

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Audio-magnetotelluric station location map
and data log for Charleston, South Carolina

by

R. M. Senterfit and W. Huff

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This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards and nomenclature.

ρ_a = observed apparent resistivity in ohm-metres

N = number of observations

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"NOTE" - Telluric line orientation indicated with station numbers.

Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
1 _{NS}	ρ_a	11.5	13.5	10.9	14.5	21.7	—	—	—	—	—	—	—
	N	8	9	8	7	8							
	Er	1.4	1.4	1.8	0.7	1.0							
1 _{EW}	ρ_a	11.1	8.4	10.4	11.2	—	—	—	—	—	—	—	—
	N	6	5	7	9								
	Er	2.0	0.5	0.6	1.2								
2 _{NS}	ρ_a	6.6	16.3	23.2	13.3	13.6	17.5	—	—	—	—	—	—
	N	6	6	8	6	7	5						
	Er	0.5	1.7	1.9	2.2	0.7	1.7						
2 _{EW}	ρ_a	5.1	8.9	10.0	11.8	19.0	24.0	—	—	—	—	—	—
	N	5	4	6	6	6	3						
	Er	1.2	0.4	0.2	0.5	1.6	3.4						
3 _{NS}	ρ_a	7.9	13.2	13.4	13.7	18.7	14.5	—	—	—	—	—	—
	N	6	7	6	6	6	7						
	Er	0.2	0.1	1.4	1.7	0.9	1.9						
3 _{EW}	ρ_a	5.3	8.8	5.3	5.6	3.9	—	—	—	—	—	—	—
	N	7	6	6	4	6							
	Er	0.4	0.6	1.4	0.3	0.7							
4 _{NS}	ρ_a	10.9	15.9	12.9	13.1	21.7	29.5	—	—	—	—	—	—
	N	6	7	8	7	9	6						
	Er	1.5	1.4	0.8	1.4	0.4	2.3						
4 _{EW}	ρ_a	8.3	8.9	13.8	17.5	17.5	28.9	—	—	—	—	—	—
	N	5	7	8	10	7	3						
	Er	2.2	1.3	1.0	2.4	1.7	3.1						

U.S. GEOLOGICAL SURVEY A.M.T. DATA LOG

CHARLESTON, S.C.

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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
5NS	pa	13.3	18.9	18.5	29.6	55.9	20.5	-	-	-	-	-	-
	N	7	6	6	6	6	6						
	Er	3.9	5.2	1.3	6.7	2.8	1.5						
5EW	pa	18.0	20.1	17.4	27.3	42.3	-	-	-	-	-	-	-
	N	5	6	6	4	10							
	Er	2.5	1.5	1.0	4.8	11.7							
6NS	pa	6.8	4.5	4.3	5.8	2.2	-	-	-	-	-	-	-
	N	4	6	5	6	4							
	Er	1.8	1.6	0.9	0.9	0.9							
6EW	pa	17.1	13.6	16.5	20.9	16.0	-	-	-	-	-	-	-
	N	6	6	7	7	7							
	Er	3.5	1.3	3.9	3.8	0.8							
7NS	pa	8.1	11.0	11.7	9.4	18.9	-	-	-	-	-	-	-
	N	5	6	7	8	8							
	Er	1.5	2.9	1.0	1.2	0.8							
7EW	pa	20.8	33.6	30.0	29.7	34.7	-	-	-	-	-	-	-
	N	7	8	8	8	8							
	Er	1.7	1.6	1.3	0.4	2.4							
8NS	pa	8.9	8.1	11.1	13.8	19.9	31.3	-	-	-	-	-	-
	N	7	8	7	7	7	8						
	Er	0.8	1.7	0.9	1.2	0.3	3.2						
8EW	pa	1.9	1.8	5.9	10.5	12.2	8.4	-	-	-	-	-	-
	N	6	5	6	7	8	5						
	Er	0.3	0.5	0.9	2.6	1.9	2.0						

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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
9NS	pa	19.1	13.7	11.8	13.1	30.3	-	-	-	-	-	-	-
	N	7	9	8	8	10							
	Er	3.1	1.7	1.2	1.0	0.7							
9EW	pa	8.7	2.4	3.7	7.1	13.6	-	-	-	-	-	-	-
	N	6	9	10	8	5							
	Er	1.2	0.2	0.3	0.6	0.9							
10NS	pa	21.3	43.8	26.1	43.6	-	-	-	-	-	-	-	-
	N	6	9	10	5								
	Er	3.5	4.7	3.4	2.7								
10EW	pa	30.2	-	20.7	22.8	47.8	-	-	-	-	-	-	-
	N	4		9	8	11							
	Er	11.4		2.4	1.8	3.0							
11NS	pa	7.0	7.9	9.7	15.7	25.4	13.6	-	-	-	-	-	-
	N	8	8	12	8	8	8						
	Er	0.7	0.6	0.6	1.2	1.0	0.6						
11EW	pa	7.8	7.3	7.0	10.6	21.6	11.3	-	-	-	-	-	-
	N	8	9	8	8	8	3						
	Er	1.0	0.9	0.6	0.6	0.7	0.9						
12NS	pa	6.5	4.4	7.7	8.1	12.7	-	-	-	-	-	-	-
	N	8	8	12	8	6							
	Er	0.6	0.6	1.7	0.2	1.6							
12EW	pa	5.3	2.1	2.5	-	3.3	-	-	-	-	-	-	-
	N	5	8	7		10							
	Er	0.5	0.2	0.3		0.3							

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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
13NS	ρ_a	6.1	7.6	4.5	8.4	9.3	4.8	-	-	-	-	-	-
	N	8	10	8	8	8	7						
	Er	0.8	1.7	0.8	0.7	0.2	0.3						
13EW	ρ_a	1.9	3.1	2.4	3.3	5.4	4.1	-	-	-	-	-	-
	N	9	6	8	8	8	4						
	Er	0.2	0.7	0.1	0.3	0.2	0.4						
14NS	ρ_a	10.1	12.5	10.5	22.8	58.9	18.8	-	-	-	-	-	-
	N	13	8	8	9	8	1						
	Er	1.6	1.9	0.9	3.5	5.9	-						
14EW	ρ_a	-	-	-	-	-	-	-	-	-	-	-	-
	N												
	Er												
15NS	ρ_a	20.2	35.7	22.4	69.3	32.8	-	-	-	-	-	-	-
	N	8	4	4	8	7							
	Er	3.6	9.8	1.3	7.8	2.5							
15EW	ρ_a	-	-	-	-	-	-	-	-	-	-	-	-
	N												
	Er												
16NS	ρ_a	13.1	27.4	31.6	51.7	51.8	-	-	-	-	-	-	-
	N	12	6	5	8	8							
	Er	1.7	2.4	3.2	11.1	4.9							
16EW	ρ_a	4.7	1.2	2.3	3.7	7.1	15.5	-	-	-	-	-	-
	N	12	7	8	4	4	3						
	Er	1.0	0.1	0.2	0.2	0.2	8.1						

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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
17NS	pa	55.6	34.6	11.6	25.2	18.2	16.7	-	-	-	-	-	-
	N	3	2	6	5	4	5						
	Er	19.6	8.4	2.6	11.1	2.8	1.3						
17EW	pa	33.8	31.2	21.5	32.5	41.1	35.1	-	-	-	-	-	-
	N	2	4	4	5	3	4						
	Er	7.1	13.6	8.6	5.6	10.0	3.7						
18NS	pa	-	-	-	-	-	-	-	-	-	-	-	-
	N												
	Er												
18EW	pa	38.6	42.5	39.2	-	-	-	-	-	-	-	-	-
	N	3	1	4									
	Er	0.9	-	0.5									
19NS	pa	24.9	22.3	19.3	20.3	32.6	-	-	-	-	-	-	-
	N	6	7	6	6	6							
	Er	5.0	2.7	4.0	1.6	0.7							
19EW	pa	12.6	9.2	22.7	19.6	35.6	-	-	-	-	-	-	-
	N	7	6	6	8	6							
	Er	3.8	1.2	5.4	1.2	2.4							
20NS	pa	9.8	14.8	11.2	18.1	23.2	12.0	-	-	-	-	-	-
	N	5	5	8	7	6	9						
	Er	4.2	0.7	1.2	1.2	0.5	0.5						
20EW	pa	9.4	9.1	7.5	10.0	27.4	13.9	-	-	-	-	-	-
	N	4	5	8	7	7	5						
	Er	3.6	4.2	1.3	1.1	4.8	4.5						

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		FREQUENCY											
Sta. No.		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
21NS	pa	23.3	13.9	15.7	17.9	36.4	30.4	—	—	—	—	—	—
	N	10	4	8	13	9	5						
	Er	1.4	1.2	1.6	1.4	6.4	4.1						
21EW	pa	14.5	16.2	14.2	23.6	30.2	—	—	—	—	—	—	—
	N	4	3	6	8	7							
	Er	1.6	1.5	1.3	5.2	3.6							
22NS	pa	42.2	52.4	23.4	24.1	27.7	31.9	—	—	—	—	—	—
	N	7	8	8	11	13	5						
	Er	5.2	8.8	3.5	1.9	3.7	1.9						
22EW	pa	29.3	39.1	41.2	31.7	19.3	16.6	—	—	—	—	—	—
	N	7	7	9	9	17	3						
	Er	3.4	4.7	6.4	3.6	1.2	0.7						
23NS	pa	218.0	—	298.0	69.6	49.5	—	—	—	—	—	—	—
	N	4		3	9	8							
	Er	35.6		22.7	9.0	3.6							
23EW	pa	104.5	92.7	138.7	115.1	18.7	—	—	—	—	—	—	—
	N	5	4	3	5	4							
	Er	35.0	15.5	17.5	9.9	1.6							
24NS	pa	787.7	1281.2	387.8	857.1	533.6	—	—	—	—	—	—	—
	N	6	7	5	5	6							
	Er	101.2	284.9	46.8	122.8	70.3							
24EW	pa	727.0	314.6	305.0	347.8	329.3	—	—	—	—	—	—	—
	N	5	7	9	7	8							
	Er	230.0	43.2	51.6	20.4	32.9							

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Sta. No.		FREQUENCY											
		7.5	10	14	27	76	285	685	1.2K	3.3K	6.7K	10.2K	18.6K
25NS	ρ_a	878.0	788.0	659.4	278.2	194.4	—	—	—	—	—	—	—
	N	5	5	5	6	8							
	Er	267.0	169.0	52.3	44.0	10.9							
25EW	ρ_a	692.0	400.1	403.5	595.1	517.5	—	—	—	—	—	—	—
	N	7	5	8	5	8							
	Er	151.0	22.0	33.5	55.8	104.7							
26NS	ρ_a	16.6	21.1	12.3	15.0	23.7	73.1	—	—	—	—	—	—
	N	7	6	9	11	10	7						
	Er	3.0	3.5	0.5	0.7	0.5	12.5						
26EW	ρ_a	7.0	20.3	10.0	17.3	24.4	37.1	—	—	—	—	—	—
	N	12	6	9	11	8	5						
	Er	0.9	3.1	1.5	1.2	3.3	13.7						
27NS	ρ_a	343.1	—	264.0	269.1	—	219.0	—	—	—	—	—	—
	N	4		4	2		8						
	Er	91.6		65.7	19.4		15.6						
27EW	ρ_a	524.4	—	705.8	584.0	—	211.9	—	—	—	—	—	—
	N	4		3	2		6						
	Er	77.1		64.4	89.3		25.9						
28NS	ρ_a	11.2	14.6	10.2	21.2	26.7	14.1	—	—	—	—	—	—
	N	6	5	7	8	8	6						
	Er	2.9	1.2	1.5	1.2	1.0	0.7						
28EW	ρ_a	5.9	5.0	5.4	11.6	11.9	6.9	—	—	—	—	—	—
	N	6	8	8	6	8	6						
	Er	1.3	0.7	0.4	2.0	0.4	0.3						

~~1~~ = no data

[illegible]