UNITED STATES DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Audiomagnetotelluric investigation at Bursum caldera, Mogollon mining district,westcentral New Mexico: location map and data report

by

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Fifty-one audiomagnetotelluric (AMT) soundings were made in the summer of 1991 as part of a study of the Mogollon mining district. The work was done with the objective of aiding in the geologic mapping of the structural and lithologic relationships in the area by providing information on electrical structure of the subsurface.

The study area included the Bursum Creek caldera, located in the Gila National Forest and on mining lands in the vicinity of Mogollon, about 20 kilometers northeast of Glenwood, New Mexico. Locations of the soundings are shown in plate 1. The sounding curve for each station along with its corresponding data set is shown in Appendix 1.

Electromagnetic induction soundings were made using distant field sources, mostly natural sources in the frequency range from 4.5 hertz (Hz) to 27,000 Hz. The data for each station consist of scalar measurements of discrete frequencies for two orthogonal magnetic and electric field pairs.

The basic principles of the AMT method correspond to those of the magnetotelluric (MT) method (Cagniard, 1953; Vozoff, 1972; Vozoff and others, 1963). AMT signals, however, occur at higher frequencies and originate mainly from atmospheric disturbances (spherics) rather than the lower frequencies used in MT (typically in the range of .001 to 1,000 hertz) which originate from ionospheric phenomena.

Previous AMT or MT work applied to investigate the structure and lithologic relations in various volcanic areas include that by Hoover and others, 1987; Hermance and others, 1984; Leary and Phinney, 1974; Stanley, 1982; Long, 1985; and Fitterman and others, 1988.

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Appendix 1

Sounding curve for each station recorded at Bursum caldera AMT survey at Mogollon mining district, New Mexico.

Key to abbreviations:

Sta. ID	Station identification
Freq.	Freguency (Hz)
No Freq.	Number of frequencies recorded
Ap Res	Apparent resistivity (ohm-meters)
N Obs	Number of observations taken
Std Err	Standard error (%)
O = NS	North-south E-field measurement
X = EW	East-west E-field measurement

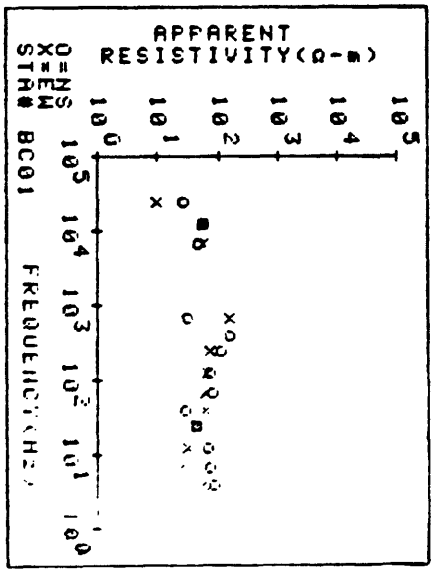
Station 1

STA. ID_BC01 NS NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	69.77	6	11.95
7.5	57.45	10	4.82
14.0	51.64	10	4.04
27.0	35.51	11	3.64
45.0	23.15	9	5.07
75.0	60.65	13	4.72
140.0	58.64	10	7.16
270.0	84.83	9	12.40
450.0	121.88	9	42.84
750.0	24.32	7	3.93
7500.0	38.54	8	11.98
14000.0	46.22	7	1.75
27000.0	21.79	8	1.47

STA. ID_BC01 EW NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	44.85	6	4.67
7.5	19.32	10	3.96
14.0	25.81	9	2.68
27.0	33.71	10	2.79
45.0	49.33	14	1.82
75.0	48.66	10	2.55
140.0	53.46	10	2.09
270.0	56.23	11	3.41
750.0	128.77	9	9.85
7500.0	46.77	10	2.14
14000.0	46.51	9	3.52
27000.0	7.88	7	.54



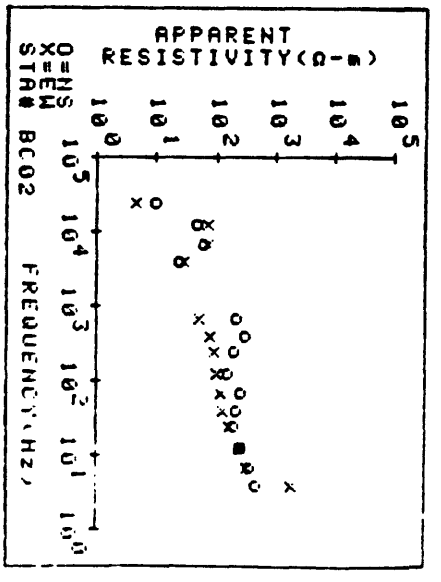
Station 2

STA. ID_BC02 NS NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	373.56	8	64.21
7.5	279.47	10	15.06
14.0	213.04	10	20.28
27.0	161.05	10	17.25
45.0	171.79	9	24.24
75.0	212.62	9	19.54
140.0	127.17	7	10.02
270.0	155.36	11	19.97
450.0	234.12	9	27.84
750.0	176.70	8	27.56
4500.0	18.82	8	3.16
7500.0	50.88	8	3.16
14000.0	36.47	7	.75
27000.0	7.81	7	.43

STA. ID_BC02 EW NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	1405.40	5	130.29
7.5	267.28	10	10.40
14.0	208.62	10	4.98
27.0	136.45	10	12.43
45.0	107.51	11	2.06
75.0	93.52	10	6.89
140.0	82.14	14	3.01
270.0	72.56	10	6.47
450.0	64.73	12	6.93
750.0	42.49	10	3.59
4500.0	21.90	8	2.81
7500.0	57.21	10	2.13
14000.0	55.69	7	3.81
27000.0	3.58	4	.27



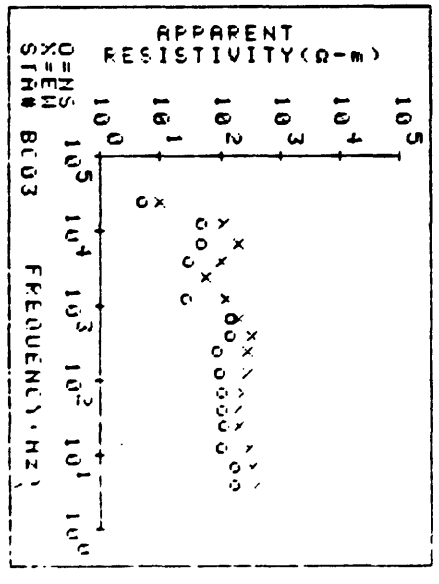
Station 3

STA. ID_BC03 NS NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	134.07	5	59.33
7.5	134.32	8	19.20
14.0	82.77	7	5.51
27.0	90.57	9	10.97
45.0	83.76	8	13.45
75.0	79.69	7	5.70
140.0	76.52	9	5.90
270.0	69.45	9	6.64
450.0	116.12	7	10.03
750.0	117.70	9	16.41
1400.0	20.64	7	4.24
4500.0	23.27	8	2.57
7500.0	39.26	11	3.82
14000.0	37.13	6	1.39
27000.0	4.04	8	.25

STA. ID_BC03 EW NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	318.26	6	27.92
7.5	262.61	9	24.48
14.0	235.37	10	24.47
27.0	157.63	10	6.00
45.0	147.52	10	8.54
75.0	184.86	9	13.10
140.0	215.94	10	6.88
270.0	216.11	10	8.63
450.0	258.99	8	9.68
750.0	159.63	9	21.85
1400.0	99.93	8	21.53
2700.0	44.20	7	5.06
4500.0	83.80	10	10.09
7500.0	158.75	11	4.11
14000.0	86.92	9	2.59
27000.0	7.88	6	1.29



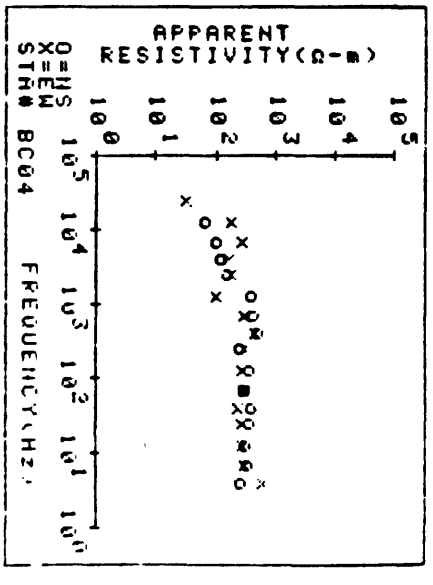
Station 4

STA. ID_BC04 NS NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	211.56	7	62.24
7.5	253.16	8	9.95
14.0	251.87	9	26.90
27.0	282.73	10	10.88
45.0	317.73	10	27.44
75.0	239.35	12	31.97
140.0	262.13	11	18.72
270.0	209.43	12	24.88
450.0	407.18	10	21.29
750.0	337.95	9	24.30
1400.0	309.38	7	44.22
2700.0	123.06	4	23.26
4500.0	96.22	7	11.57
7500.0	83.07	13	18.90
14000.0	53.16	8	.45

STA. ID_BC04 EW NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	457.35	12	45.00
7.5	244.84	12	25.19
14.0	214.27	12	19.06
27.0	215.20	11	11.72
45.0	186.10	12	4.83
75.0	240.35	12	13.53
140.0	230.27	10	12.23
270.0	243.39	12	17.61
450.0	354.79	11	30.16
750.0	249.13	7	13.47
1400.0	82.59	6	21.15
2700.0	145.72	7	11.43
4500.0	129.90	12	13.74
7500.0	215.44	14	9.12
14000.0	144.33	12	6.90
27000.0	24.23	7	3.53



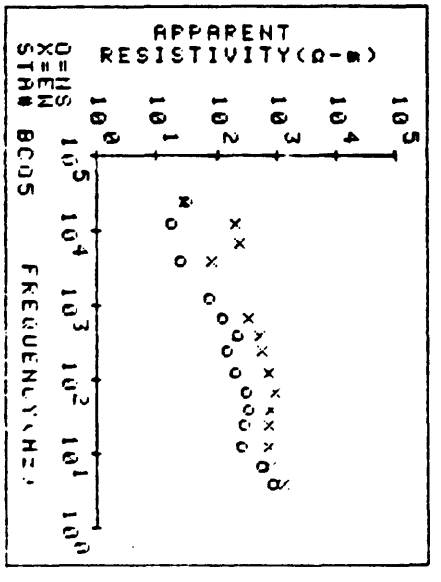
Station 5

STA. ID_BC05 NS NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	686.25	10	232.66
7.5	428.37	12	29.43
14.0	202.03	11	20.46
27.0	216.74	11	18.44
45.0	254.43	10	16.56
75.0	242.24	12	22.80
140.0	165.70	10	19.61
270.0	116.42	10	9.90
450.0	172.14	10	16.70
750.0	97.44	11	10.97
1400.0	57.34	7	10.07
4500.0	20.11	10	3.64
14000.0	13.45	6	1.01
27000.0	24.73	12	1.21

STA. ID_BC05 EW NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	1002.10	12	95.33
7.5	598.75	12	62.65
14.0	561.37	10	65.19
27.0	586.81	11	36.21
45.0	597.14	11	32.46
75.0	730.24	12	68.33
140.0	561.32	11	47.53
270.0	443.41	12	37.68
450.0	417.79	12	19.81
750.0	275.06	12	22.19
4500.0	62.68	12	8.51
7500.0	186.03	12	34.65
14000.0	164.99	10	12.47
27000.0	22.07	5	6.05



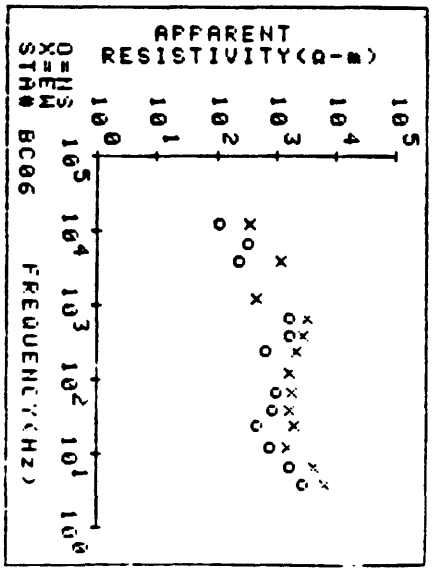
Station 6

STA. ID_BC06 NS NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	2216.60	9	291.73
7.5	1316.10	12	126.27
14.0	596.16	11	116.01
27.0	373.16	10	86.27
45.0	666.54	12	60.96
75.0	814.74	11	115.00
270.0	530.33	11	62.15
450.0	1282.50	10	279.95
750.0	1300.90	10	207.12
4500.0	184.65	10	21.05
7500.0	265.30	14	19.54
14000.0	89.11	8	6.02

STA. ID_BC06 EW NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	5138.90	11	829.59
7.5	3427.90	9	287.90
14.0	1226.50	9	179.55
27.0	1488.60	11	86.64
45.0	1275.00	12	271.91
75.0	1400.30	10	184.73
140.0	1275.00	11	307.55
270.0	1672.40	13	215.55
450.0	2135.30	14	117.56
750.0	2608.60	12	233.51
1400.0	384.30	4	219.29
4500.0	938.96	12	136.68
14000.0	292.70	8	20.62



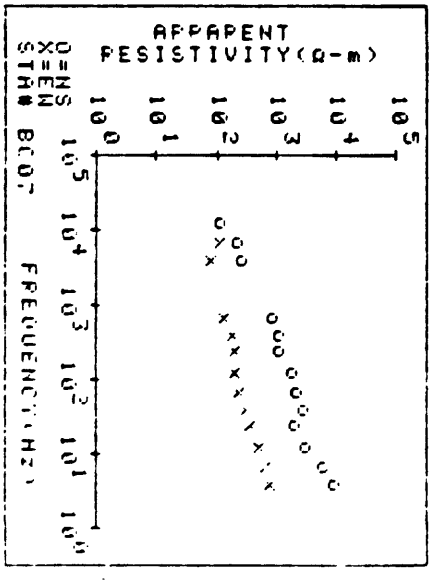
Station 7

STA. ID_BC07 NS NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	6808.90	10	1541.10
7.5	4648.70	12	283.77
14.0	2307.60	12	128.51
27.0	1561.30	12	237.66
45.0	2098.70	11	148.69
75.0	1760.50	11	144.67
140.0	1416.20	10	145.32
270.0	843.30	12	81.78
450.0	853.30	12	51.36
750.0	666.23	12	43.97
4500.0	207.51	10	35.88
7500.0	179.09	10	16.27
14000.0	91.20	7	2.52

STA. ID_BC07 EW NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	590.17	12	54.84
7.5	517.57	12	49.65
14.0	389.32	12	25.64
27.0	290.08	12	19.17
45.0	250.34	12	19.64
75.0	195.60	12	18.57
140.0	155.70	12	12.51
270.0	156.91	12	4.48
450.0	146.75	12	7.59
750.0	108.24	12	8.21
4500.0	63.08	6	9.69
7500.0	84.60	15	8.05



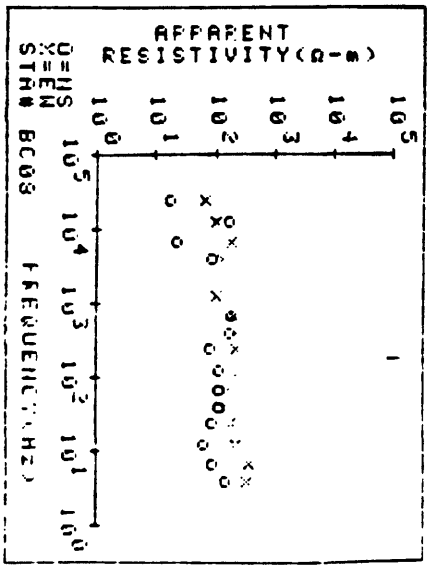
Station 8

STA. ID_BC08 NS NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	112.97	6	21.90
7.5	67.37	8	11.78
14.0	49.43	7	9.36
27.0	69.57	10	7.32
45.0	89.31	10	19.26
75.0	90.30	11	13.23
140.0	89.82	8	16.47
270.0	63.69	8	15.16
450.0	137.85	10	15.96
750.0	144.92	10	29.53
4500.0	69.47	10	7.09
7500.0	18.47	9	2.71
14000.0	132.99	7	11.68
27000.0	13.51	6	1.37

STA. ID_BC08 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	271.62	10	48.17
7.5	282.11	9	26.82
14.0	174.97	13	8.94
27.0	146.19	14	6.22
45.0	123.68	12	3.15
75.0	119.54	12	3.50
140.0	148.68	14	4.89
270.0	168.92	12	7.27
450.0	175.23	12	4.03
750.0	165.17	12	8.64
1400.0	82.55	6	11.39
4500.0	100.95	11	8.71
7500.0	149.19	14	15.26
14000.0	79.35	9	6.89
27000.0	51.13	6	2.77



Station 9

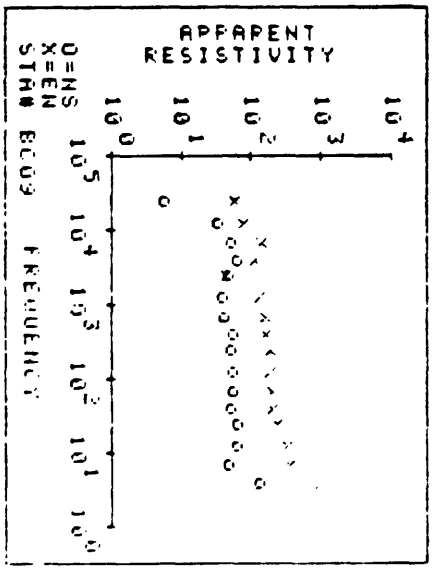
STATION=BC09N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	101.97	11	9.17
7.5	36.69	11	6.48
14.0	50.02	12	6.66
27.0	49.00	11	5.47
45.0	39.82	11	6.56
75.0	42.67	11	5.10
140.0	43.61	11	4.37
270.0	39.73	11	3.50
450.0	43.37	10	1.69
750.0	31.61	11	6.21
1400.0	31.25	9	4.03
2700.0	38.96	8	4.75
4500.0	49.05	11	4.98
7500.0	39.99	11	3.27
14000.0	26.94	6	2.38
27000.0	4.52	11	.19

STATION=BC09E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	806.75	11	87.67
7.5	278.15	11	49.47
14.0	274.41	11	20.18
27.0	186.62	11	12.82
45.0	155.28	11	19.29
75.0	157.56	11	9.61
140.0	153.47	11	8.39
270.0	147.10	11	6.43
450.0	127.18	10	11.75
750.0	131.37	11	7.61
1400.0	102.92	11	18.20
2700.0	34.51	9	4.33
4500.0	93.53	11	4.13
7500.0	116.07	11	10.11
14000.0	63.22	8	5.38
27000.0	47.00	9	3.29

PROJ= BURSUM CALDERA



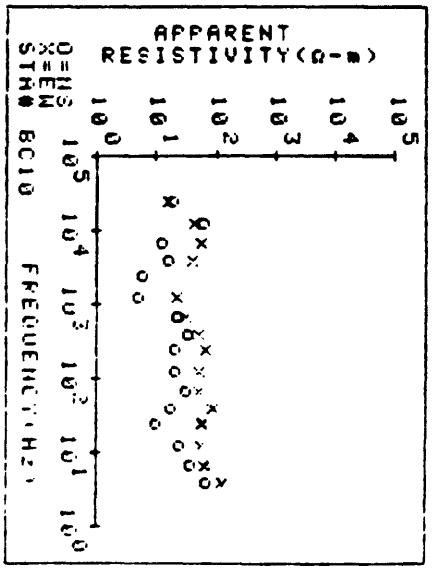
Station 10

STA. ID_BC10 NS NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	53.22	8	19.92
7.5	28.57	9	2.46
14.0	18.62	11	.88
27.0	7.48	10	1.91
45.0	13.83	10	1.25
75.0	24.14	10	2.83
140.0	16.57	14	1.66
270.0	16.79	9	2.71
450.0	26.30	11	4.13
750.0	17.12	7	2.15
1400.0	3.96	5	.32
2700.0	4.52	3	.27
4500.0	12.72	8	2.23
7500.0	9.55	10	2.15
14000.0	49.07	8	6.25
27000.0	15.52	4	.58

STA. ID_BC10 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	92.33	7	5.95
7.5	48.67	9	4.24
14.0	43.89	10	2.97
27.0	46.12	10	5.22
45.0	68.98	13	8.31
75.0	40.83	14	1.25
140.0	42.85	13	3.99
270.0	52.26	11	4.35
450.0	40.76	11	5.20
750.0	25.52	6	5.91
1400.0	18.05	6	5.91
4500.0	31.96	11	3.18
7500.0	45.72	11	2.76
14000.0	35.46	8	2.31
27000.0	12.46	5	1.18



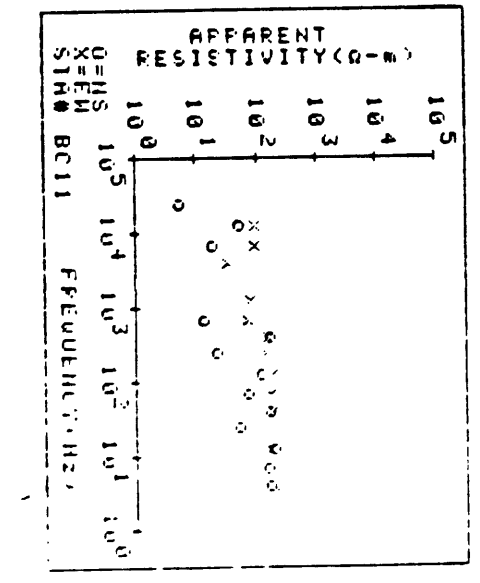
Station 11

STA. ID_BC11 NS NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	134.23	6	41.98
7.5	124.90	12	11.40
14.0	153.35	9	29.95
27.0	42.85	10	2.61
45.0	138.49	8	34.81
75.0	58.75	12	9.05
140.0	92.52	10	10.54
270.0	18.03	7	2.59
450.0	137.41	8	56.86
750.0	11.11	9	3.90
7500.0	15.08	10	4.12
14000.0	41.40	7	2.15
27000.0	4.39	12	.28

STA. ID_BC11 EW NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	197.21	9	18.07
7.5	34.25	11	2.08
14.0	134.71	11	8.10
27.0	139.30	11	4.93
45.0	152.37	14	16.81
75.0	139.79	13	7.21
140.0	146.17	11	7.02
270.0	115.21	12	12.77
450.0	126.13	11	9.34
750.0	56.98	10	8.22
1400.0	63.96	4	8.29
4500.0	27.33	7	1.86
7500.0	71.75	11	6.50
14000.0	73.14	5	3.20



Station 12

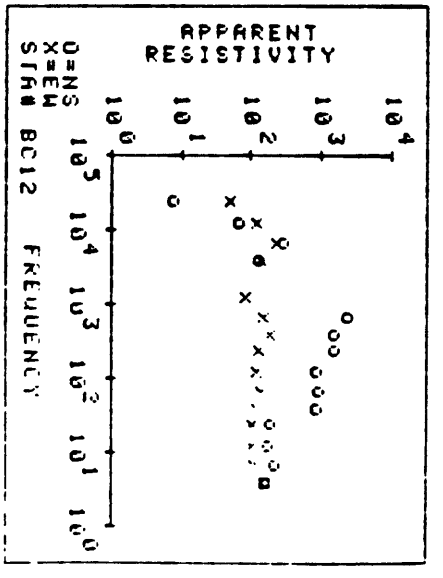
STATION=BC12N-S NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	127.20	6	21.93
7.5	174.65	11	18.86
14.0	141.19	11	15.90
27.0	145.52	8	27.52
45.0	666.32	7	117.70
75.0	736.64	9	129.62
140.0	677.72	7	232.12
270.0	1194.40	11	179.67
450.0	1202.70	9	286.59
750.0	1847.40	3	41.28
4500.0	101.59	12	14.24
7500.0	232.75	11	8.58
14000.0	54.12	7	.77
27000.0	6.10	7	.27

STATION=BC12E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	133.49	11	13.15
7.5	90.88	11	5.52
14.0	83.15	11	10.44
27.0	84.30	10	6.65
45.0	95.40	11	4.06
75.0	108.61	14	6.51
140.0	99.94	11	4.02
270.0	107.89	10	4.54
450.0	145.95	11	7.49
750.0	119.22	11	8.62
1400.0	68.97	9	10.54
4500.0	112.67	11	9.73
7500.0	191.28	11	6.13
14000.0	96.85	10	4.00
27000.0	40.96	7	1.61

PROJ= BURSUM CALDERA



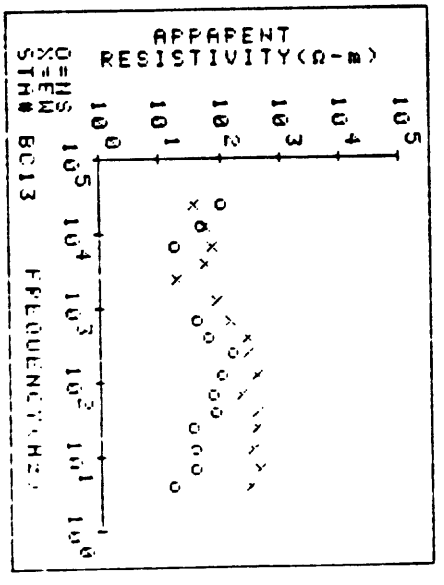
Station 13

STA. ID_BC13 NS NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	12.25	4	3.08
7.5	30.24	10	5.62
14.0	29.30	9	4.68
27.0	27.77	8	5.29
45.0	62.83	8	5.35
75.0	58.51	11	6.74
140.0	78.66	8	22.99
270.0	119.79	8	31.67
450.0	50.68	11	18.51
750.0	33.15	7	2.69
7500.0	13.57	9	1.58
14000.0	39.02	7	5.74
27000.0	82.31	3	4.54

STA. ID_BC13 EW NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	250.96	11	18.90
7.5	348.61	10	96.84
14.0	272.86	11	13.30
27.0	314.10	15	10.60
45.0	308.07	11	19.63
75.0	178.02	11	20.29
140.0	304.87	11	12.40
270.0	214.52	11	5.49
450.0	217.77	10	7.21
750.0	110.81	11	9.43
1400.0	67.55	9	9.71
2700.0	15.59	5	3.08
4500.0	46.51	12	2.05
7500.0	56.81	11	1.67
14000.0	43.76	7	1.98
27000.0	28.22	7	1.49



Station 14

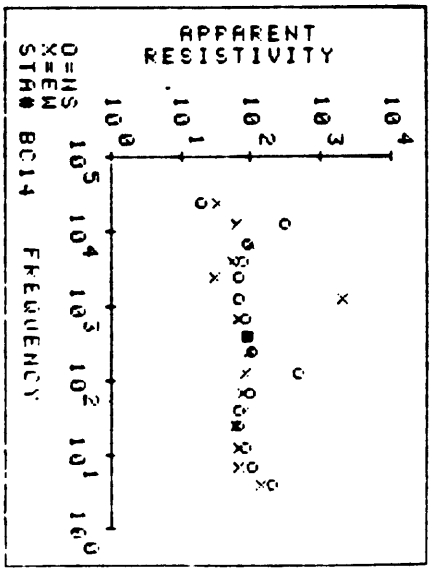
STATION=BC14N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	161.40	10	19.75
7.5	85.01	10	5.58
14.0	65.96	10	7.83
27.0	54.21	12	3.50
45.0	54.49	11	9.25
75.0	79.06	11	10.94
140.0	388.32	11	30.69
270.0	82.92	9	12.09
450.0	74.09	8	9.57
750.0	68.59	11	7.03
1400.0	55.43	11	9.18
2700.0	54.19	9	5.53
4500.0	61.93	10	4.35
7500.0	72.34	7	4.25
14000.0	249.89	5	27.51
27000.0	15.85	5	2.60

STATION=BC14E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	114.70	4	43.55
7.5	53.47	11	3.97
14.0	54.95	11	2.15
27.0	51.97	10	3.40
45.0	68.38	10	5.50
75.0	60.60	10	3.41
140.0	68.41	11	2.63
270.0	76.86	11	2.41
450.0	73.91	10	3.80
750.0	54.63	11	5.40
1400.0	1618.20	11	356.97
2700.0	24.82	8	8.35
4500.0	44.35	11	2.85
7500.0	76.20	10	6.28
14000.0	50.16	9	2.13
27000.0	27.15	5	1.23

PROJ= BURSUM CALDERA



Station 15

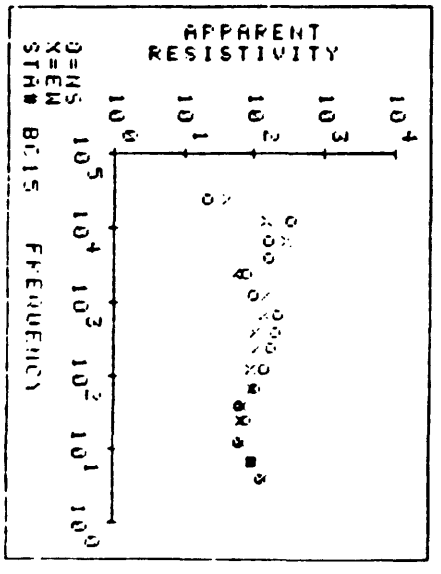
STATION=BC15N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	100.61	10	10.78
7.5	79.77	9	12.59
14.0	58.33	11	4.09
27.0	64.95	11	5.45
45.0	50.34	11	7.77
75.0	83.01	9	13.24
140.0	112.01	11	8.59
270.0	137.14	10	20.12
450.0	160.73	10	18.49
750.0	172.66	12	20.87
1400.0	80.86	11	16.64
2700.0	62.35	10	10.89
4500.0	126.02	11	12.15
7500.0	131.61	10	6.27
14000.0	262.55	7	8.79
27000.0	16.49	7	.78

STATION=BC15E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	112.39	10	12.23
7.5	79.36	10	4.35
14.0	56.33	11	3.50
27.0	55.41	11	2.52
45.0	52.91	11	2.35
75.0	78.22	11	5.87
140.0	74.46	11	5.83
270.0	89.88	11	3.66
450.0	82.00	12	6.70
750.0	114.92	11	4.49
1400.0	116.67	11	8.69
2700.0	45.15	8	10.17
7500.0	239.63	12	24.61
14000.0	123.82	7	11.74
27000.0	32.77	7	1.54

PROJ= BURSUM CALDERA



Station 16

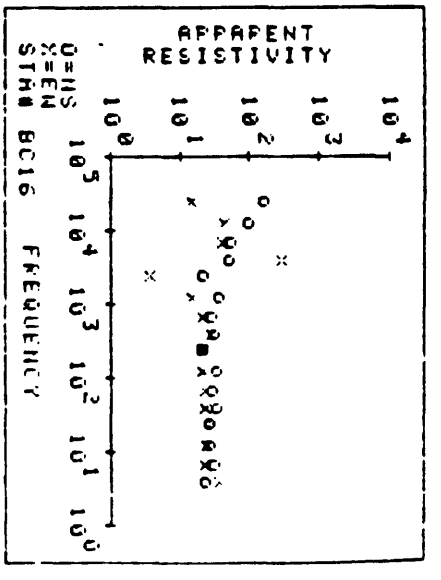
STATION=BC16N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	18.36	9	3.15
7.5	24.00	11	4.93
14.0	21.16	11	2.70
27.0	21.34	7	2.84
45.0	26.22	11	1.67
75.0	22.09	11	6.19
140.0	26.88	11	3.88
270.0	17.65	12	1.99
450.0	25.38	11	1.46
750.0	22.86	11	2.59
1400.0	28.86	10	4.12
2700.0	16.79	10	1.32
4500.0	41.15	11	1.82
7500.0	45.38	11	1.75
14000.0	77.41	7	3.39
27000.0	131.67	8	9.42

STATION=BC16E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	28.44	11	2.50
7.5	19.04	11	1.04
14.0	20.15	11	1.66
27.0	22.69	11	1.42
45.0	18.84	11	.91
75.0	17.76	12	.99
140.0	16.91	11	.31
270.0	17.32	11	.54
450.0	23.08	11	1.10
750.0	16.88	10	1.00
1400.0	12.27	11	.90
2700.0	3.07	8	.54
4500.0	237.71	11	23.45
7500.0	32.48	11	.73
14000.0	36.52	7	.91
27000.0	12.26	7	.31

PROJ= BURSUM CALDERA



Station 17

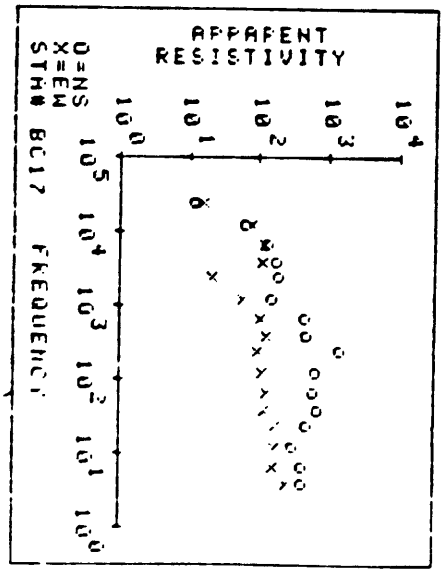
STATION=BC17N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	324.54	9	34.39
7.5	335.41	11	59.28
14.0	255.22	12	51.15
27.0	382.53	13	32.87
45.0	535.52	9	67.66
75.0	469.11	12	56.16
140.0	504.32	13	45.13
270.0	1139.60	10	109.39
450.0	372.15	11	35.96
750.0	352.41	11	35.19
1400.0	124.18	8	8.68
2700.0	148.15	11	9.74
4500.0	138.80	11	8.44
7500.0	105.13	11	2.44
14000.0	49.53	5	1.09
27000.0	9.37	9	.45

STATION=BC17E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	199.67	11	12.72
7.5	131.13	11	7.12
14.0	137.41	10	9.22
27.0	137.89	11	8.95
45.0	100.55	11	2.22
75.0	106.81	11	2.97
140.0	90.66	11	3.93
270.0	76.45	11	3.00
450.0	105.71	10	3.62
750.0	81.57	11	3.31
1400.0	47.90	11	4.16
2700.0	16.95	5	2.90
4500.0	89.40	11	3.34
7500.0	95.30	10	1.66
14000.0	62.96	12	2.01
27000.0	12.47	7	.67

PROJ= BURSUM CALDERA



Station 18

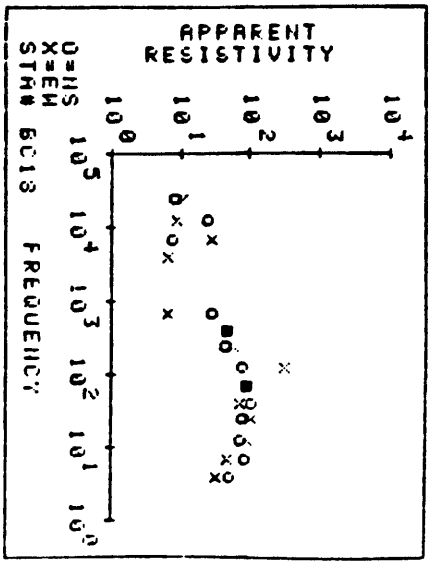
STATION=BC18N-S NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	40.79	7	12.33
7.5	66.94	11	4.04
14.0	58.80	10	5.52
27.0	64.84	10	5.67
45.0	86.95	12	7.66
75.0	71.97	10	5.31
140.0	61.78	11	7.37
270.0	34.16	8	6.42
450.0	38.16	10	5.70
750.0	23.26	5	6.59
7500.0	6.39	10	.95
14000.0	19.83	7	.61
27000.0	6.67	6	.31

STATION=BC18E-W NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	27.31	9	7.63
7.5	38.15	10	3.12
14.0	70.59	8	8.26
27.0	85.79	11	20.72
45.0	60.01	11	6.40
75.0	71.22	11	9.85
140.0	240.70	11	21.23
270.0	46.60	11	2.12
450.0	38.10	11	9.52
750.0	5.37	6	.54
4500.0	5.37	6	1.55
7500.0	22.64	11	.76
14000.0	7.36	6	.58
27000.0	8.62	7	.34

PROJ= BURSUM CALDERA



Station 19

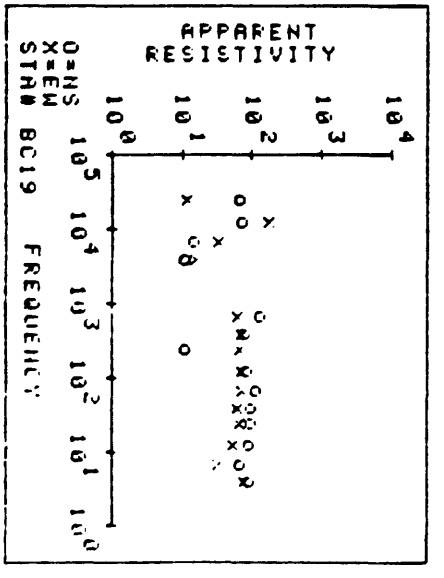
STATION=BC19N-S NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	72.08	6	26.44
7.5	53.43	12	5.01
14.0	74.86	11	6.39
27.0	77.88	11	10.74
45.0	77.37	9	4.65
75.0	89.54	11	12.58
140.0	68.58	13	9.82
270.0	8.95	6	1.46
450.0	68.94	5	13.63
750.0	104.00	1	0.00
4500.0	9.21	6	1.55
7500.0	11.50	10	.79
14000.0	59.24	6	1.31
27000.0	53.34	3	.61

STATION=BC19E-W NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	62.89	7	6.85
7.5	25.64	9	2.59
14.0	44.69	8	3.66
27.0	55.26	11	4.21
45.0	49.89	11	3.38
75.0	56.56	11	3.97
140.0	57.39	4	1.55
270.0	55.34	12	5.65
450.0	56.45	11	3.45
750.0	50.04	11	5.60
4500.0	13.13	10	1.32
7500.0	25.54	10	2.29
14000.0	137.13	7	3.47
27000.0	9.31	7	.73

PROJ= BURSUM CALDERA



Station 20

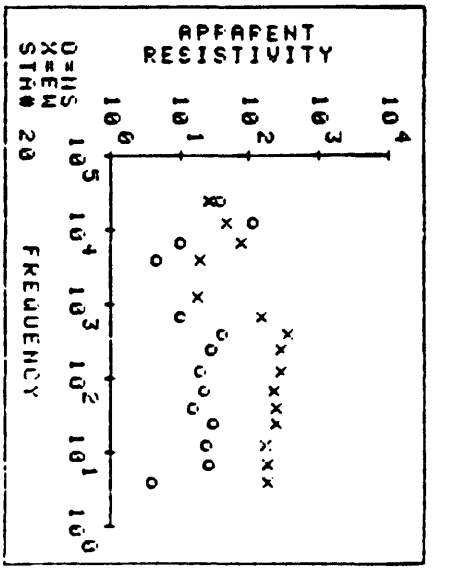
STATION=20N-S NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	3.16	6	1.04
7.5	20.83	8	2.26
14.0	19.69	11	2.03
27.0	25.21	8	5.66
45.0	12.54	10	3.56
75.0	16.96	11	2.50
140.0	16.42	11	2.04
270.0	22.91	9	1.67
450.0	32.50	11	3.43
750.0	8.04	11	1.02
4500.0	3.72	4	.83
7500.0	8.06	9	1.09
14000.0	90.54	5	2.43
27000.0	30.98	4	3.23

STATION=20E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	148.54	12	8.96
7.5	153.67	12	16.60
14.0	136.87	12	6.20
27.0	201.55	13	9.81
45.0	204.84	12	8.24
75.0	191.21	12	10.80
140.0	223.08	12	8.17
270.0	225.75	12	7.66
450.0	278.66	10	31.07
750.0	116.31	11	16.12
1400.0	14.49	4	3.90
4500.0	15.87	12	1.72
7500.0	62.15	12	2.09
14000.0	38.96	12	2.05
27000.0	21.12	7	.23

PROJ= BURSUM CALDERA



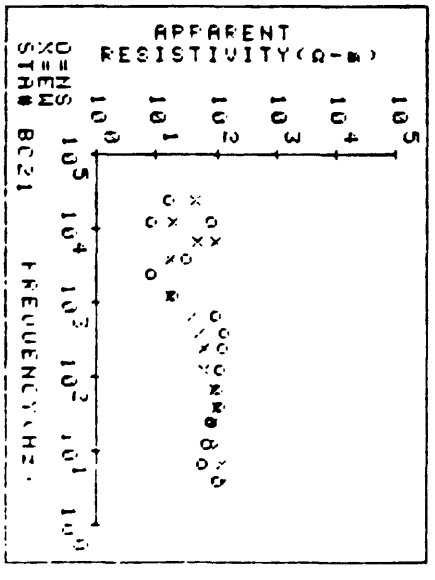
Station 21

STA. ID_BC21 NS NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	79.84	7	9.86
7.5	46.45	10	6.42
14.0	51.40	11	2.94
27.0	61.65	11	5.08
45.0	88.57	10	8.07
75.0	84.44	10	5.97
140.0	86.75	10	4.87
270.0	92.83	11	9.16
450.0	106.24	12	7.29
750.0	76.08	10	8.29
1400.0	15.55	6	4.46
2700.0	6.23	3	.12
4500.0	25.60	8	6.06
14000.0	6.52	11	.39
14000.0	64.97	5	2.13
27000.0	12.25	11	.53

STA. ID_BC21 EW NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	104.49	10	9.76
7.5	92.41	11	9.05
14.0	80.05	10	12.07
27.0	67.11	13	7.48
45.0	77.74	11	7.30
75.0	72.23	13	5.68
140.0	49.40	11	3.45
270.0	47.12	10	2.64
450.0	42.93	11	3.15
750.0	33.35	12	3.98
1400.0	13.81	11	3.94
4500.0	13.46	12	1.29
7500.0	77.34	9	5.11
7500.0	37.00	11	1.02
14000.0	14.60	11	1.51
27000.0	33.88	7	1.22



Station 22

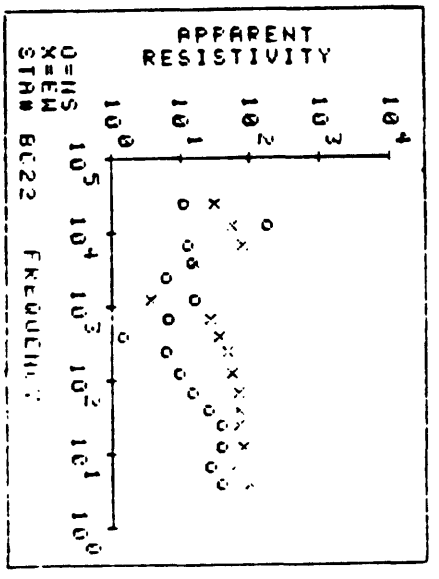
STATION=BC22N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	30.69	10	7.39
7.5	20.76	11	3.82
14.0	29.79	11	3.88
27.0	30.73	11	7.11
45.0	19.16	8	3.70
75.0	12.13	12	1.61
140.0	7.98	8	1.11
270.0	4.85	10	.76
450.0	1.14	9	.34
750.0	5.36	11	.45
1400.0	12.86	7	.29
2700.0	4.97	3	.17
4500.0	11.57	10	2.37
7500.0	10.43	11	1.01
14000.0	144.32	4	2.33
27000.0	8.66	6	.88

STATION=BC22E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	78.02	11	9.11
7.5	48.74	11	3.79
14.0	61.32	11	5.66
27.0	53.91	11	1.87
45.0	54.54	11	2.13
75.0	54.65	9	2.81
140.0	42.58	12	2.06
270.0	37.93	11	2.16
450.0	26.40	11	2.24
750.0	20.74	11	1.04
1400.0	3.02	6	.64
4500.0	12.54	11	2.02
7500.0	62.63	11	5.42
14000.0	44.62	7	1.84
27000.0	24.76	7	1.13

PROJ= BURSUM CALDERA



Station 23

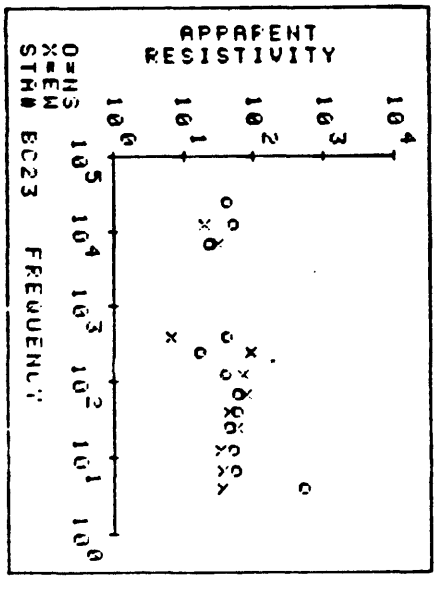
STATION=BC23N-S NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	412.58	13	31.57
7.5	45.14	11	2.50
14.0	41.88	14	2.95
27.0	36.12	18	5.60
45.0	46.94	12	4.38
75.0	47.72	13	6.61
140.0	33.30	10	6.54
270.0	14.14	7	2.82
450.0	31.85	8	3.64
7500.0	19.03	7	2.82
14000.0	41.34	4	.59
27000.0	31.85	2	9.80

STATION=BC23E-W NO FREQ= 11

FREQ	AP-RES	N OBS	STD ERR
4.5	26.90	7	1.35
7.5	28.76	9	4.81
14.0	26.67	10	1.18
27.0	45.44	12	2.93
45.0	35.77	12	2.45
75.0	64.10	11	3.19
140.0	57.19	11	3.52
270.0	73.79	10	10.03
450.0	5.31	8	.16
7500.0	23.87	14	2.32
14000.0	16.40	6	1.03

PROJ= BURSUM CALDERA



Station 24

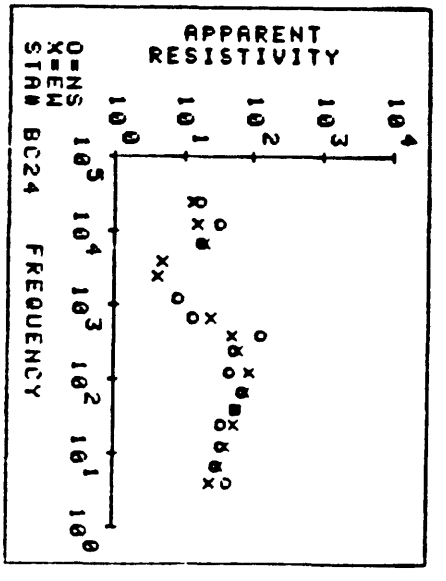
STATION=BC24N-S NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	34.51	8	6.87
7.5	24.21	12	3.25
14.0	27.09	12	3.68
27.0	27.52	14	4.01
45.0	47.67	9	4.45
75.0	57.77	8	16.03
140.0	37.99	9	5.20
270.0	43.82	11	8.67
450.0	103.51	9	14.54
750.0	10.89	11	1.03
1400.0	6.60	9	1.23
7500.0	14.61	11	1.26
14000.0	25.69	7	.83
27000.0	13.69	8	.83

STATION=BC24E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	19.71	9	3.38
7.5	26.53	11	1.19
14.0	33.72	11	6.53
27.0	45.20	11	1.76
45.0	48.32	11	3.35
75.0	63.07	13	4.51
140.0	71.03	12	4.30
270.0	49.54	11	4.22
450.0	42.11	10	3.71
750.0	19.26	11	2.82
2700.0	3.42	6	.71
4500.0	4.05	6	.31
7500.0	16.20	11	1.24
14000.0	12.91	3	.45
27000.0	10.99	9	.56

PROJ= BURSUM CALDERA



Station 25

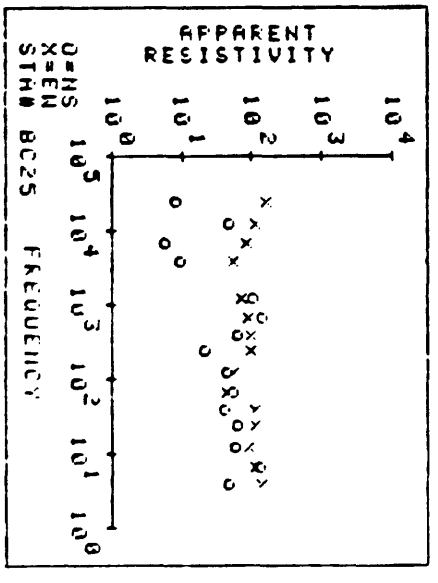
STATION=BC25N-S NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	36.89	7	7.15
7.5	102.37	10	8.79
14.0	47.26	11	4.18
27.0	49.48	14	4.21
45.0	33.67	11	6.60
75.0	42.98	8	11.94
140.0	35.30	11	5.39
270.0	16.92	11	2.11
450.0	50.33	11	5.04
750.0	111.86	10	8.64
1400.0	82.47	3	4.95
4500.0	7.77	3	.50
7500.0	4.66	11	.70
14000.0	38.06	7	.65
27000.0	6.80	6	.26

STATION=BC25E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	114.59	9	16.54
7.5	91.20	11	16.69
14.0	70.10	11	12.54
27.0	89.13	11	7.23
45.0	90.39	11	21.06
75.0	35.65	10	6.17
140.0	44.67	11	3.12
270.0	77.98	11	4.98
450.0	79.68	11	7.73
750.0	70.09	11	6.12
1400.0	57.34	3	3.63
4500.0	43.91	8	4.35
7500.0	68.57	10	5.12
14000.0	92.73	12	4.78
27000.0	125.32	3	2.61

PROJ= BURSUM CALDERA



Station 26

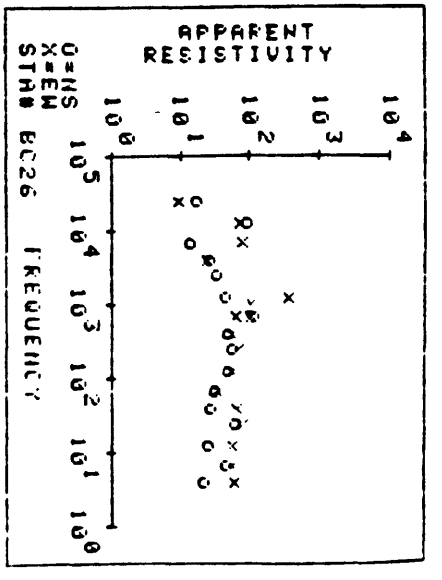
STATION=BC26N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	16.77	7	5.09
7.5	34.67	11	3.83
14.0	19.40	12	5.16
27.0	48.75	11	9.05
45.0	21.88	11	4.94
75.0	24.94	10	5.61
140.0	36.79	11	5.35
270.0	44.83	10	6.51
450.0	38.35	10	8.64
750.0	88.00	11	9.79
1400.0	36.33	5	1.59
2700.0	27.29	4	2.35
4500.0	21.98	6	3.46
7500.0	11.21	11	1.54
14000.0	74.20	7	1.67
27000.0	13.32	8	.57

STATION=BC26E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	48.36	11	6.88
7.5	43.86	11	4.26
14.0	43.94	11	5.37
27.0	64.13	11	7.30
45.0	50.67	11	11.25
75.0	27.28	11	8.03
140.0	42.39	12	2.43
270.0	55.30	11	5.57
450.0	44.46	11	2.76
750.0	52.39	11	9.50
1400.0	279.50	5	31.44
4500.0	20.48	3	3.14
7500.0	63.61	11	2.10
14000.0	57.90	7	5.32
27000.0	7.82	7	.46

PROJ= BURSUM CALDERA



Station 27

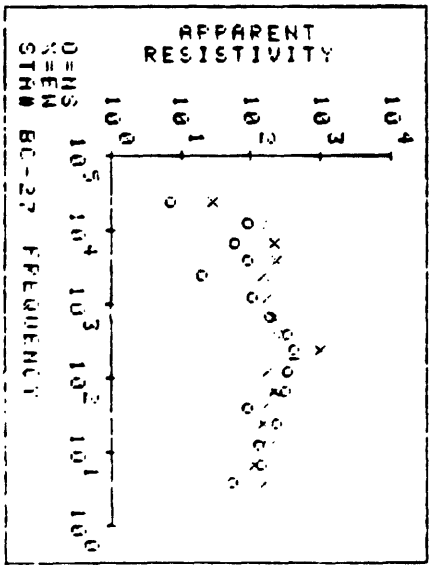
STATION=BC-27N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	44.95	6	11.45
7.5	113.20	6	19.33
14.0	104.14	8	25.59
27.0	182.09	13	21.65
45.0	71.70	10	13.28
75.0	241.70	12	49.82
140.0	258.89	11	66.63
270.0	341.29	10	53.42
450.0	276.61	12	32.99
756.0	150.08	11	23.45
1400.0	86.49	6	31.07
2700.0	15.96	6	5.00
4500.0	70.67	12	6.04
7500.0	45.60	12	11.60
14000.0	70.41	7	4.00
27000.0	5.61	9	.67

STATION=BC-27E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	130.00	4	26.57
7.5	90.60	4	16.83
14.0	147.75	10	9.05
27.0	119.84	11	7.51
45.0	124.15	9	9.26
75.0	167.17	12	9.02
140.0	139.22	12	12.93
270.0	765.66	12	27.61
450.0	185.55	13	9.24
750.0	170.19	12	4.94
1400.0	139.36	13	11.81
2700.0	117.75	12	5.23
4500.0	188.93	14	16.82
7500.0	178.96	12	7.29
14000.0	143.16	8	4.32
27000.0	22.05	11	1.02

PROJ= BURSUM CALDERA



Station 28

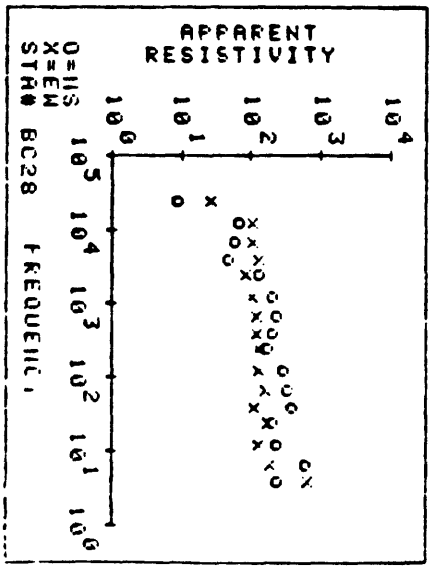
STATION=BC28N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	189.05	5	47.52
7.5	472.15	9	151.28
14.0	184.04	7	15.46
27.0	166.11	9	23.17
45.0	314.37	9	42.71
75.0	272.41	11	31.64
140.0	235.73	11	28.47
270.0	143.65	11	11.61
450.0	166.79	10	17.38
750.0	189.04	11	21.66
1400.0	158.87	8	18.54
2700.0	107.14	11	9.98
4500.0	37.28	12	7.24
7500.0	45.77	10	5.29
14000.0	53.08	7	2.24
27000.0	7.17	7	.88

STATION=BC28E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	523.08	6	26.99
7.5	154.86	14	22.20
14.0	107.86	10	6.61
27.0	136.90	10	19.19
45.0	93.00	11	5.61
75.0	129.58	11	13.02
140.0	104.75	11	4.46
270.0	105.18	11	6.28
450.0	99.26	11	5.68
750.0	94.37	11	2.91
1400.0	83.74	11	2.89
2700.0	68.19	8	4.01
4500.0	103.53	10	3.08
7500.0	85.37	11	7.92
14000.0	86.17	11	6.36
27000.0	21.12	8	2.22

PROJ= BURSUM CALDERA



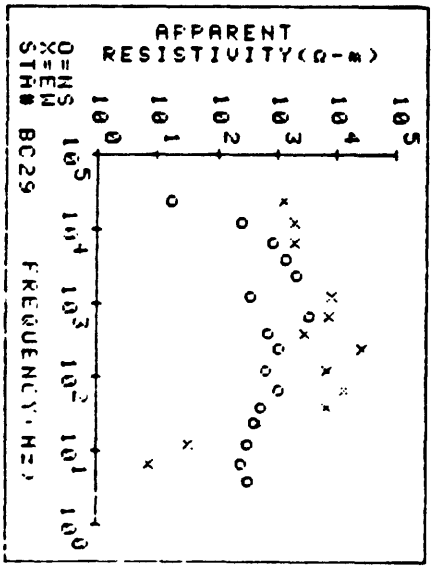
Station 29

STA. ID_BC29 NS NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
27.0	329.45	11	48.18
14.0	257.52	7	45.96
7.5	199.24	7	89.35
4.5	271.47	4	34.18
45.0	451.22	7	193.38
75.0	869.87	8	173.91
140.0	529.86	9	135.59
270.0	869.66	9	162.39
450.0	559.76	10	131.42
750.0	2900.10	10	335.40
1400.0	291.92	9	45.23
2700.0	1720.00	7	143.85
4500.0	1119.60	11	115.57
7500.0	674.70	9	66.43
14000.0	211.22	6	4.68
27000.0	13.29	9	.31

STA. ID_BC29 EW NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
27.0	416.32	11	19.53
14.0	27.15	5	4.63
7.5	6.16	4	1.11
45.0	5386.10	5	161.52
75.0	10530.00	4	395.97
140.0	5304.00	3	215.09
270.0	20968.00	5	1666.90
450.0	2457.60	5	111.70
750.0	6029.00	6	739.71
1400.0	6454.50	5	206.18
7500.0	1616.30	5	48.65
14000.0	1500.70	4	219.43
27000.0	1059.50	3	22.63



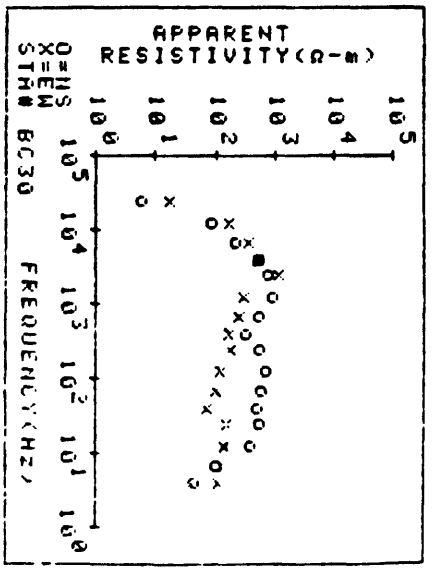
Station 30

STA. ID_BC30 NS NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	33.44	8	7.30
7.5	79.60	10	16.90
14.0	320.64	9	64.05
27.0	440.98	9	54.39
45.0	411.83	8	42.51
75.0	469.26	6	171.57
140.0	548.59	10	111.69
270.0	444.16	12	57.99
450.0	255.82	10	62.94
750.0	449.84	9	32.83
1400.0	724.08	12	68.62
2700.0	594.05	12	36.79
4500.0	452.65	14	20.88
7500.0	179.48	11	14.29
14000.0	67.30	6	3.47
27000.0	4.63	10	.24

STA. ID_BC30 EW NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	86.84	8	22.97
7.5	109.00	12	10.18
14.0	115.93	15	6.35
27.0	121.13	12	12.10
45.0	57.51	11	6.70
75.0	83.61	10	9.21
140.0	96.39	13	8.44
270.0	150.35	15	8.54
450.0	129.79	11	13.51
750.0	199.71	13	14.08
1400.0	238.69	11	21.19
2700.0	928.50	9	127.13
4500.0	441.68	10	50.76
7500.0	284.72	8	21.86
14000.0	131.25	7	4.30
27000.0	13.71	7	.45



Station 31

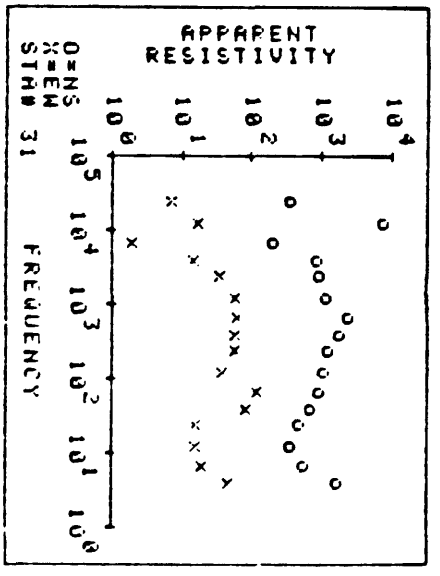
STATION=31N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	1331.30	6	189.48
7.5	455.62	12	34.32
14.0	285.74	11	39.81
27.0	394.16	12	20.97
45.0	550.39	11	35.26
75.0	754.23	11	148.88
140.0	868.72	11	61.17
270.0	1002.60	11	114.41
450.0	1425.70	12	67.45
750.0	1912.90	12	74.35
1400.0	910.00	10	75.97
2700.0	729.80	10	77.34
4500.0	682.92	11	55.16
7500.0	164.42	9	39.75
14000.0	5985.80	4	124.03
27000.0	286.80	8	7.49

STATION=31E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	37.50	12	2.23
7.5	16.45	11	.82
14.0	12.70	11	.42
27.0	12.45	12	.41
45.0	68.64	12	2.26
75.0	95.33	11	3.74
140.0	29.63	12	.74
270.0	48.71	11	2.38
450.0	46.89	12	1.52
750.0	49.69	12	1.80
1400.0	48.00	12	1.93
2700.0	28.84	12	4.07
4500.0	11.85	10	1.03
7500.0	1.57	6	.23
14000.0	13.79	7	1.30
27000.0	5.83	5	.69

PROJ= BURSUM CALDERA



Station 32

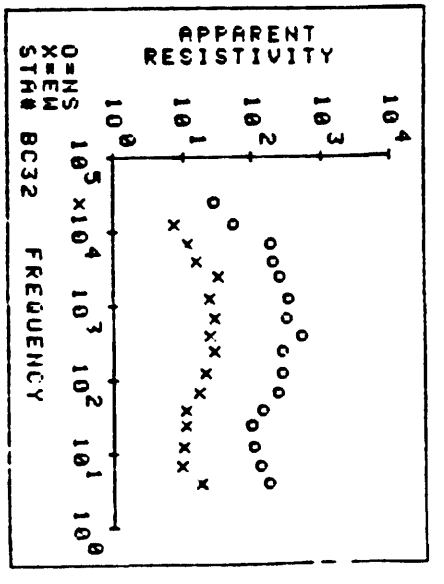
STATION=BC32N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	140.89	9	30.28
7.5	101.27	12	7.72
14.0	82.35	11	7.68
27.0	78.51	7	12.10
45.0	116.22	12	9.99
75.0	160.99	12	7.24
140.0	208.01	11	20.31
270.0	221.52	12	13.33
450.0	420.01	12	13.87
750.0	244.91	12	25.51
1400.0	271.54	11	20.43
2700.0	199.69	11	17.91
4500.0	161.52	8	3.92
7500.0	147.87	8	13.46
14000.0	45.02	4	1.12
27000.0	22.26	7	1.85

STATION=BC32E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	14.35	12	.97
7.5	7.80	12	.58
14.0	8.44	12	.53
27.0	8.96	12	.49
45.0	8.64	12	.65
75.0	13.45	12	.44
140.0	16.55	12	.51
270.0	22.39	12	.84
450.0	20.40	12	.64
750.0	23.23	12	.44
1400.0	19.18	12	1.39
2700.0	26.50	9	1.33
4500.0	12.93	9	1.35
7500.0	9.71	9	1.10
14000.0	6.86	3	.85
27000.0	.28	6	.85

PROJ= BURSUM CALDERA



Station 33

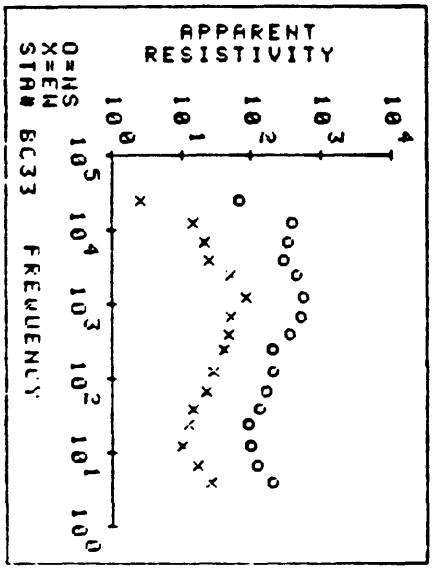
STATION=BC33N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	164.08	11	31.76
7.5	95.79	12	7.57
14.0	78.22	11	7.62
27.0	71.10	11	4.18
45.0	102.31	11	4.93
75.0	130.35	12	10.06
140.0	157.81	11	13.50
270.0	163.26	13	11.77
450.0	385.07	11	26.42
750.0	404.59	11	28.15
1400.0	439.49	12	37.56
2700.0	358.47	12	23.59
4500.0	230.17	10	26.87
7500.0	258.62	12	16.44
14000.0	317.23	5	161.33
27000.0	53.14	11	3.11

STATION=BC33E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	21.70	12	1.79
7.5	14.21	11	.42
14.0	8.84	12	.25
27.0	10.17	12	.39
45.0	12.00	12	.36
75.0	16.89	12	.38
140.0	22.50	11	.64
270.0	32.27	12	.70
450.0	37.31	12	2.12
750.0	40.12	11	1.34
1400.0	65.61	11	2.09
2700.0	41.39	11	2.03
4500.0	19.71	9	2.93
7500.0	17.24	5	2.29
14000.0	11.62	5	1.00
27000.0	2.08	3	.22

PROJ= BURSUM CALDERA



Station 34

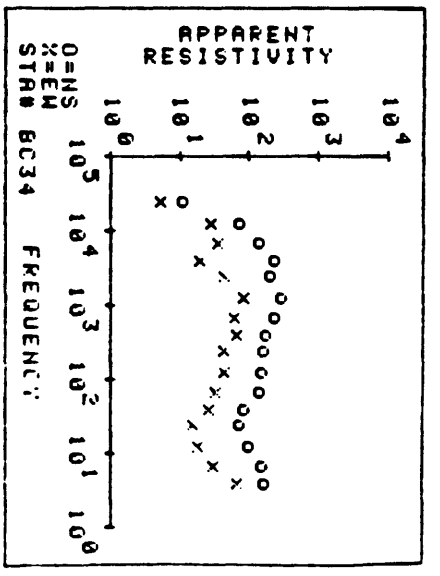
STATION=BC34N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	126.63	10	12.39
7.5	117.94	11	11.31
14.0	80.12	11	7.46
27.0	59.15	10	4.59
45.0	69.38	11	4.99
75.0	108.40	11	10.56
140.0	118.81	11	11.25
270.0	131.07	11	13.09
450.0	139.51	11	9.05
750.0	190.83	11	11.95
1400.0	223.02	11	26.05
2700.0	157.32	11	17.41
4500.0	185.12	10	23.50
7500.0	115.87	12	1.97
14000.0	58.12	7	2.01
27000.0	9.05	8	.47

STATION=BC34E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	55.10	12	4.53
7.5	24.08	11	1.10
14.0	14.96	12	.51
27.0	12.50	11	.78
45.0	22.00	12	.97
75.0	26.50	11	.60
140.0	34.24	12	.61
270.0	35.70	12	.91
450.0	53.77	11	2.03
750.0	51.07	11	2.41
1400.0	66.40	11	5.05
2700.0	36.22	11	3.16
4500.0	16.29	10	2.06
7500.0	28.42	10	3.64
14000.0	23.63	7	.55
27000.0	4.22	7	.26

PROJ= BURSUM CALDERA



Station 35

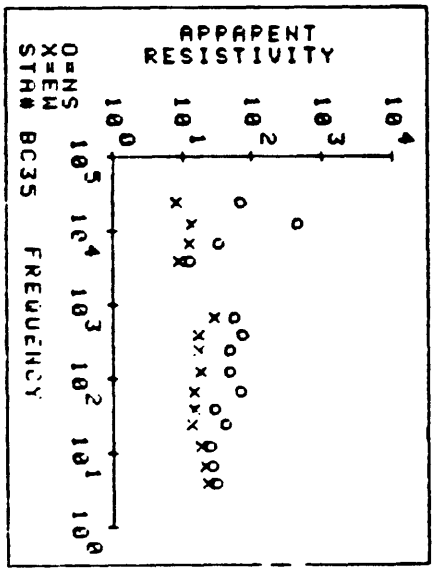
STATION=BC35N-S NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	24.84	6	4.89
7.5	21.95	8	1.84
14.0	19.46	12	2.18
27.0	32.78	9	4.13
45.0	22.91	11	2.97
75.0	53.86	11	6.85
140.0	38.94	10	3.99
270.0	38.70	9	4.42
450.0	56.42	10	5.20
750.0	45.40	8	10.37
4500.0	10.31	10	1.31
7500.0	26.12	10	4.50
14000.0	360.21	5	9.92
27000.0	54.64	9	3.57

STATION=BC35E-W NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	17.98	10	1.81
7.5	16.92	11	1.80
14.0	14.45	11	3.05
27.0	11.35	11	.56
45.0	12.10	12	.59
75.0	12.26	11	.45
140.0	14.59	12	.66
270.0	14.22	11	1.85
450.0	13.51	12	.73
750.0	22.59	11	1.59
4500.0	7.14	5	2.49
7500.0	10.43	10	1.47
14000.0	10.97	7	.34
27000.0	6.81	10	3.11

PROJ= BURSUM CALDERA



Station 36

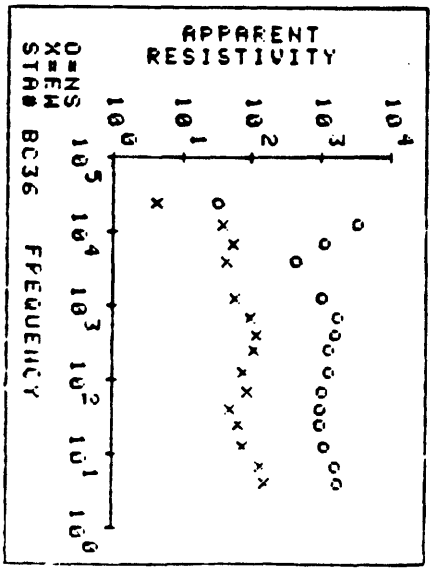
STATION=BC36N-S NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	1455.50	7	264.81
7.5	1348.10	10	147.39
14.0	935.90	11	90.34
27.0	780.39	12	68.93
45.0	772.00	10	83.87
75.0	855.40	11	87.89
140.0	1033.20	11	82.74
270.0	1075.10	10	153.64
450.0	1348.30	10	137.40
750.0	1412.00	10	148.76
1400.0	877.11	10	92.43
4500.0	344.31	9	67.36
7500.0	890.36	10	88.26
14000.0	2780.20	6	89.66
27000.0	26.62	10	1.25

STATION=BC36E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	129.66	8	14.67
7.5	110.42	12	20.89
14.0	64.10	13	10.66
27.0	55.87	12	14.82
45.0	41.86	11	5.81
75.0	71.48	12	6.70
140.0	61.43	12	6.54
270.0	93.51	12	30.61
450.0	100.25	10	8.40
750.0	80.34	11	5.65
1400.0	46.01	7	9.00
4500.0	36.50	6	9.84
7500.0	45.25	9	3.71
14000.0	30.52	6	1.72
27000.0	3.56	9	.30

PROJ= BURSUM CALDERA



Station 37

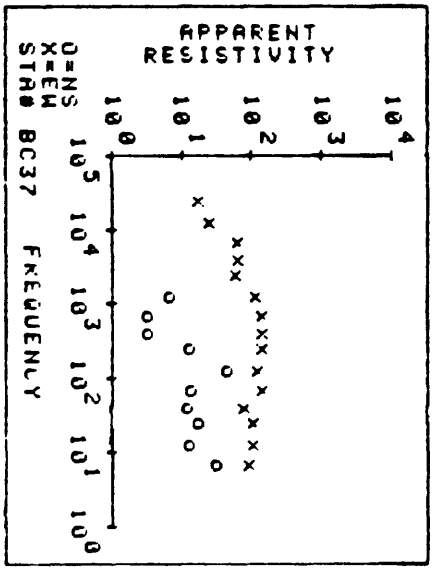
STATION=BC37N-S NO FREQ= 18

FREQ	AP-RES	N OBS	STD ERR
7.5	25.13	6	4.11
14.0	10.13	8	.37
27.0	13.69	10	1.42
45.0	9.51	7	1.18
75.0	10.71	8	1.29
140.0	36.17	10	2.71
270.0	10.53	10	1.19
450.0	2.62	9	.30
750.0	2.70	9	.27
1400.0	5.45	10	.37

STATION=BC37E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
7.5	72.20	8	9.79
14.0	85.15	11	4.30
27.0	84.62	9	6.16
45.0	61.93	11	6.33
75.0	109.14	10	4.03
140.0	95.95	11	2.59
270.0	115.17	12	6.51
450.0	110.90	11	10.10
750.0	100.38	11	7.49
1400.0	91.16	11	20.08
2700.0	47.56	7	4.95
4500.0	48.99	8	6.71
7500.0	48.84	9	3.65
14000.0	19.13	3	.64
27000.0	13.42	3	.26

PROJ= BURSUM CALDERA



Station 38

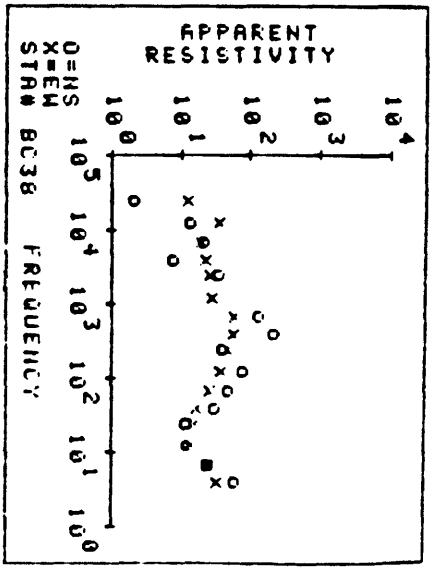
STATION=BC38N-S NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	47.46	5	19.27
7.5	19.69	10	5.92
14.0	10.36	12	.99
27.0	9.27	11	1.29
45.0	25.05	13	3.53
75.0	39.23	9	6.77
140.0	64.41	12	9.26
270.0	33.98	9	6.60
450.0	174.23	9	9.95
750.0	187.84	9	32.75
2700.0	27.61	8	1.98
4500.0	6.33	8	.30
7500.0	17.45	10	4.21
14000.0	11.02	7	.42
27000.0	1.69	7	.07

STATION=BC38E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	26.81	8	1.64
7.5	19.58	9	2.33
14.0	10.86	12	.77
27.0	13.08	11	.41
45.0	13.45	12	.92
75.0	20.76	11	1.12
140.0	29.65	11	1.85
270.0	37.98	11	1.68
450.0	46.10	11	1.92
750.0	47.65	12	1.10
1400.0	22.83	11	2.42
2700.0	20.55	11	4.26
4500.0	18.83	8	1.99
7500.0	15.72	8	1.24
14000.0	27.47	6	.15
27000.0	10.28	8	1.84

PROJ= BURSUM CALDERA



Station 39

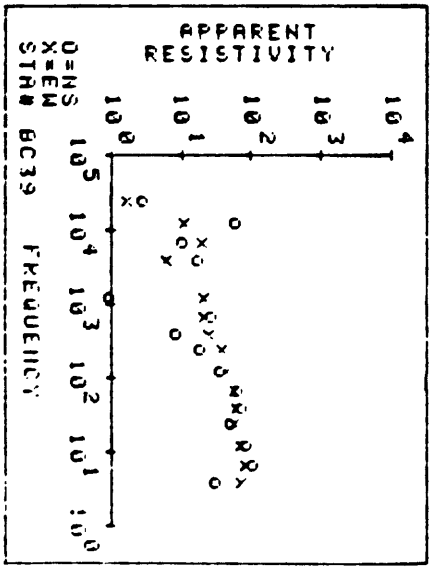
STATION=BC39N-S NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	24.25	4	13.89
7.5	82.23	11	6.78
14.0	69.02	11	14.73
27.0	40.60	12	6.61
45.0	56.63	11	5.24
75.0	50.13	11	14.27
140.0	27.88	10	6.65
270.0	15.15	11	3.37
450.0	6.51	9	1.47
750.0	20.60	11	2.26
1400.0	.75	7	.23
4500.0	13.29	11	2.20
7500.0	8.16	9	2.01
14000.0	47.85	3	1.65
27000.0	2.21	7	.57

STATION=BC39E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	58.38	7	3.84
7.5	65.62	11	3.21
14.0	56.52	11	1.94
27.0	47.24	11	2.12
45.0	49.92	11	2.67
75.0	47.83	11	1.87
140.0	35.15	11	1.94
270.0	31.53	11	.96
450.0	19.22	11	.91
750.0	17.36	12	1.00
1400.0	17.42	12	1.08
4500.0	5.13	12	.95
7500.0	16.45	12	1.34
14000.0	8.86	7	1.04
27000.0	1.32	7	.06

PROJ= BURSUM CALDERA



Station 40

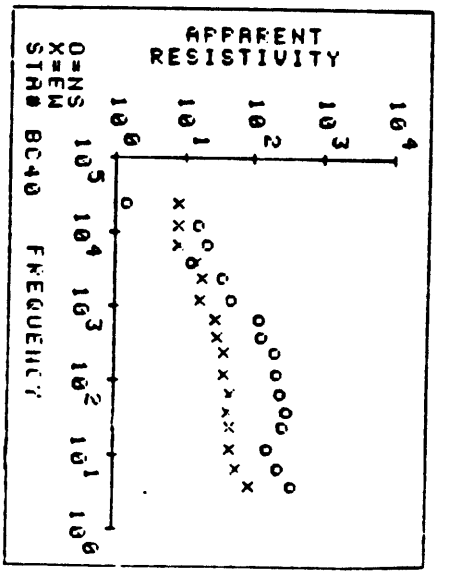
STATION=BC40N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	284.64	9	70.96
7.5	181.66	11	8.67
14.0	125.21	11	12.31
27.0	213.20	11	17.71
45.0	245.47	11	28.18
75.0	199.60	11	15.34
140.0	174.89	11	12.06
270.0	164.92	11	16.73
450.0	105.63	11	6.58
750.0	98.79	11	7.18
1400.0	37.31	11	7.24
2700.0	29.25	7	4.83
4500.0	10.12	10	.99
7500.0	16.98	10	3.67
14000.0	13.09	5	.61
27000.0	1.16	7	.04

STATION=BC40E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	70.80	11	4.91
7.5	45.44	11	2.16
14.0	38.69	12	2.59
27.0	38.41	10	2.01
45.0	35.08	11	1.19
75.0	38.42	12	1.08
140.0	31.29	12	1.25
270.0	30.95	12	.86
450.0	24.47	13	1.10
750.0	22.36	12	.72
1400.0	13.37	11	1.12
2700.0	14.96	12	1.25
4500.0	12.05	11	.85
7500.0	6.73	13	.58
14000.0	6.52	7	.15
27000.0	6.89	7	.10

PROJ= BURSUM CALDERA



Station 41

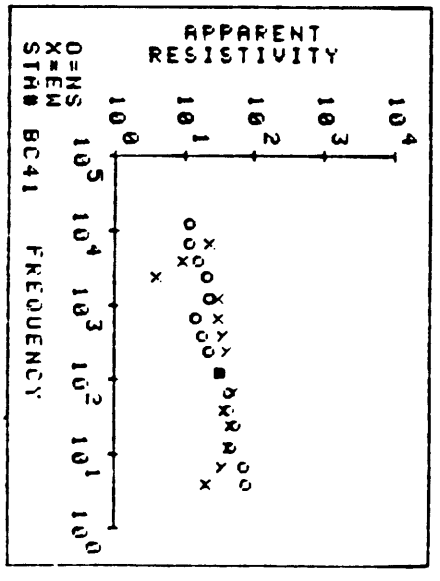
STATION=BC41N-S NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	63.59	11	8.58
7.5	58.19	10	3.36
14.0	38.47	9	2.87
27.0	42.36	15	1.28
45.0	35.22	11	2.42
75.0	35.42	11	3.57
140.0	26.98	12	1.81
270.0	17.96	12	1.00
450.0	14.72	11	.49
750.0	12.00	12	.66
1400.0	18.75	9	1.88
2700.0	17.49	14	1.04
4500.0	12.72	11	1.41
7500.0	9.30	10	.75
14000.0	9.62	3	.59

STATION=BC41E-W NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	16.90	3	.80
7.5	26.42	11	3.40
14.0	34.55	12	.87
27.0	38.10	15	.85
45.0	31.48	11	1.64
75.0	40.36	12	1.39
140.0	27.18	12	1.98
270.0	33.27	12	1.10
450.0	27.65	12	1.09
750.0	24.52	12	.73
1400.0	24.46	14	.84
2700.0	3.31	7	.40
4500.0	7.93	8	.94
7500.0	17.91	4	3.38

PROJ= BURSUM CALDERA



Station 42

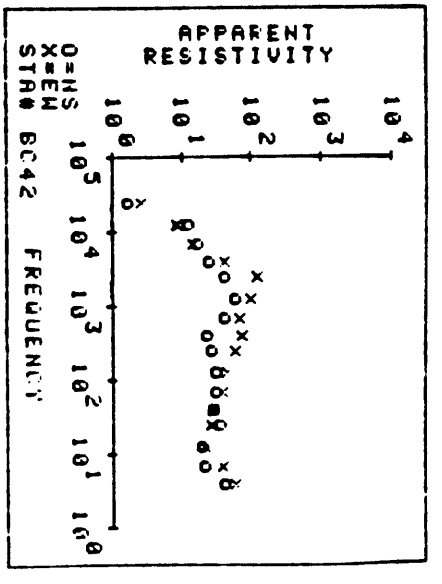
STATION=BC42N-S NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	32.36	11	1.32
7.5	16.63	11	1.24
14.0	15.85	11	1.61
27.0	28.69	9	2.73
45.0	23.89	10	4.18
75.0	24.80	11	4.14
140.0	25.37	11	2.67
270.0	20.77	12	1.12
450.0	19.01	11	1.31
750.0	31.72	11	3.73
1400.0	48.72	11	4.33
2700.0	33.91	11	2.40
4500.0	19.96	11	1.98
7500.0	13.78	7	2.56
14000.0	10.63	5	.41
27000.0	1.34	7	.02

STATION=BC42E-W NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	48.50	11	5.28
7.5	29.86	11	.91
14.0	16.91	11	.73
27.0	20.68	11	2.89
45.0	22.05	11	1.15
75.0	31.13	12	1.79
140.0	34.08	11	2.86
270.0	47.79	13	2.00
450.0	58.55	11	5.04
750.0	55.13	13	2.27
1400.0	80.41	11	4.50
2700.0	94.96	11	4.36
4500.0	31.96	7	3.69
7500.0	11.52	3	1.38
14000.0	7.30	7	.29
27000.0	2.17	7	.12

PROJ= BURSUM CALDERA



Station 43

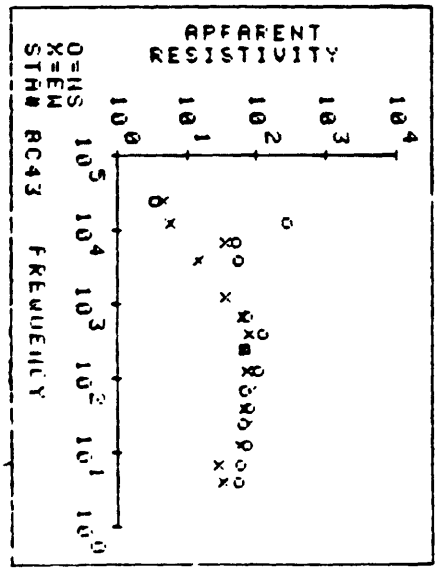
STATION=BC43N-S NO FREQ= 14

FREQ	AP-RES	N OBS	STD ERR
4.5	43.64	11	8.43
7.5	48.41	12	3.28
14.0	58.44	12	5.88
27.0	49.50	12	5.29
45.0	62.85	10	8.73
75.0	53.88	12	6.66
140.0	82.39	12	11.12
270.0	53.12	11	5.54
450.0	96.94	11	14.47
750.0	58.23	10	5.76
4500.0	44.38	8	4.04
7500.0	39.87	5	9.67
14000.0	212.00	3	2.95
27000.0	2.73	6	.22

STATION=BC43E-W NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	26.68	8	4.18
7.5	22.75	10	2.64
14.0	45.60	10	4.85
27.0	62.89	12	3.14
45.0	54.43	11	3.77
75.0	65.81	12	4.47
140.0	57.88	15	1.82
270.0	53.66	11	3.09
450.0	62.51	13	4.36
750.0	49.09	12	5.35
1400.0	28.51	5	4.48
4500.0	11.94	7	1.54
7500.0	26.20	7	2.32
14000.0	4.67	4	1.29
27000.0	3.61	5	.55

PROJ= BURSUM CALDERA



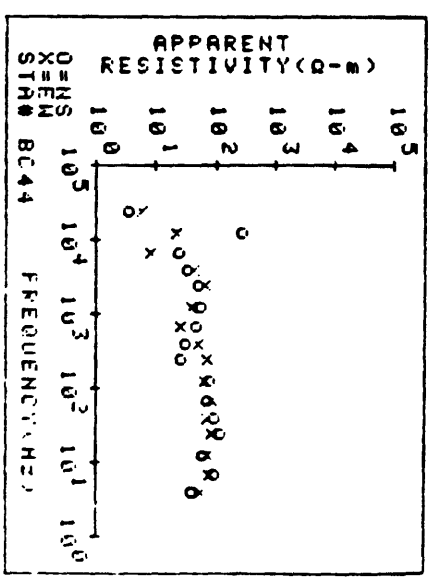
Station 44

STA. ID_BC44 NS NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	33.13	6	6.41
7.5	72.28	9	9.24
14.0	48.72	15	4.58
27.0	92.06	8	23.91
45.0	72.13	12	6.42
75.0	58.47	12	4.22
140.0	61.13	11	15.41
270.0	21.04	10	1.84
450.0	25.30	9	2.53
750.0	38.94	12	5.59
1400.0	46.27	9	6.19
2700.0	41.69	15	6.15
4500.0	26.02	12	5.86
7500.0	18.59	11	8.82
14000.0	231.07	3	10.34
27000.0	2.84	10	.19

STA. ID_BC44 EW NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	43.19	6	10.62
7.5	64.92	10	9.10
14.0	56.35	12	3.94
27.0	67.34	12	2.80
45.0	55.77	13	2.37
75.0	67.66	9	7.70
140.0	51.99	13	3.88
270.0	57.04	11	8.16
450.0	40.78	11	7.69
750.0	20.23	13	2.26
1400.0	31.18	7	3.63
2700.0	52.27	11	9.30
4500.0	33.60	8	12.49
7500.0	6.48	9	.52
14000.0	17.03	4	.39
27000.0	4.49	8	.50



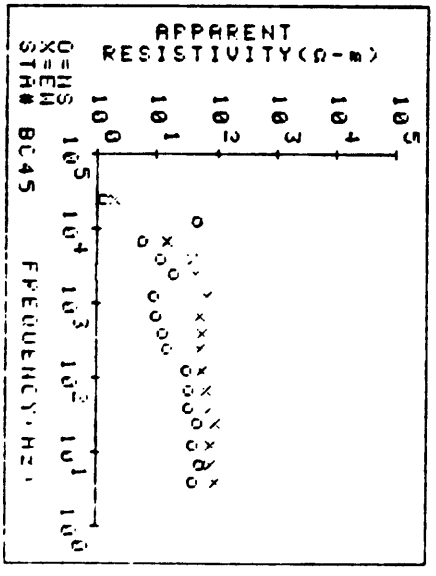
Station 45

STA. ID_BC45 NS NO FREQ= 16

FREQ	AP-RES	N OBS	STD ERR
4.5	31.04	7	3.60
7.5	41.77	11	3.02
14.0	33.34	11	1.97
27.0	38.12	12	2.03
45.0	25.98	12	3.81
75.0	26.37	14	3.15
140.0	25.82	11	2.09
270.0	12.10	7	1.80
450.0	9.89	8	.73
750.0	7.76	12	.62
1400.0	6.86	11	1.79
2700.0	14.43	11	1.63
4500.0	9.26	11	.89
7500.0	4.77	10	.58
14000.0	38.95	3	1.47
27000.0	.99	5	.05

STA. ID_BC45 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	73.66	11	6.42
7.5	64.08	11	5.62
14.0	65.04	12	2.41
27.0	73.49	12	2.46
45.0	61.28	11	1.05
75.0	54.67	12	.96
140.0	45.69	11	1.03
270.0	39.96	15	1.56
450.0	44.36	12	2.86
750.0	40.77	12	2.60
1400.0	51.65	12	5.37
2700.0	35.22	14	1.69
4500.0	31.16	12	1.86
7500.0	11.23	4	1.98
27000.0	1.55	3	.07



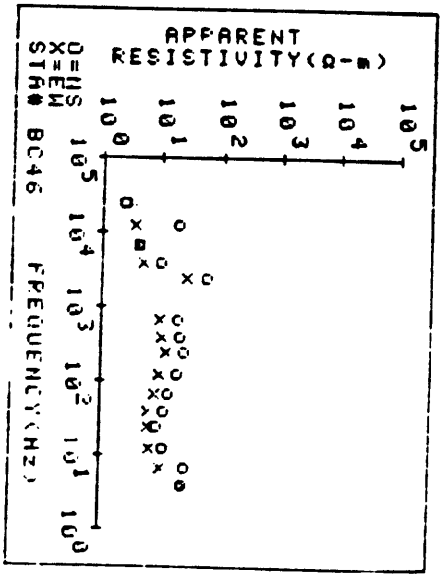
Station 46

STA. ID_BC46 NS NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	18.66	5	3.87
7.5	21.69	12	2.45
14.0	8.94	12	.91
27.0	6.88	12	.70
45.0	9.08	14	.45
75.0	10.55	12	.76
140.0	15.58	12	1.32
270.0	16.98	11	4.19
450.0	16.44	11	1.49
750.0	14.56	9	1.23
2700.0	45.68	10	3.63
4500.0	7.34	8	1.72
7500.0	3.29	9	1.50
14000.0	14.47	3	.19
27000.0	1.79	7	.06

STA. ID_BC46 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	21.37	10	3.80
7.5	8.61	12	.53
14.0	5.66	11	.29
27.0	4.95	11	.15
45.0	5.07	11	.22
75.0	6.59	12	.23
140.0	7.46	12	.29
270.0	9.65	12	.23
450.0	8.30	12	1.11
750.0	7.31	11	.26
2700.0	20.98	11	1.53
4500.0	4.00	8	1.20
7500.0	3.29	8	1.22
14000.0	2.69	3	.08
27000.0	2.58	5	.21



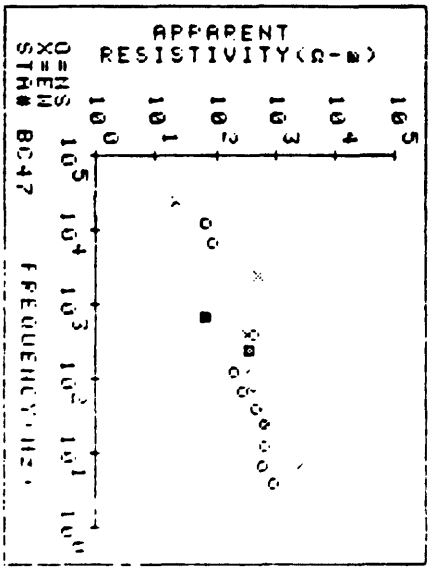
Station 47

STA. ID_BC47 NS NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	714.80	6	199.37
7.5	495.10	6	103.20
14.0	509.00	10	80.94
27.0	537.40	11	79.28
45.0	378.94	10	31.68
75.0	230.20	11	36.93
140.0	155.32	11	27.60
270.0	295.08	11	48.49
450.0	350.53	10	39.83
750.0	53.29	9	5.21
7500.0	70.92	6	9.29
14000.0	54.93	3	2.40

STA. ID_BC47 EW NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	1674.50	4	22.20
7.5	1986.80	6	146.29
14.0	1308.30	12	164.00
27.0	570.83	12	54.09
45.0	484.64	10	66.51
75.0	341.47	11	26.42
140.0	253.74	11	18.28
270.0	298.00	15	25.87
450.0	274.16	12	54.74
750.0	54.42	12	4.99
2700.0	394.14	11	90.21
27000.0	18.32	4	1.11



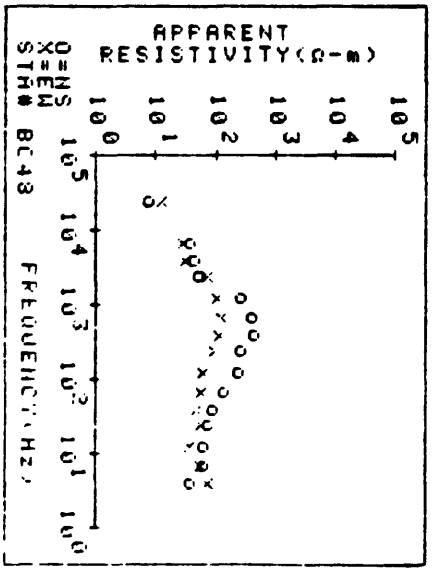
Station 48

STA. ID_BC48 NS NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	29.36	7	8.33
7.5	49.11	10	5.27
14.0	48.33	11	4.73
27.0	56.70	11	6.42
45.0	71.17	10	9.71
75.0	106.36	9	17.96
140.0	194.54	11	19.73
270.0	204.36	11	12.42
450.0	331.66	11	25.87
750.0	300.37	10	28.88
1400.0	213.00	7	18.61
2700.0	39.84	7	2.94
4500.0	35.38	9	3.40
7500.0	29.74	7	.32
27000.0	6.06	6	.37

STA. ID_BC48 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	57.00	9	10.01
7.5	44.10	8	6.68
14.0	29.38	10	4.84
27.0	43.34	11	9.14
45.0	37.55	11	4.72
75.0	45.48	12	2.57
140.0	50.37	14	2.20
270.0	74.56	12	3.34
450.0	86.61	12	2.26
750.0	95.70	12	5.16
1400.0	78.23	15	9.45
2700.0	56.65	7	19.31
4500.0	24.75	11	2.81
7500.0	22.03	7	2.23
27000.0	9.60	3	3.08



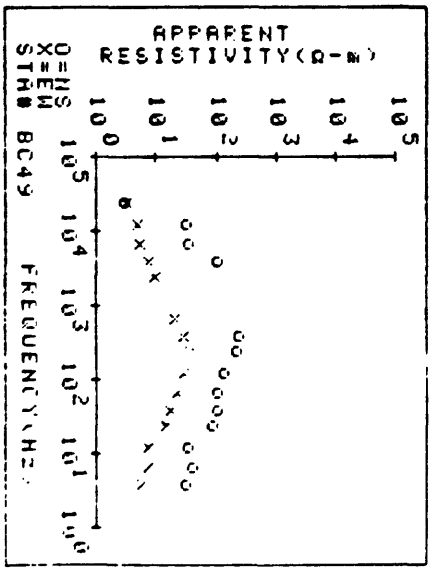
Station 49

STA. ID_BC49 NS NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	24.94	6	11.64
7.5	33.12	10	3.71
14.0	28.10	12	3.78
27.0	69.94	12	5.14
45.0	78.83	10	32.28
75.0	83.58	12	7.33
140.0	103.50	6	32.67
270.0	166.89	12	43.12
450.0	183.43	11	28.84
4500.0	84.31	3	1.07
7500.0	26.39	7	4.84
14000.0	23.87	3	1.20
27000.0	2.26	5	.09

STA. ID_BC49 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	4.54	5	1.20
7.5	5.83	11	.70
14.0	5.68	11	.63
27.0	11.71	11	.66
45.0	14.27	11	.72
75.0	17.23	11	.82
140.0	23.13	11	1.28
270.0	28.55	12	1.40
450.0	22.85	11	1.37
750.0	16.46	10	.62
2700.0	7.80	4	2.33
4500.0	5.76	9	1.29
7500.0	4.27	9	.34
14000.0	3.82	3	.21
27000.0	2.52	4	.06



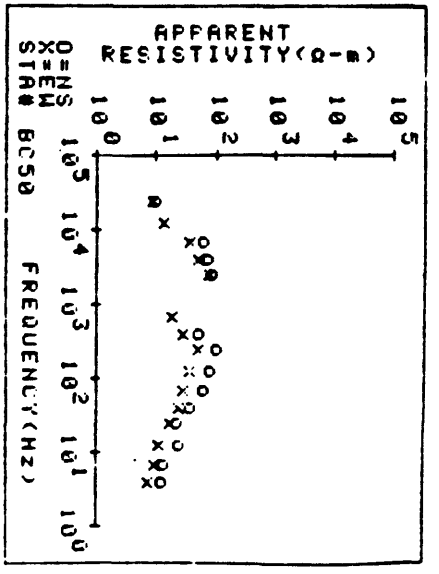
Station 50

STA. ID_BC50 NS NO FREQ= 13

FREQ	AP-RES	N OBS	STD ERR
4.5	10.85	5	.88
7.5	10.89	11	1.20
14.0	19.35	12	1.75
27.0	17.60	11	2.18
45.0	30.34	11	4.72
75.0	49.66	11	4.82
140.0	64.46	11	6.13
270.0	81.25	12	5.69
450.0	40.31	11	1.27
2700.0	78.45	11	1.20
4500.0	58.58	9	3.17
7500.0	50.16	9	3.98
27000.0	7.52	3	.36

STA. ID_BC50 EW NO FREQ= 15

FREQ	AP-RES	N OBS	STD ERR
4.5	5.90	11	.56
7.5	7.62	11	.51
14.0	8.84	12	.37
27.0	13.93	11	.82
45.0	16.52	11	.73
75.0	21.90	11	1.24
140.0	29.22	12	.89
270.0	40.94	11	2.20
450.0	22.36	11	1.48
750.0	15.22	12	2.05
2700.0	61.97	5	9.77
4500.0	42.17	11	4.51
7500.0	30.22	12	2.50
14000.0	10.57	3	2.33
27000.0	6.74	7	1.28



Station 51

STA. ID_BC51 NS NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	31.41	7	9.04
7.5	48.37	10	4.63
14.0	50.10	11	2.55
27.0	96.69	10	17.27
45.0	82.67	11	6.78
75.0	143.63	12	12.44
140.0	129.60	11	14.39
276.0	356.93	12	114.95
450.0	298.23	11	68.08
7500.0	86.18	10	7.52
14000.0	101.65	3	13.98
27000.0	33.17	5	.99

STA. ID_BC51 EW NO FREQ= 12

FREQ	AP-RES	N OBS	STD ERR
4.5	18.54	7	1.57
7.5	17.51	12	1.98
14.0	23.09	11	.07
27.0	38.07	11	1.03
45.0	41.43	11	1.48
75.0	55.43	10	2.41
140.0	69.66	11	2.19
276.0	94.48	12	[illegible]
450.0	78.25	11	[illegible]
7500.0	20.85	6	[illegible]
14000.0	21.74	3	[illegible]
27000.0	8.15	5	.86