.0
23	57	13	4	6.0	11.0	65	6	14	2.0	4.0	43	7	4	2.0	4.0	21	3	4	1.5	4.0

F_{am} = median value of effective antenna noise in db above ktb
D_u = ratio of upper decile to median in db
D_ℓ = ratio of median to lower decile in db
V_{dm} = median deviation of average voltage in db below mean power
L_{dm} = median deviation of average logarithm in db below mean power

MONTH-HOUR VALUES OF RADIO NOISE

Station São José Lat. 23.3°S Long. 45.8°W Month June 19 66

Frequency (Mc)

Hour (LST)	.061					.113					.246					.545					2.5					5.0					10.0					20.0				
	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm	Fam	Du	Dℓ	Vdm	Ldm
00		24	6	7.5	13.5		24	8	6.0	11.0				5.0*	11.0*				6.0	9.5	60*			25*	55*	61*			50*	100*	46*			4.0*	7.5*	24*			1.0*	3.0*
01		14	12	9.0	16.0		16	8	6.0	11.0				6.0*	12.0*				4.5*	8.0*	58*			30*	60*	47*			35*	70*	44*			4.5*	9.5*	24*			2.0*	4.0*
02		14	8	9.5	17.0		18	10	6.5	10.5				12.0*	20.5*				6.0	10.5	60*			35*	65*	47*			50*	95*	46*			1.0*	3.5*	24*			2.0*	4.0*
03		16	12	8.0	18.0		22	12	5.0*	9.5*				12.5*	22.0*				6.5*	14.5*	59*			50*	95*	47*			60*	110*	42*			2.0*	4.0*	24*			2.0*	4.0*
04		16	8	9.5	16.5		10	18	8.0	17.0				8.0*	17.5*				7.5	15.0	60*			4.0*	10.5*	41*			55*	95*	40*			1.5*	3.5*	26*			2.0*	4.0*
05		16	8	10.0	17.5		16	10	7.5	13.5				8.0*	16.5*				5.5*	11.0*	54*			30*	60*	47*			40*	75*	36*			2.0*	4.0*	26*			3.0*	6.0*
06		12	8	7.5*	13.5*		18	6	9.0*	15.0*				10.0*	17.5*				5.0*	11.0*	54*			6.5*	12.0*	45*					42*			4.0*	7.5*	26*			2.0*	4.0*
07		14	8	7.0*	12.5*		15	6	6.5*	12.0*				7.0*	10.5*				3.0*	6.0*	42*			5.5*	10.0*	61*					38*					26*			2.0*	4.0*
08		16	6	4.5*	8.5*				8.0*	14.5*				4.5*	8.5*				6.0*	10.5*	42*			2.5*	5.0*	49*					36*			4.0*	7.5*	26*			3.0*	6.0*
09		14	6	5.0	9.0		8	4	6.5*	12.0*				4.5*	8.5*	2	6	5.0*	9.5*	42*			3.5*	5.5*	41*					36*					26*			3.0*	6.0*
10		20	10	8.5	15.0		22	4	7.0	12.5				9.0*	16.0*	4	12	5.5*	10.5*	42*			2.0*	4.0*	35*			7.0*	12.5*	43*					27*				
11		12	12	7.5*	13.5*				4.5*	8.5*				8.0*	14.5*	5	8	6.0*	9.5*	44*			5.5*	9.0*	33*					40*					28*				
12		19	4	7.0	12.5		9	8	6.0*	11.0*				6.0*	11.0*	5	11	6.0*	12.5*	40*			3.0*	6.0*	31*					36*					28*			2.0*	4.0*
13		20	10	7.0*	15.0*		6	10	6.0	12.0				8.0*	14.5*	2	5	7.5*	13.5*	40*			2.5*	5.0*	35*					38*			2.0*	4.5*	26*				
14		18	6	6.0	11.0		13	8	5.5	10.0				11.0*	19.5*	4	11			39*			5.5*	9.5*	31*					38*			12.0*	23.5*	28*				
15		18	6	7.0	12.0		16	7	5.5	10.0				7.0*	12.0*	4	10	13.0*	20.5*	46*			4.5*	4.5*	45*					38*					26*			2.5*	5.0*
16		11	10	9.0*	16.0*		12	11	8.5	15.0				10.0*	17.5*	3	12	4.0*	9.0*	46*					45*					44*			3.5*	6.5*	28*			2.5*	5.0*
17		13	13	7.0	12.5		9	13	6.5	11.0				6.0*	13.5*	6	5	9.5*	16.0*	48*					41*					45*			3.0*	6.0*	25*			3.0*	6.0*
18		10	13	7.0	11.5		15	11	7.0*	12.5*				8.5*	16.0*	7	11	2.5*	6.0*	56*			2.0*	5.0*	61*					48*			2.5*	5.0*	28*			4.0*	7.5*
19		15	15	6.0	11.0		15	9	5.5	11.5				11.0*	18.0*	8	12	3.5*	7.5*	57*			2.5*	6.0*	58*			3.0*	6.5*	48*			3.5*	6.5*	27*			2.5*	5.0*
20		16	12	8.0	15.0		15	12	6.5	11.5				9.0*	18.5*	5	6	4.0	8.0	58*			2.5*	5.0*	61*			7.0*	13.0*	60*			3.0*	6.0*	26*			1.5*	3.5*
21		14	10	6.0*	11.5*		13	11	5.0	9.0				3.5*	8.0*	5	6	3.5	7.5	59*			2.5*	5.0*	65*			4.0*	9.0*	46*			2.0*	4.5*	25*			3.0*	6.0*
22		17	17	8.0	15.0		18	18	4.5	10.0				9.5*	19.0*	8	7	5.0*	9.0*	59*			4.0*	8.0*	67*			5.0*	9.0*	50*			3.0*	6.0*	25*			2.0*	5.0*
23		15	11	8.0	14.0		22	15	7.0	11.5				8.0	16.5	6	8	6.0*	12.5*	61*			3.0*	6.0*	66*			5.5*	6.5*	49*			4.0*	7.5*	24*			2.5*	5.0*

F_{am} = median value of effective antenna noise in db above ktb

D_u = ratio of upper decile to median in db

D_ℓ = ratio of median to lower decile in db

V_{dm} = median deviation of average voltage in db below mean power

L_{dm} = median deviation of average logarithm in db below mean power

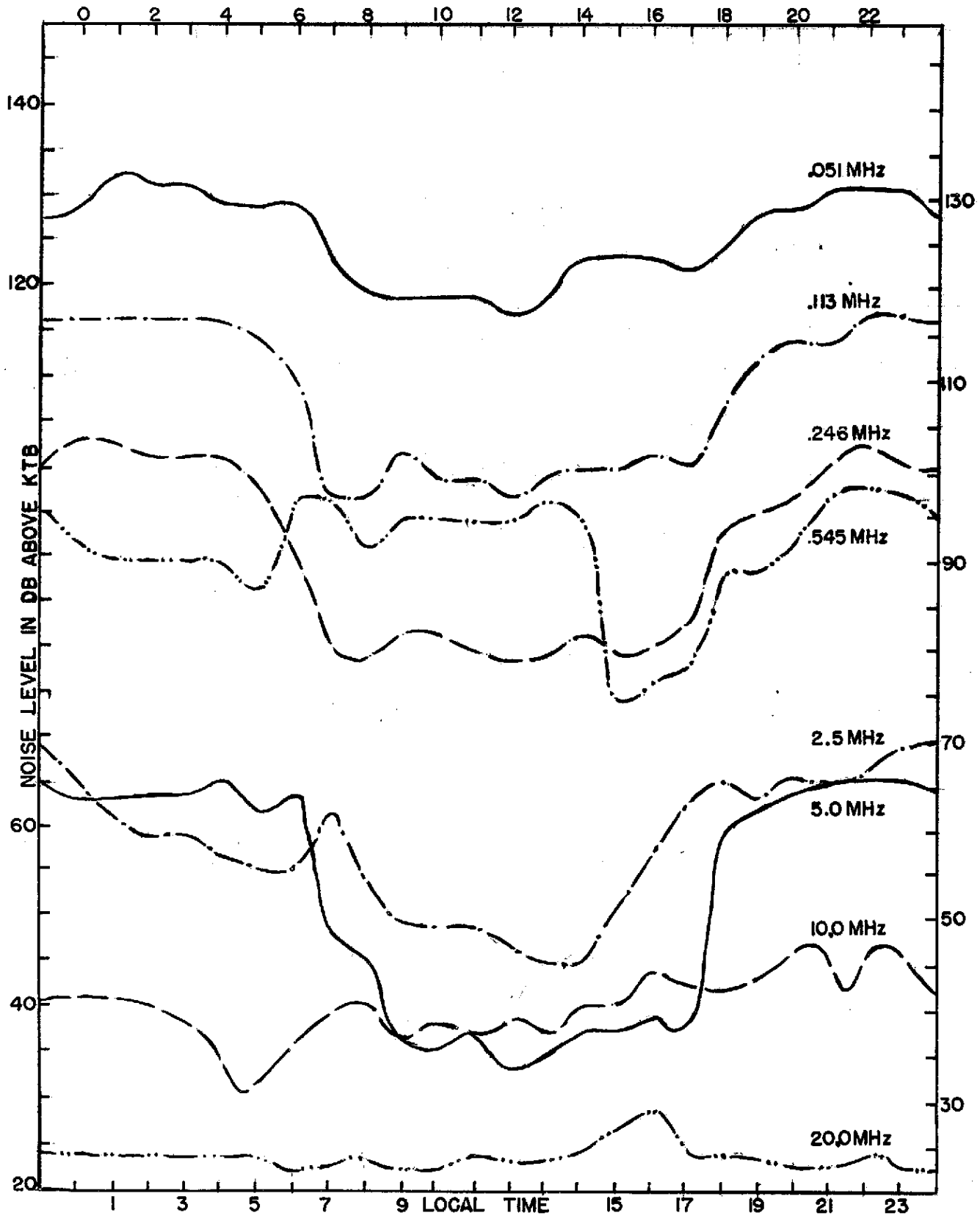

Fig. 1 — Monthly Median Values For JULY 1965

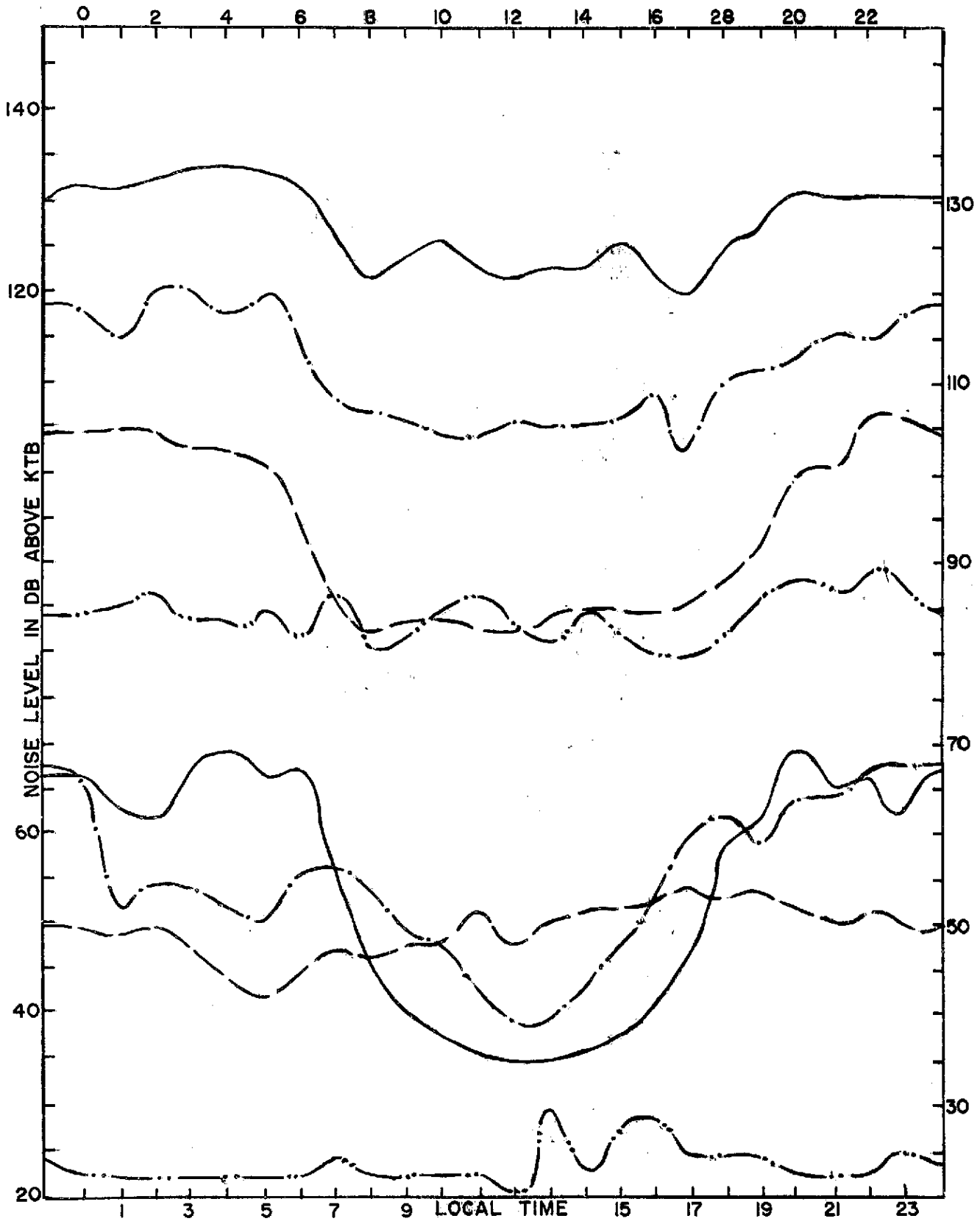

Fig. 2—Monthly Median Values For AUGUST 1965

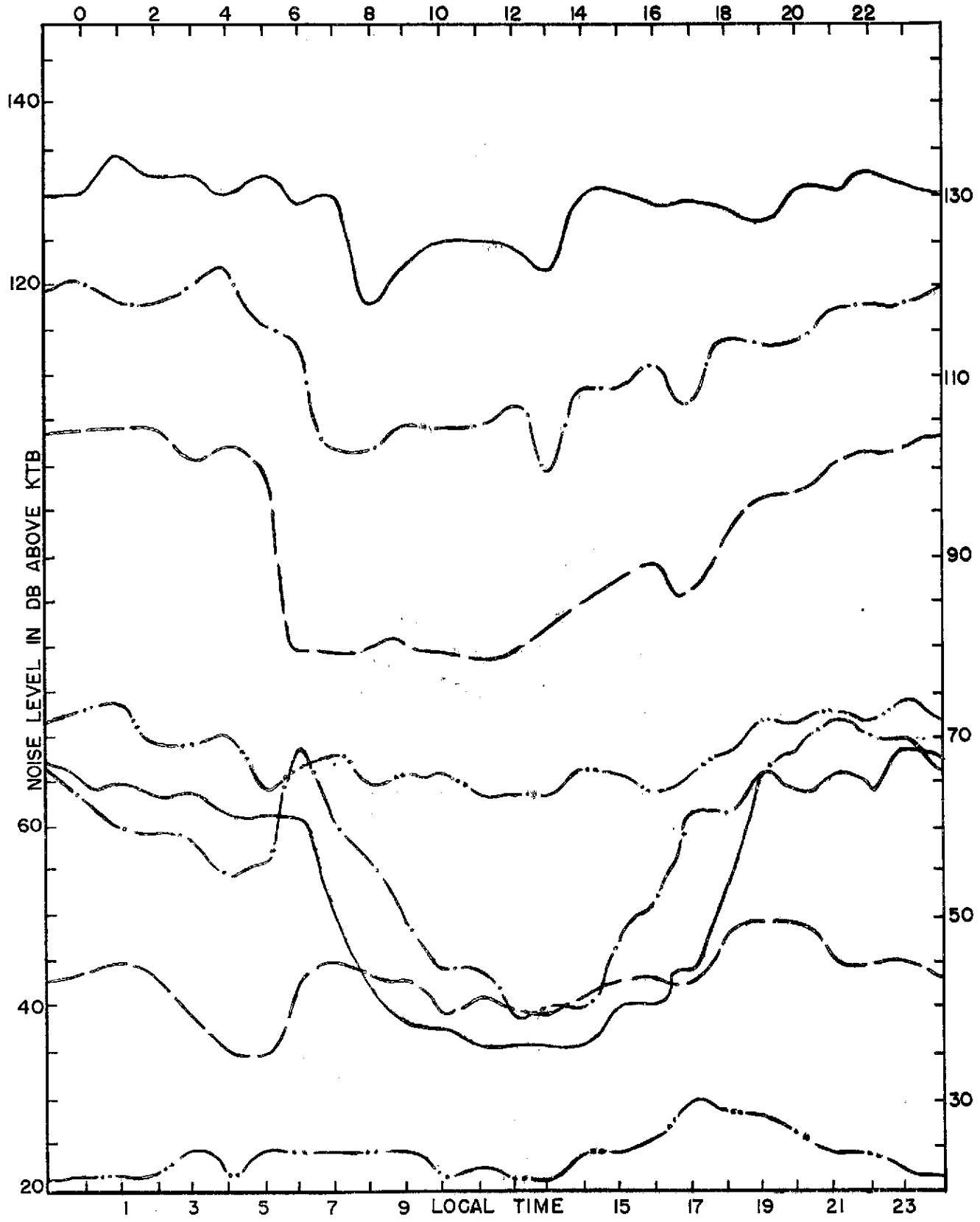

Fig.3—Monthly Median Values For SEPTEMBER 1965

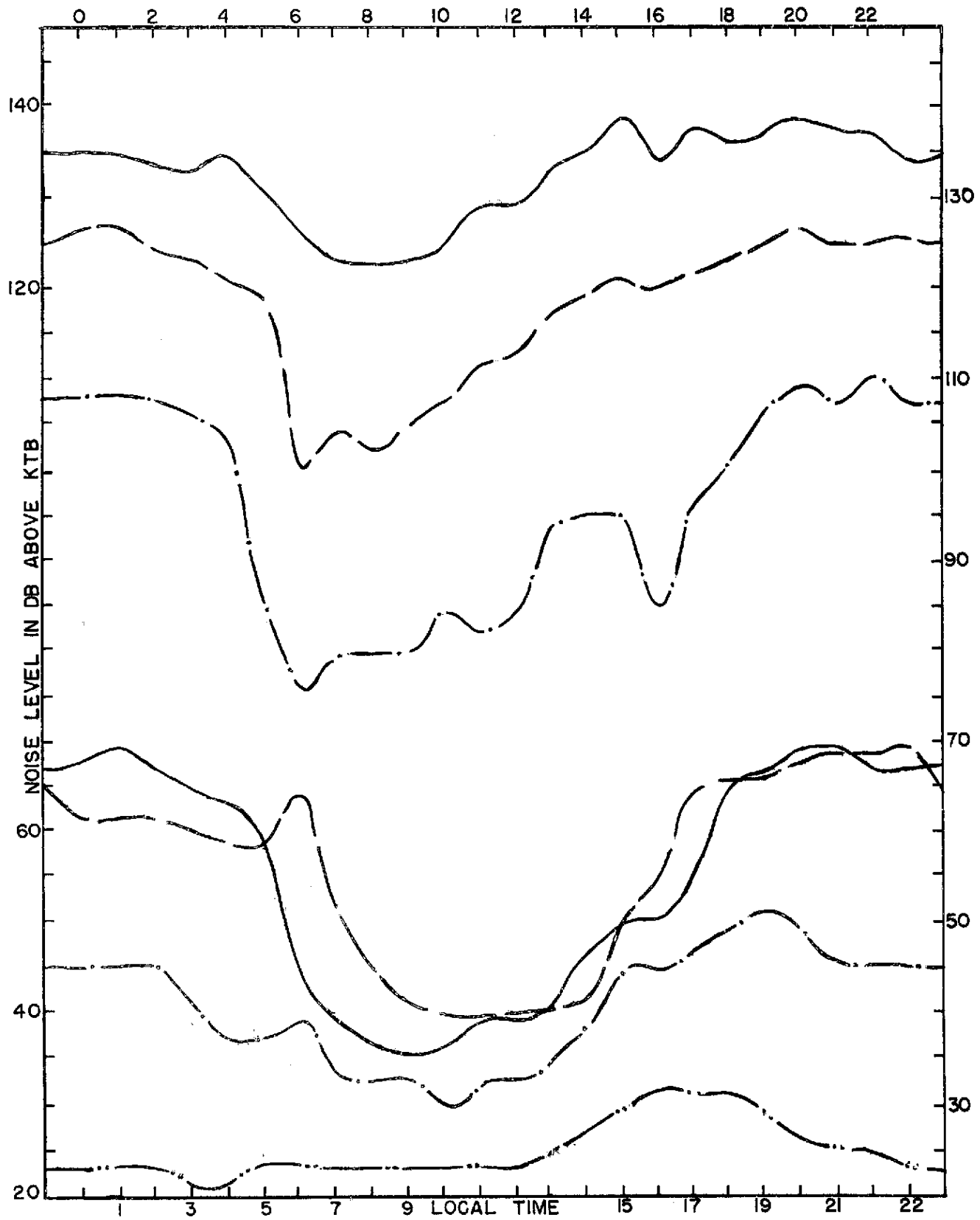

Fig. 4—Monthly Median Values For OCTOBER 1965

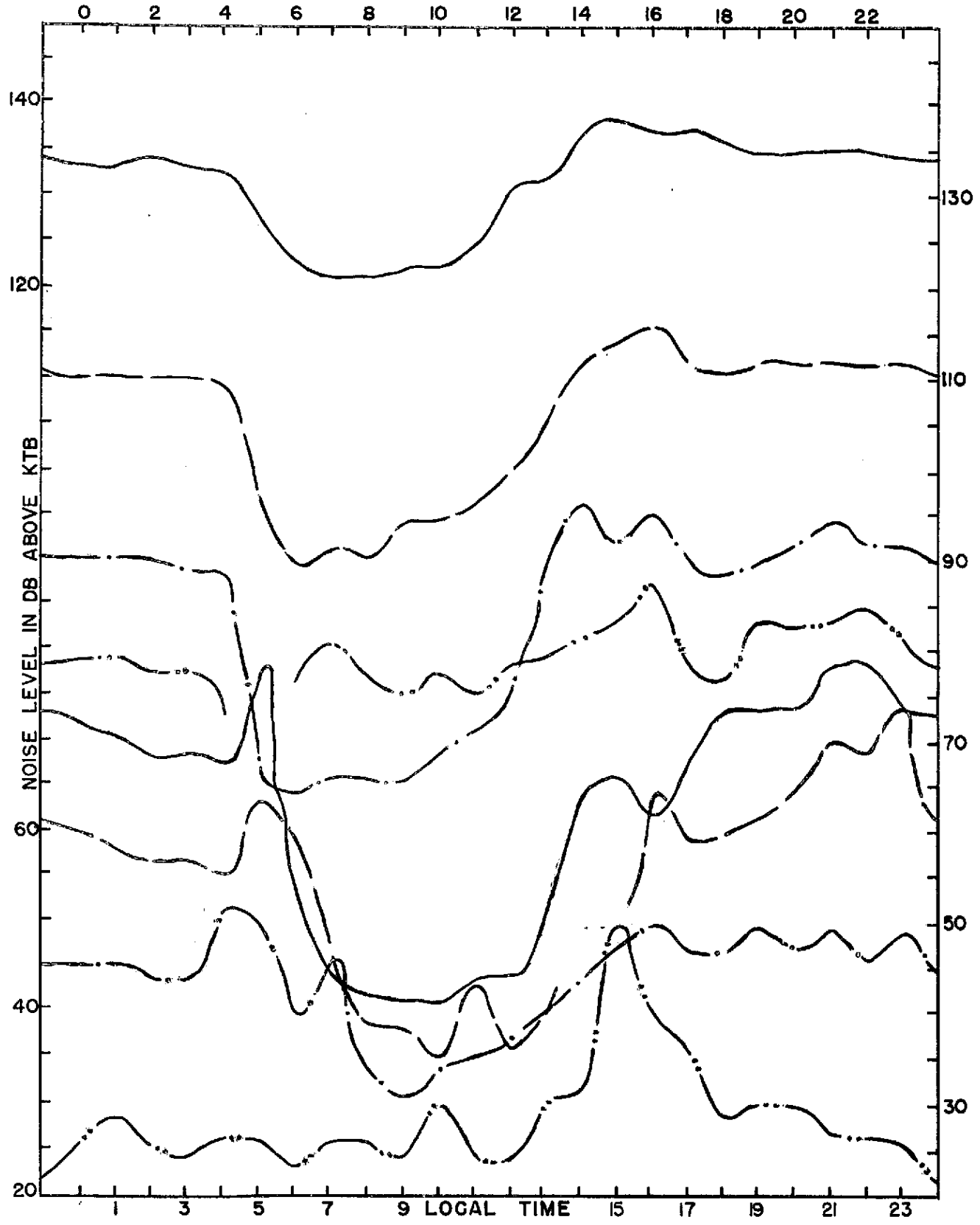

Fig. 5—Monthly Median Values For NOVEMBER 1965

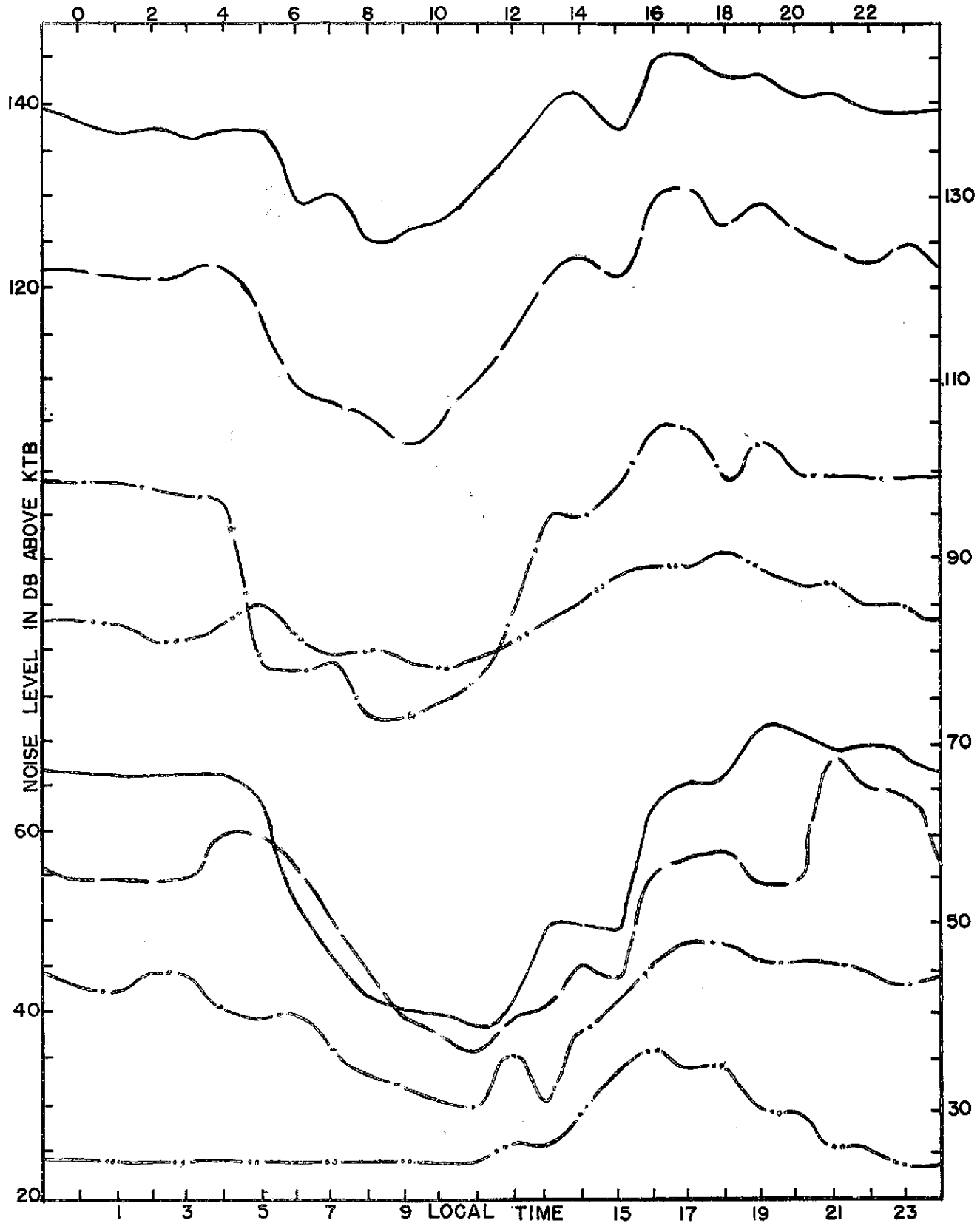

Fig. 6 —Monthly Median Values For January 1966

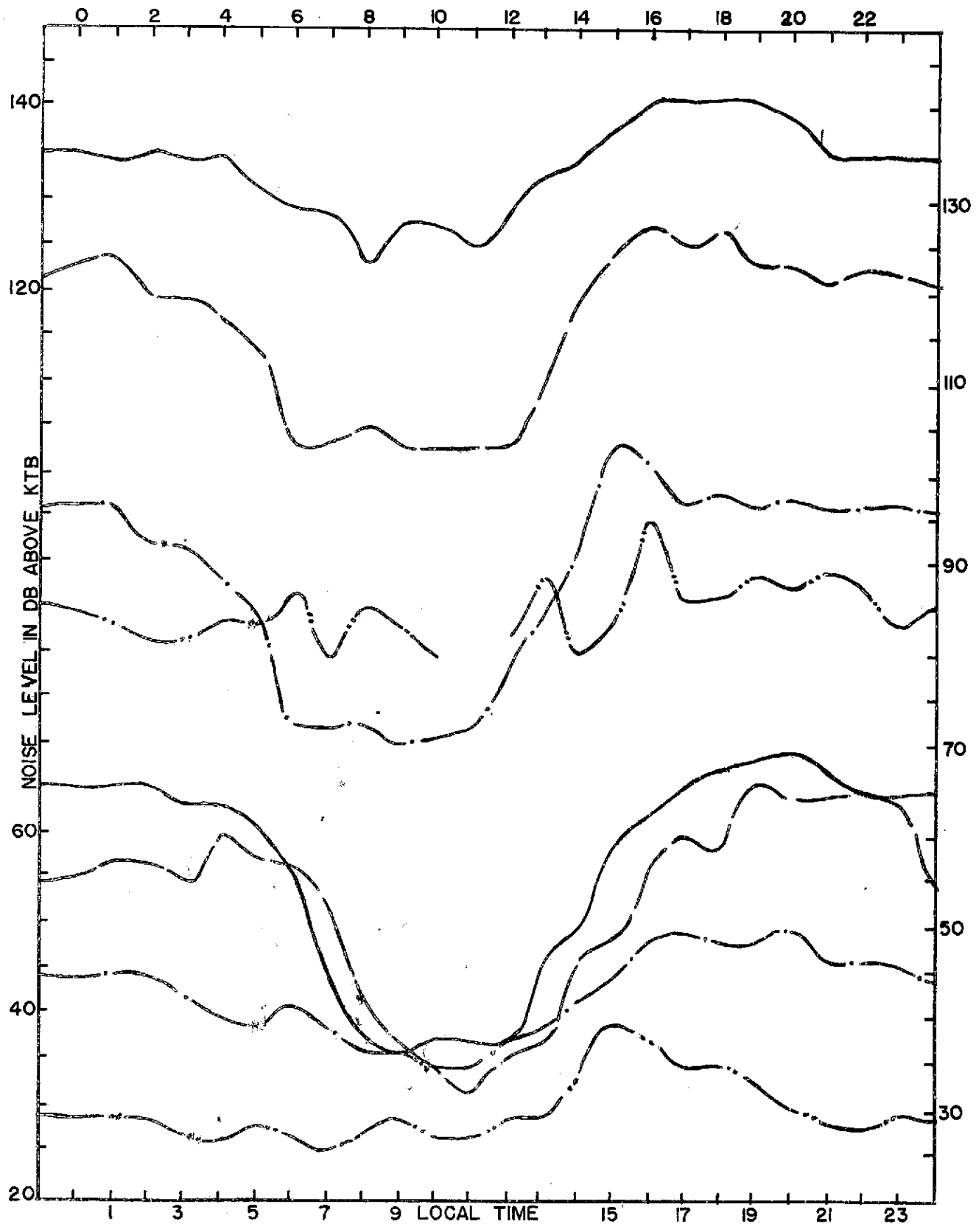

Fig. 7—Monthly Median Values For FEBRUARY 1966

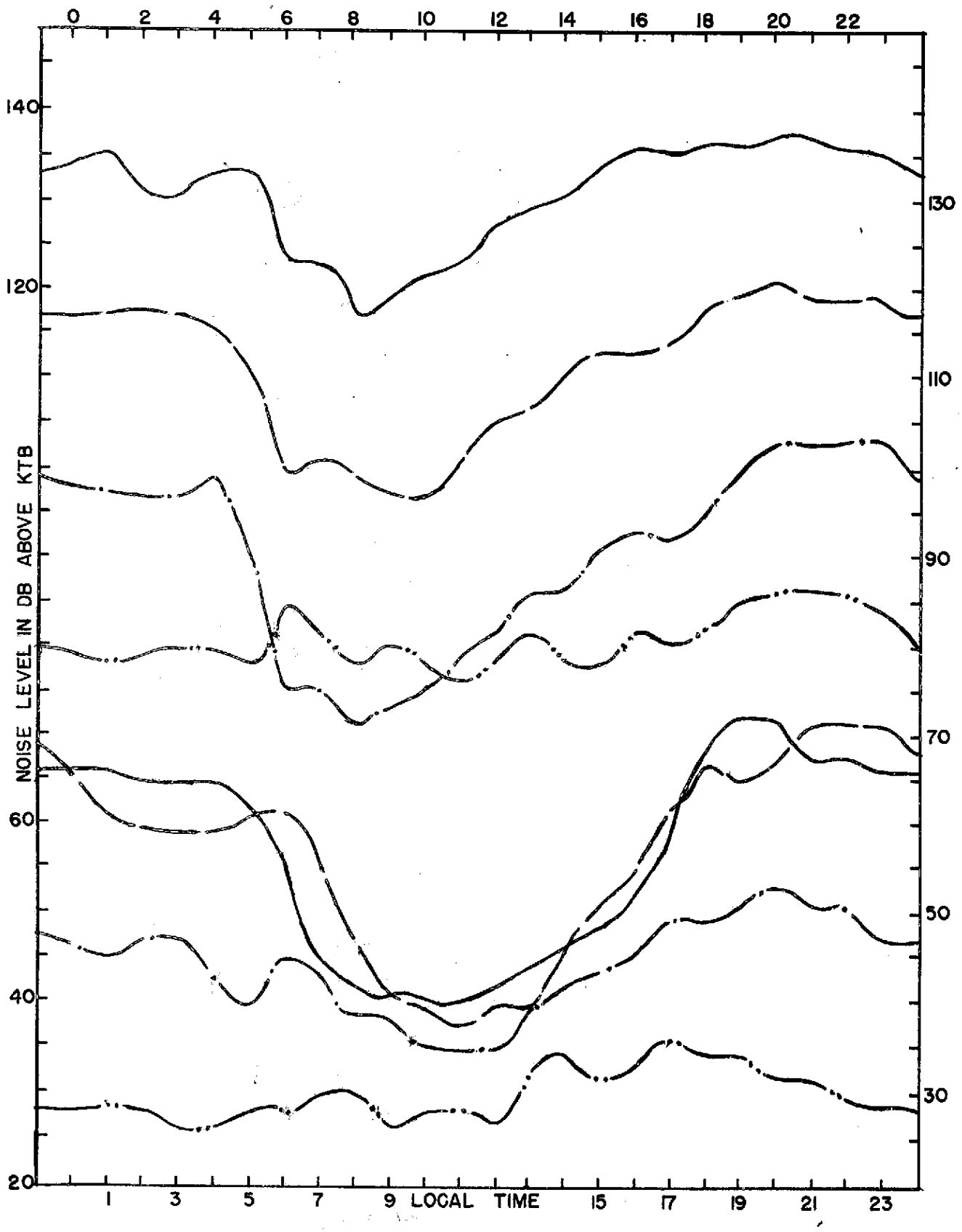

Fig. 8 — Monthly Median Values For MARCH 1966

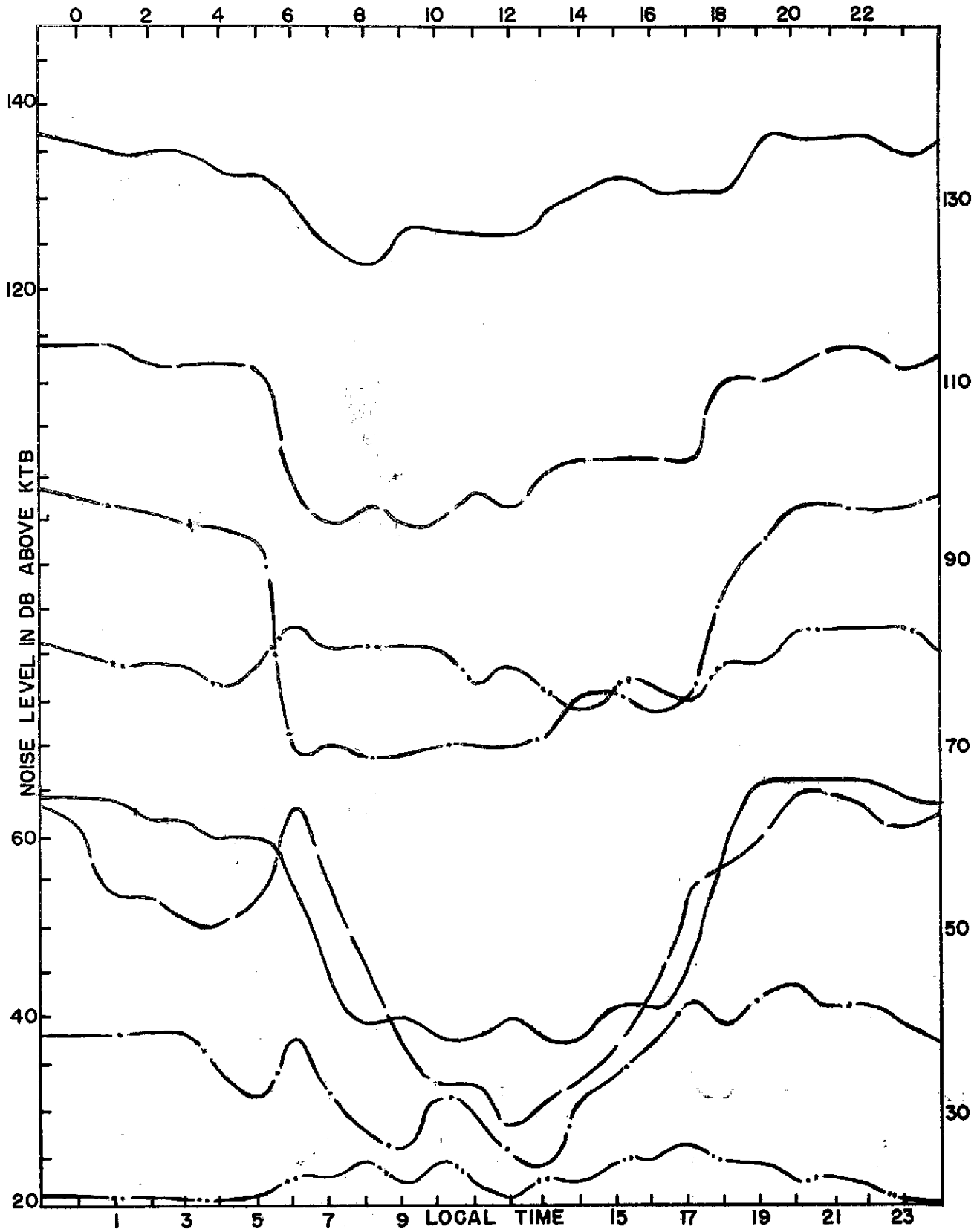

Fig. 9—Monthly Median Values For APRIL 1966

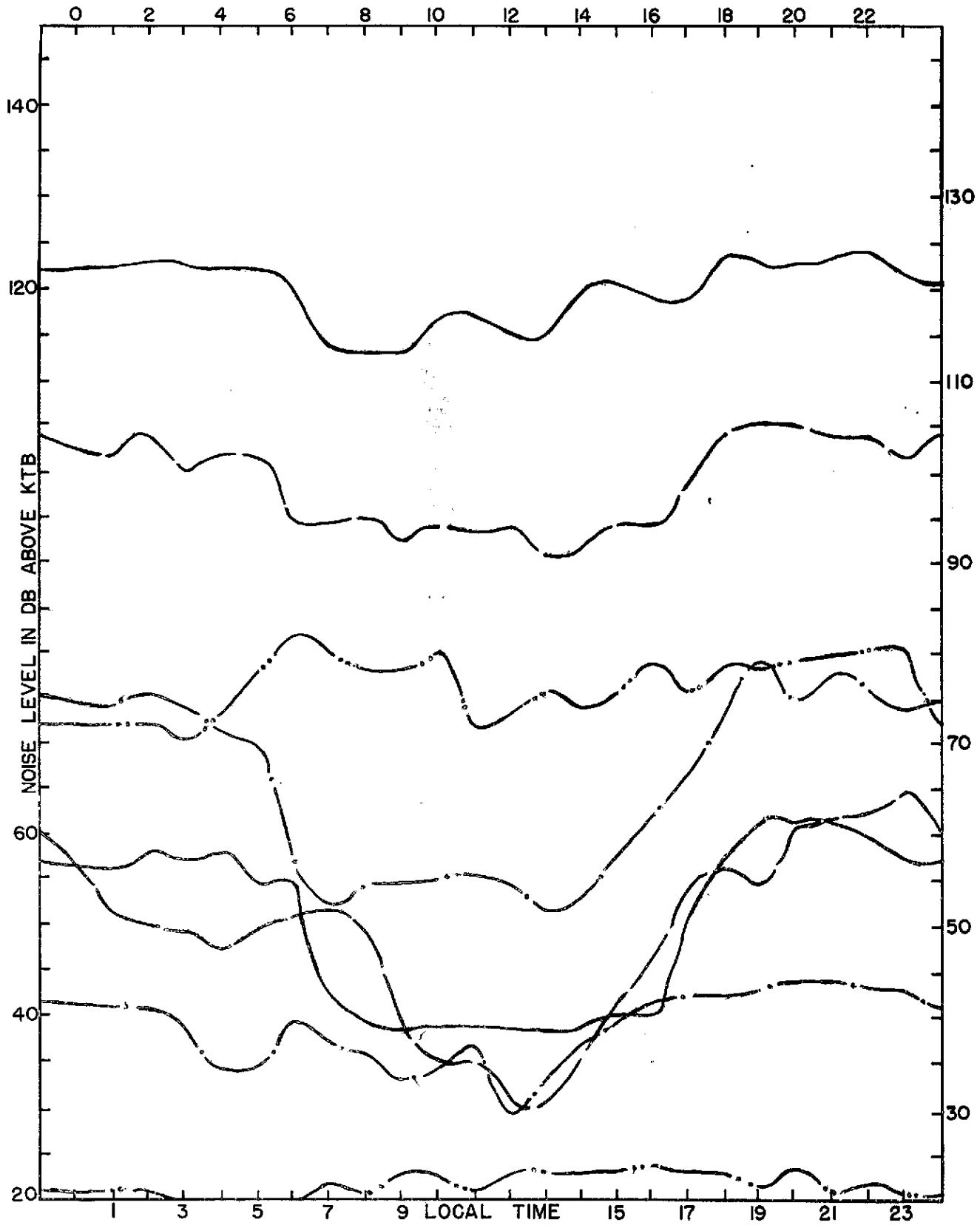

Fig. 10—Monthly Median Values For MAY 1966

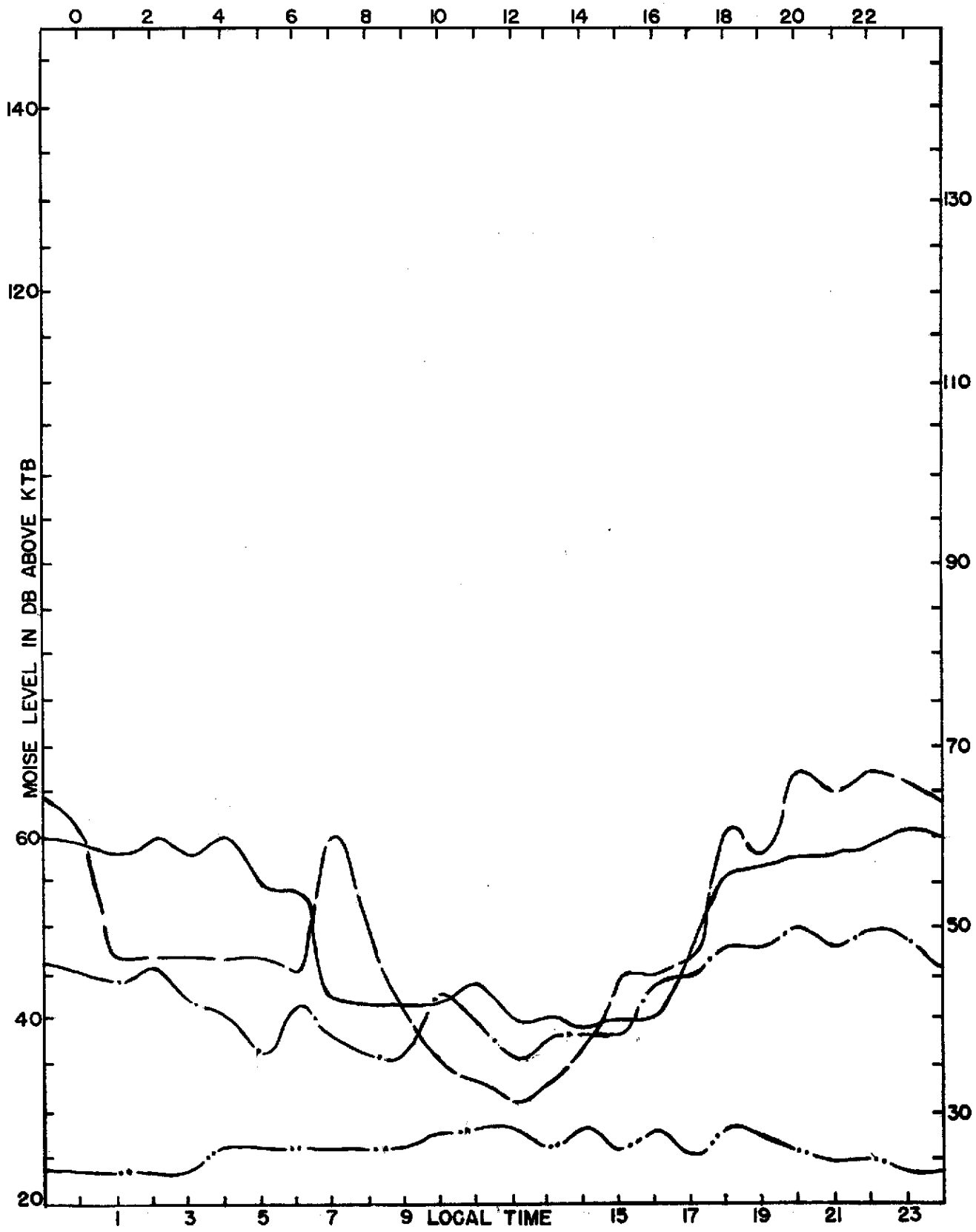

Fig. 11—Monthly Median Values For JUNE 1966