Magnetotelluric Data, Southern San Luis Valley, Colorado

By Jackie M. Williams and Brian D. Rodriguez

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Introduction

The population of the San Luis Valley region is growing rapidly. The shallow unconfined and the deeper confined Santa Fe Group aquifer in the San Luis Basin is the main sources of municipal water for the region. Water shortfalls could have serious consequences. Future growth and land management in the region depend on accurate assessment and protection of the region's ground-water resources. An important issue in managing the ground-water resources is a better understanding of the hydrogeology of the Santa Fe Group and the nature of the sedimentary deposits that fill the Rio Grande rift, which contain the principal ground-water aquifers.

The U.S. Geological Survey (USGS) is conducting a series of multidisciplinary studies of the San Luis Basin located in southern Colorado. Detailed geologic mapping, high-resolution airborne magnetic surveys, gravity surveys, an electromagnetic survey, called magnetotellurics (MT), and hydrologic and lithologic data are being used to better understand the aquifer systems. The primary goal of the MT survey is to map changes in electrical resistivity with depth that are related to differences in rock type. These various rock types help control the properties of aquifers in the region. This report does not include any interpretation of the data. Its purpose is to release the MT data acquired at the 22 stations shown in **figure 1**.

Electrical Rock Properties

Electromagnetic geophysical methods detect variations in the electrical properties of rocks. Electrical resistivity, or its inverse, electrical conductivity, are of particular interest. Electrical resistivity can be correlated with geologic units on the surface and at depth using lithologic logs to provide a three-dimensional (3-D) picture of subsurface geology. In the upper crust the resistivity of geologic units is largely dependent upon their fluid content, pore-volume porosity, interconnected fracture porosity, and conductive mineral content (Keller, 1989). Although there is not a one-to-one relationship between lithology and resistivity, there are general correlations that can be made using typical resistivity values even though values vary from one location to another (Palacky, 1987). Fluids within the pore spaces and fracture openings, especially if saline, can reduce resistivities in what would otherwise be a resistive rock matrix. Resistivities can also be lowered by the presence of electrically conductive clay minerals, graphitic carbon, and metallic mineralization. It is common, for example, for altered volcanic rocks to contain replacement minerals that have resistivities ten times lower than those of the surrounding rocks (Nelson and Anderson, 1992). Fine-grained sediments, such as clay-rich alluvium, marine shales, and other mudstones, are normally conductive from a few ohm-meters (ohm-m) to a few tens of ohm-m (Keller, 1987; Palacky, 1987). Metamorphic rocks (non-graphitic) and unaltered, unfractured igneous rocks are normally moderately to highly resistive (hundreds to thousands of ohm-m). Carbonate rocks can have similarly high resistivities depending on their fluid content, porosity, and impurities (Keller, 1987; Palacky, 1987). Fault zones may be moderately conductive (tens of ohm-m) when comprised of rocks fractured enough to have hosted fluid transport and consequent mineralogical alteration (Eberhart-Phillips and others, 1995). Higher subsurface temperatures cause higher ionic mobility that reduces rock resistivities (Keller, 1987; Palacky, 1987). Tables of electrical resistivities for a variety of rocks, minerals, and geological environments may be found in Keller (1987) and Palacky (1987).

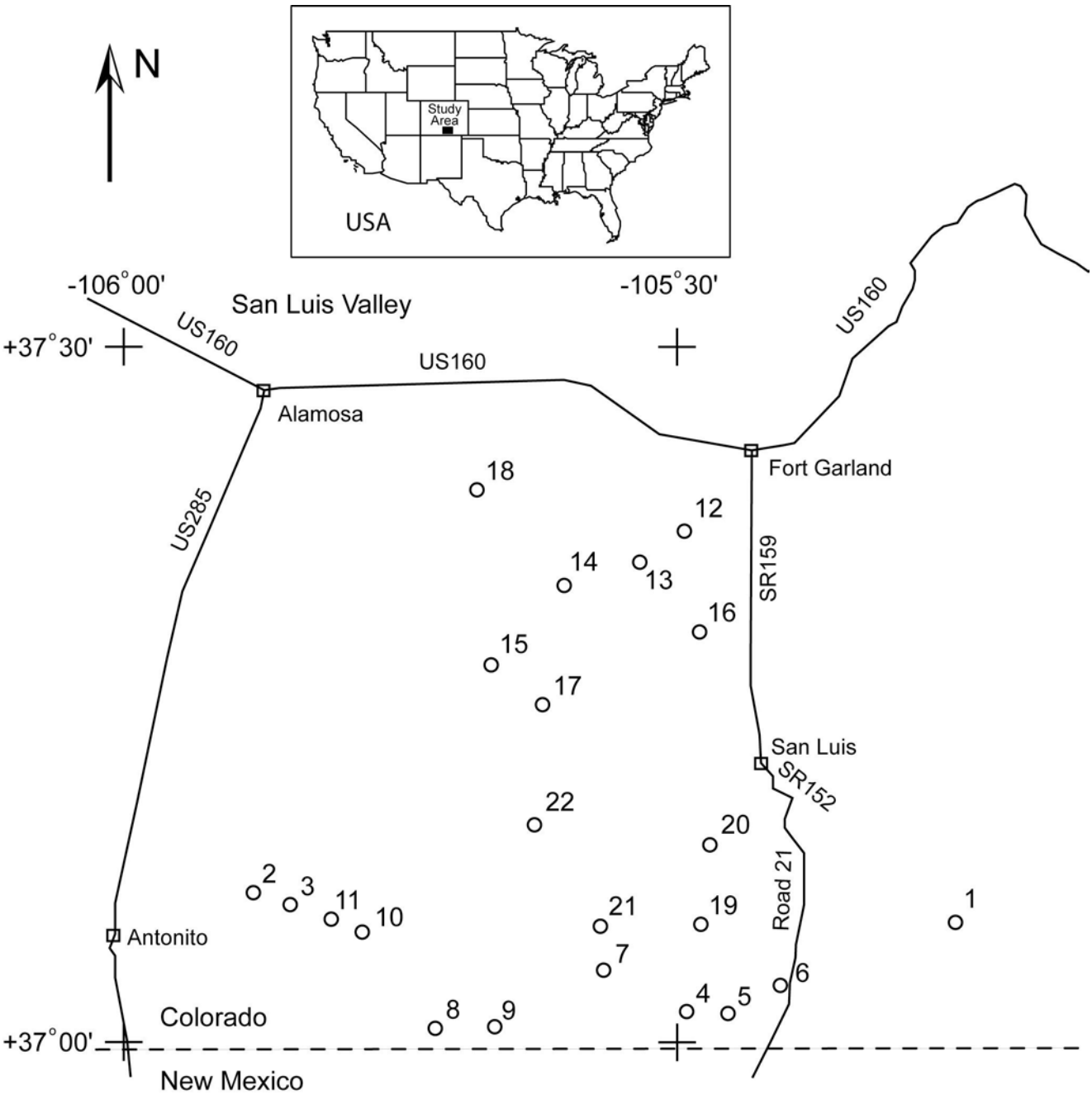

Figure 1. Location of magnetotelluric stations in the San Luis Valley Area.

Magnetotelluric Method

The MT method is a passive-surface electromagnetic geophysical technique that measures variations in the Earth's natural electromagnetic fields to investigate the electrical resistivity structure of the subsurface from depths of tens of meters to tens of kilometers (Vozoff, 1991). Worldwide lightning activity at frequencies of 10,000 to 1 Hertz (Hz) and geomagnetic micro-pulsations at frequencies of 1 to 0.001 Hz provide the majority of natural signal used by the MT method. A small amount of electromagnetic energy reflects and propagates vertically into the earth due to the resistivitiy contrast at the air-earth interface (Vozoff, 1972).

The natural fields are recorded in the *xyz* direction for the magnetic field and the *xy* direction for the electric field at the Earth's surface. The resulting time-series signals are used to derive tensor apparent-resistivities and phases by first converting them to complex cross-spectra using Fourier-transform techniques. Least squares, cross-spectral analysis (Bendat and Piersol, 1971) is used to solve for a tensor transfer function. Prior to conversion to apparent resistivity and phase, the tensor is normally rotated into principal directions that usually correspond to the direction of maximum and minimum apparent resistivity. For a two-dimensional (2-D) Earth, in which Earth's resistivity structure varies with depth and in one lateral direction, the MT fields can be decoupled into transverse-electric (TE) and transverse-magnetic (TM) modes; 2-D resistivity modeling is generally computed to fit both modes. When the geologic structures are assumed to be primarily 2-D, the MT data for the TE mode represents electric fields that are oriented parallel to geologic strike, and the data for the TM mode represents electric fields oriented perpendicular to strike.

The MT method is well suited for studying complicated geological environments because the electric and magnetic fields are sensitive to vertical and horizontal variations in resistivity. The method is capable of establishing whether the electromagnetic fields are responding to subsurface rock bodies of effectively 1, 2, or 3 dimensions. An introduction to the MT method and references for a more advanced understanding are contained in Dobrin and Savit (1988) and Vozoff (1991).

Magnetotelluric Survey

In July and August of 2006 we collected 22 MT stations in the southern San Luis Valley (**fig. 1**) of south central Colorado. The station locations were chosen to constrain the geologic/hydrostratigraphic interpretation, for proximity to roads, and to avoid, where possible, electrical noise from power lines and vehicles. The MT data were collected with an Electromagnetic Instruments, Inc., (EMI) MT-1 system (EMI, 1996). Horizontal electric fields were measured using three copper/copper sulfate porous-pot electrodes placed in an L-shaped array with dipole lengths of 30 meters (m). The orthogonal magnetic fields in the direction of the electric-field measurement array were sensed using EMI's high-magnetic-permeability, mu-metal-cored induction coils. The MT data were recorded as non-remote referenced single stations.

Table 1 lists the 22 MT station locations as recorded using a GPS during field acquisition. Coordinates are referenced to the 1866 Clarke spheroid and North American 1927 Western United States datum. Longitude and latitude format is degrees, minutes, seconds. Station elevation is given in meters. Universal Transverse Mercator (UTM) Zone 13 Northing and Easting units are in meters. The accuracy of the *x*, *y* component is ±5 m. The accuracy of the *z*

component is ±10 m. The X direction is given in degrees and defines the direction of the measured magnetic (Hx) and electric (Ex) fields.

Table 1. Station Locations

Station	Latitude (d:m:s)	Longitude (d:m:s)	Elevation (m)	Northing (m)	Easting (m)	X dir
1	37:05:06.9	105:14:46.6	3357	4104156	478113	239
2	37:06:24.7	105:52:55.5	2369	4106886	421623	153
3	37:05:54.3	105:50:52.5	2382	4105927	424527	133
4	37:01:16.5	105:29:24.2	2612	4097140	456409	269
5	37:01:16.1	105:27:14.6	2596	4097117	459608	333
6	37:02:24.0	105:24:17.9	2559	4099182	463985	182
7	37:03:01.1	105:33:54.3	2342	4100400	449752	183
8	37:00:35.0	105:45:03.9	2302	4095989	436144	95
9	37:00:36.9	105:39:48.6	2298	4096014	440973	185
10	37:04:39.6	105:47:00.6	2322	4103572	430355	5
11	37:05:17.2	105:48:44.0	2366	4104752	427800	19
12	37:21:59.6	105:29:30.8	2390	4135445	456444	4
13	37:20:42.3	105:31:58.8	2378	4133085	452788	186
14	37:19:39.3	105:36:03.1	2349	4131175	446771	2
15	37:16:14.1	105:40:01.3	2347	4124895	440858	283
16	37:17:39.5	105:28:41.8	2410	4127423	457608	5
17	37:14:32.4	105:37:14.7	2382	4121733	444942	201
18	37:23:47.7	105:40:52.0	2317	4138885	439714	137
19	37:05:05.1	105:28:38.0	2659	4104178	457586	81
20	37:08:30.4	105:28:09.0	2587	4110500	458332	306
21	37:04:59.8	105:34:06.0	2352	4104061	449483	151
22	37:09:20.7	105:37:39.3	2344	4112132	444274	272

Magnetotelluric Data

The recorded time-series data were transformed to the frequency domain and processed to determine the impedance tensor, which is used to derive apparent resistivities and phases at each site. Rotation of the impedance tensor allows for decoupling into the TE and TM modes. The data provided here have not been rotated from the original acquisition (X dir) listed in Table 1. During the analysis and interpretation process, each station will be rotated to a fixed angle determined by the given nominal profile orientation. Cross-power files were sorted to select optimal signal-to-noise time-series data sets (see **Appendix 1**).

The effects of near-surface resistivity anomalies can cause what are known as “static shifts” in the data (Sternberg and others, 1988). Cultural features also can affect the measured magnetotelluric responses. These features include fences, pipelines, communication lines, railways, and other manmade conductors.

The figures in **appendix 1** represent the field-processed MT data for each station, after the time-series data were converted to the frequency domain and the tensor-transfer function was developed.

For each station, nine separate plots are given:

1. Apparent Resistivity (x and o symbols are *xy* and *yx* components)
2. Impedance Phase (x and o symbols are *xy* and *yx* components)
3. Rotation Angle
4. Impedance Skew
5. Multiple Coherency (x and o symbols are *xy* and *yx* components)
6. Impedance Polar Plots
7. Tipper Magnitude
8. Tipper Strike
9. HzHx (x symbol) and HzHy (o symbol) Coherency

Error bars (],[) on the Apparent Resistivity, Impedance Phase, Skew, Tipper Magnitude, and Tipper Strike plots represent probable errors within one standard deviation of the sample variance (Gamble and others, 1979).

Apparent resistivity is the approximate ratio of the electric-field strength to the magnetic-field strength at a given frequency. The impedance phase is proportional to the slope of the apparent resistivity curve on a log-log plot, but from baselines at ±45 degrees (Vozoff, 1991). A measure of the dimensionality for MT data is provided by the impedance skew of the impedance tensor (Vozoff, 1972). If the effective measured resistivity response to the geology beneath a MT station truly is one or two dimensional, then the skew will be zero. Instrumental and environmental sources of electrical noise can cause non–zero skew values. Skew values typically are small (about 0.1) for relatively low-noise recordings. Higher skews (above 0.2) are an indication of either the resistivity response to 3-D geology or higher levels of noise. Manmade electrical noise, such as power lines, power generators, and moving vehicles and trains, can have a negative effect on MT data quality. All of these local disturbances can produce incoherent noise that mainly affects frequencies above 1 Hz. Other manmade electrical noise, such as direct-current electric trains and active cathodic protection of pipelines, produces coherent electromagnetic signals that mainly affect frequencies below 1 Hz.

In the survey area, noise from small power lines and small moving vehicles was negligible at distances greater than 0.4 km from the noise source. Power-line signal levels were measured at each site and were typically less than 20 percent of the maximum recordable signals. Noise from larger power lines, power generators, pipelines, and trains was negligible at distances greater than 5 km. Local lightning, wind, and rainstorms may also degrade data quality. Burying the magnetic induction coils and the electric dipole wires minimized wind noise.

Predicted values of the electric field can be computed from the measured values of the magnetic field (Vozoff, 1991). The coherence of the predicted electric field with the measured electric field is a measure of the signal-to-noise ratio provided in the multiple coherency plots. Values are normalized between 0 and 1; values at 0.5 signify signal levels equal to noise levels. For this data set, coherencies were generally at an acceptable level, except at times in the frequency ranges of about 0.1 to 5 Hz (traditionally referred to as the “dead band”).

The field-processed MT data include some scatter and poor signal-to-noise ratios. Spectral results were inspected visually for noisy data, and the best signal-to-noise field data were combined into the final plots.

The magnetotelluric impedance polar plots provide a measure of MT data dimensionality (Reddy and others, 1977). For 1-D resistivity structures, the principal impedance polar diagram (dashed line) is a circle. For 2-D or 3-D resistivity structures, the principal impedance polar

diagram (dashed line) elongates either parallel or perpendicular to strike direction. Over resistors, the principal impedance polar diagram elongates perpendicular to strike direction, and over conductors, it elongates parallel to strike direction. For 2-D resistivity structures, the additional impedance polar diagram (solid line) attains the shape of a symmetric clover leaf. For 3-D resistivity structures, the additional impedance polar diagram (solid line) elongates in one direction, and its amplitude is comparable to that of the principal impedance polar diagram (dashed line).

The magnetotelluric "tipper" is calculated from the vertical component of the magnetic field. The tipper magnitude is a measure of the "tipping" of the magnetic field out of the horizontal plane (Vozoff, 1991). It will equal zero for the 1-D case. Typically, tipper value increases from 0.1 to 0.5 and seldom approaches 1, as it responds primarily to vertical and subvertical structures. The tipper strike is used to help resolve the 90-degree ambiguity in the impedance rotation angle. The HzHx and HzHy coherency is a measure of the signal-to-noise ratio of the vertical magnetic field with respect to each of the orthogonal, horizontal magnetic-field directions. Values are normalized between 0 and 1; values at 0.5 signify signal levels equal to noise levels. These three-component magnetic-field coherencies provide a check on the signal-to-noise ratio of the measured values in the tipper magnitude and tipper strike plots.

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Appendix 1 Magnetotelluric Data Plots

There are nine separate plots for each station:

1. Apparent Resistivity for the x-y direction (x symbol) and y-x direction (o symbol) modes
2. Impedance Phase for the x-y direction (x symbol) and y-x direction (o symbol) modes
3. Rotation Angle for the impedance tensor (corresponds to the x-y direction)
4. Impedance Skew for the impedance tensor
5. Multiple Coherency for the x-y direction (x symbol) and y-x direction (o symbol) modes of the electric field
6. Impedance Polar Plots (at 12 selected frequencies)
7. Tipper Magnitude for the vertical magnetic field
8. Tipper Strike for the vertical magnetic field
9. HzHx (x symbol) and HzHy (o symbol) Coherency

Refer to the "**Magnetotelluric Data**" section in this report for an explanation of these plots.

Station 1

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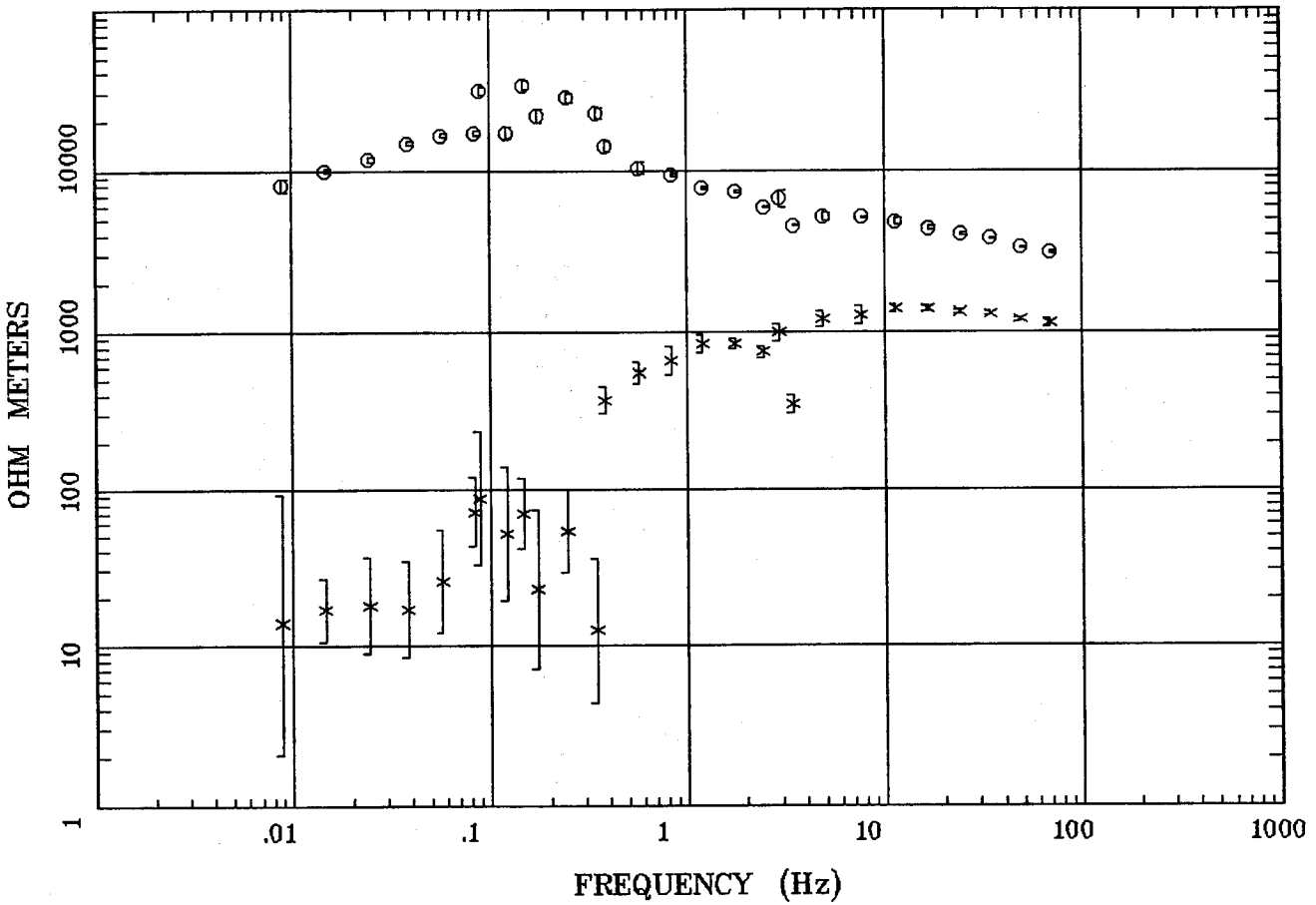

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Station 1

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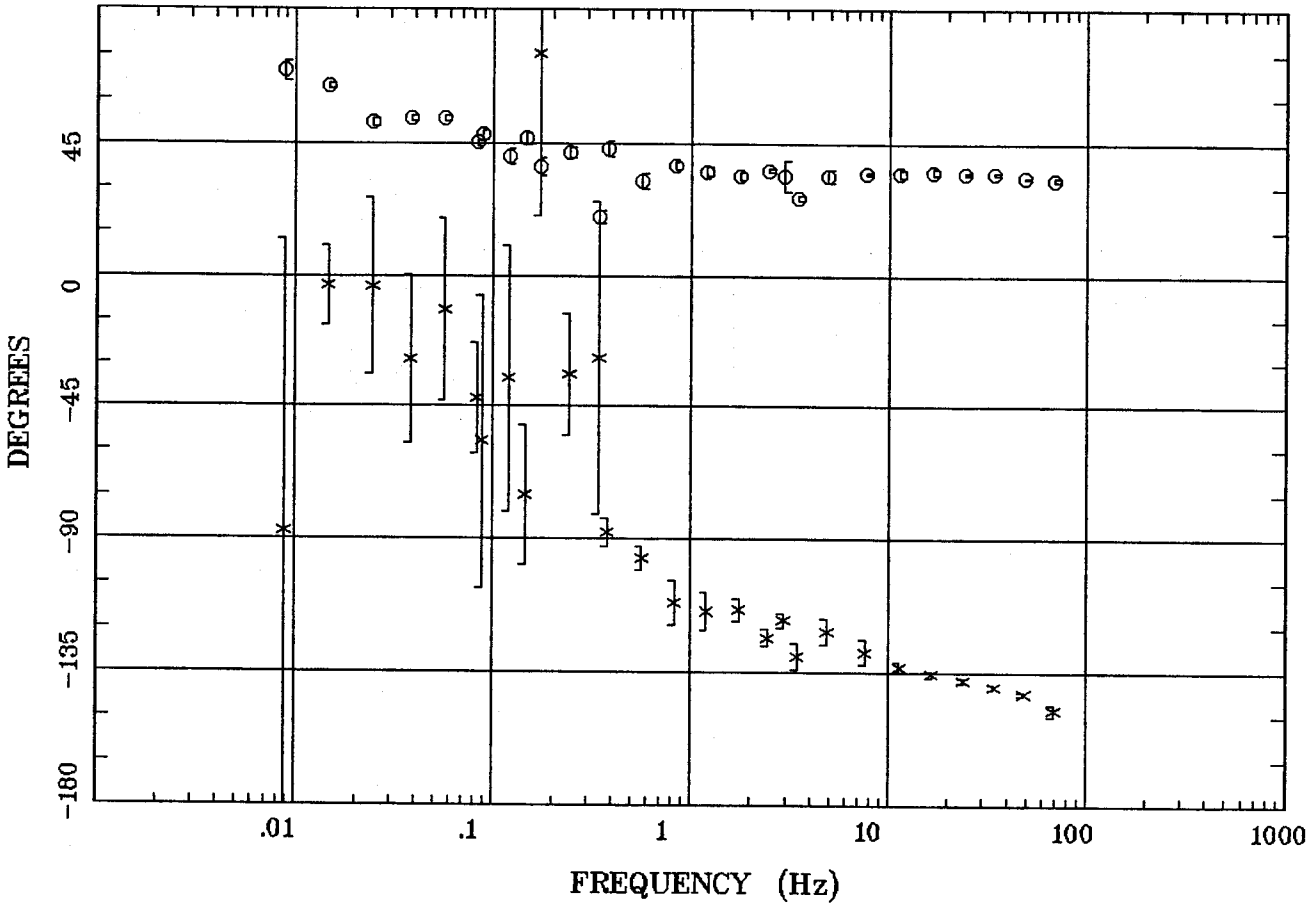
Alamosa Quad, 100k



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ROTATION ANGLE

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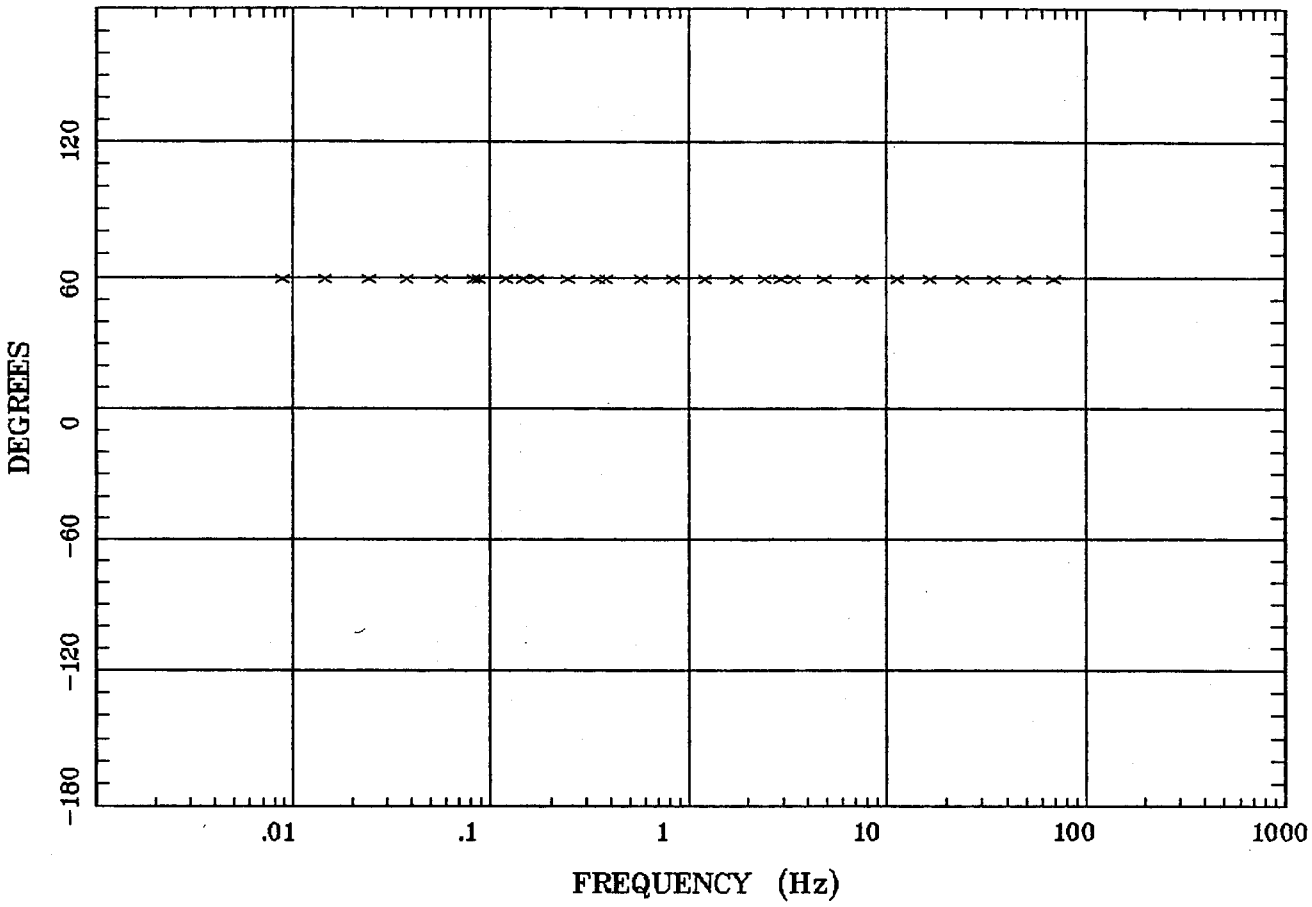

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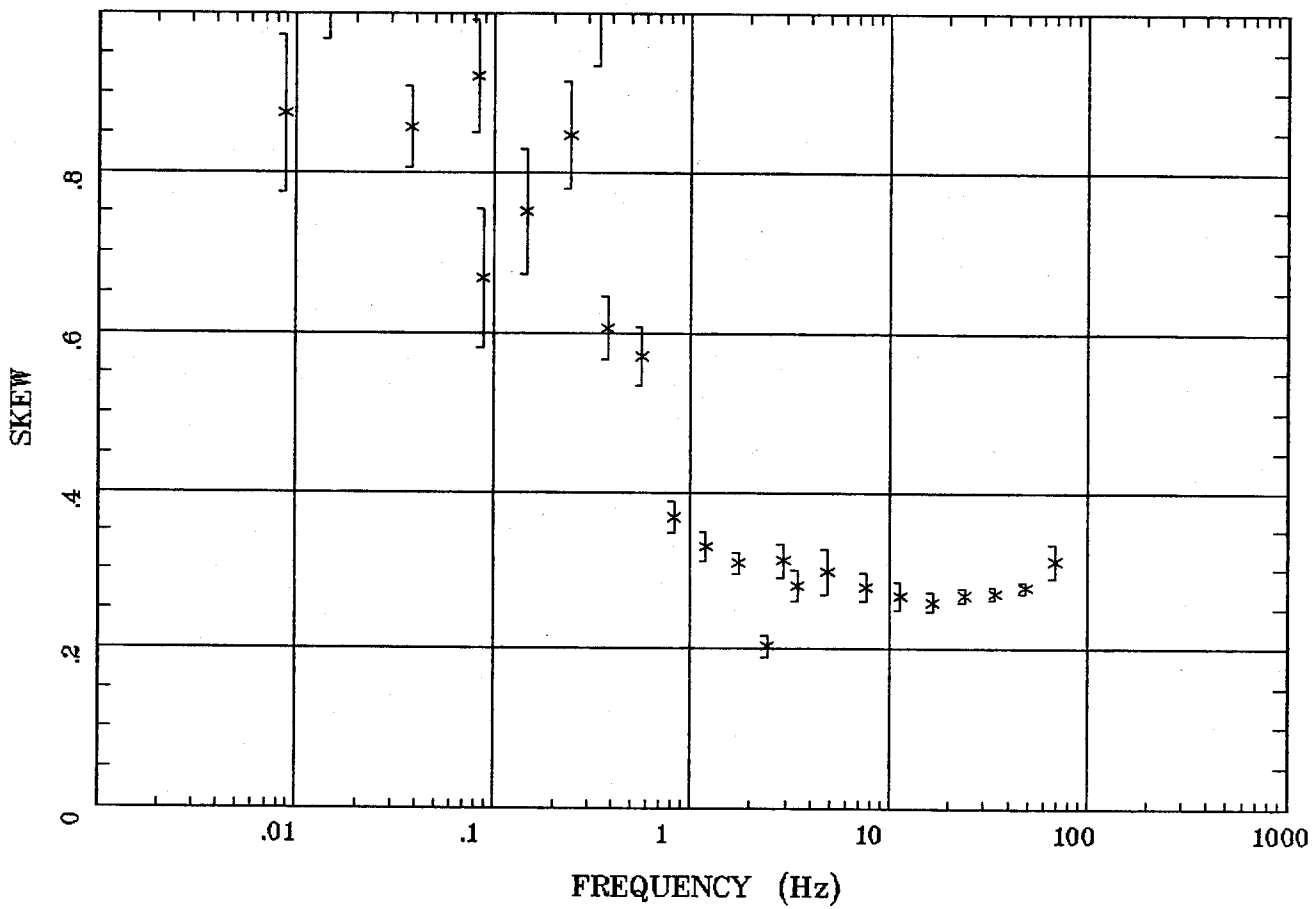

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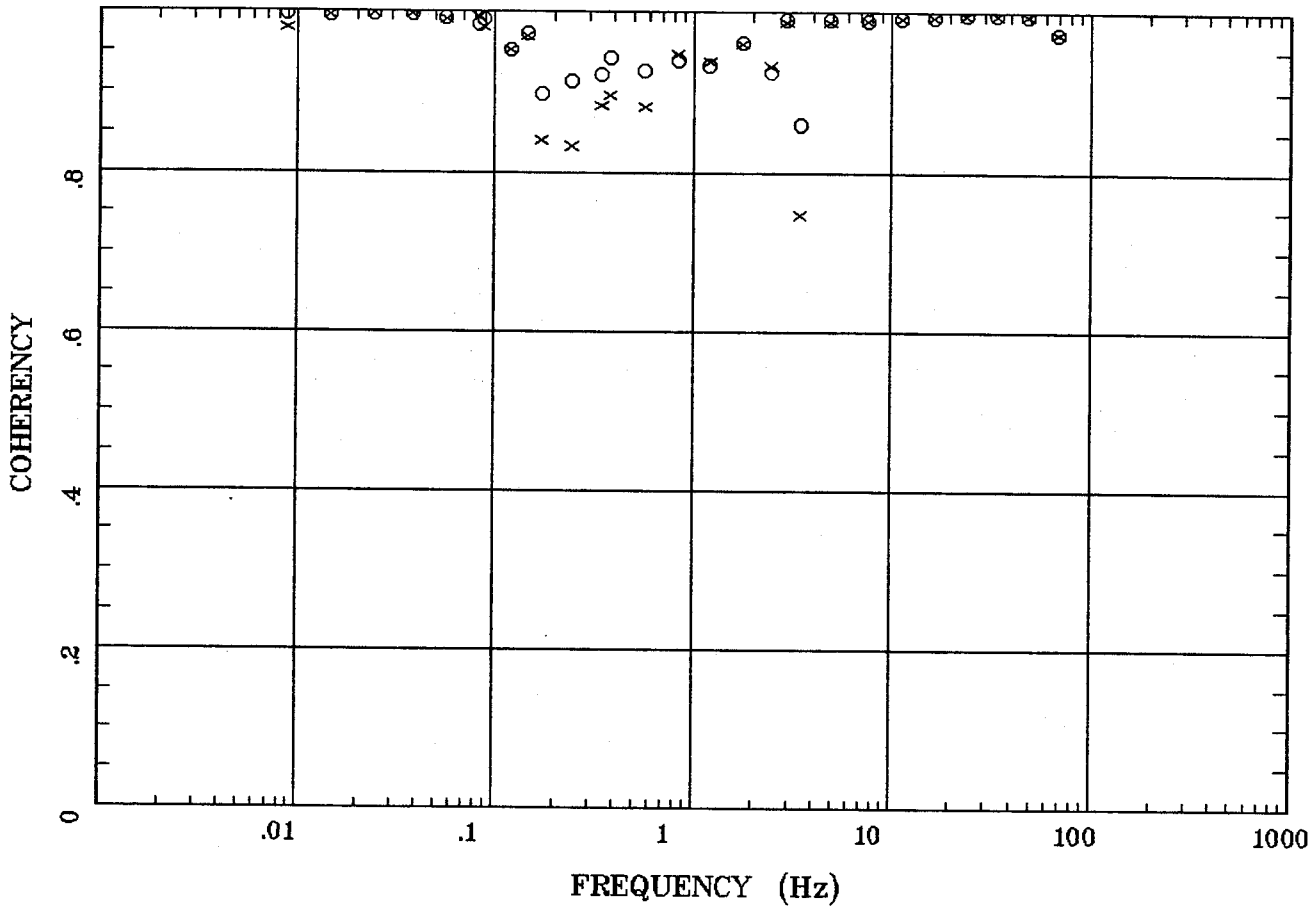
E MULT Coh.

Alamosa Quad, 100k



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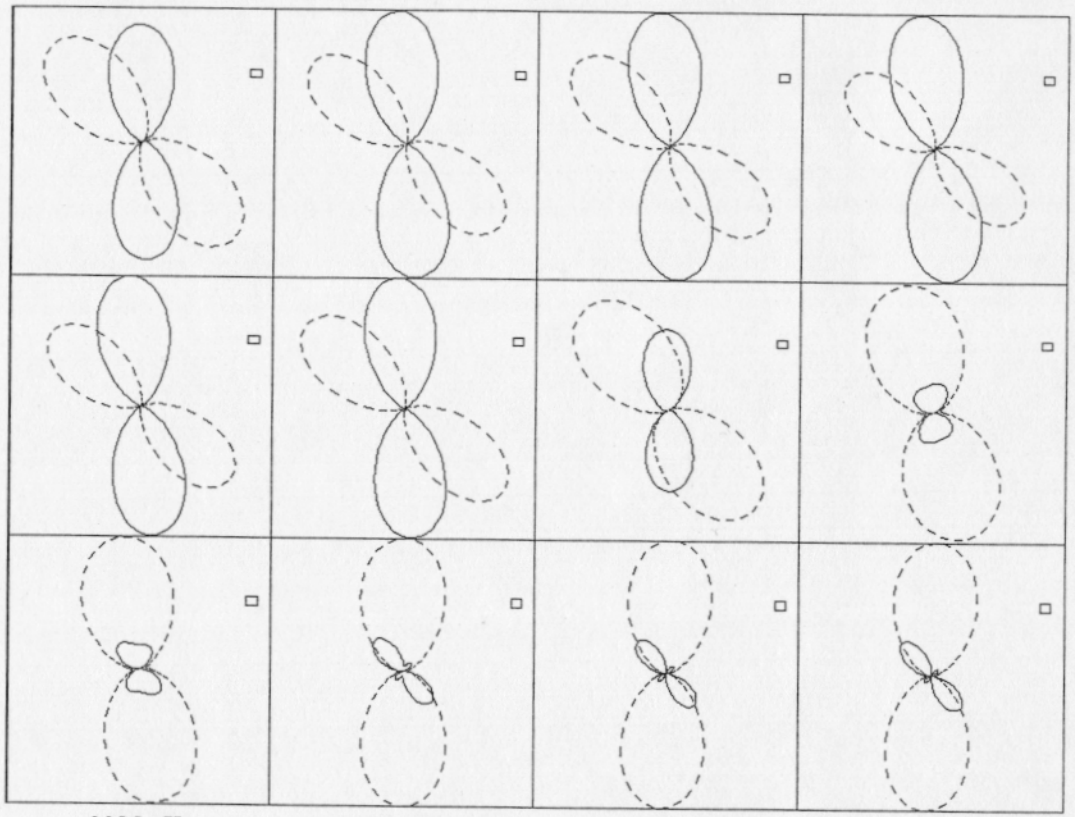
POLAR PLOTS

Alamosa Quad, 100k



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.172 Hz	.345 Hz	.566 Hz	1.758 Hz
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Station 1

TIPPER MAGNITUDE

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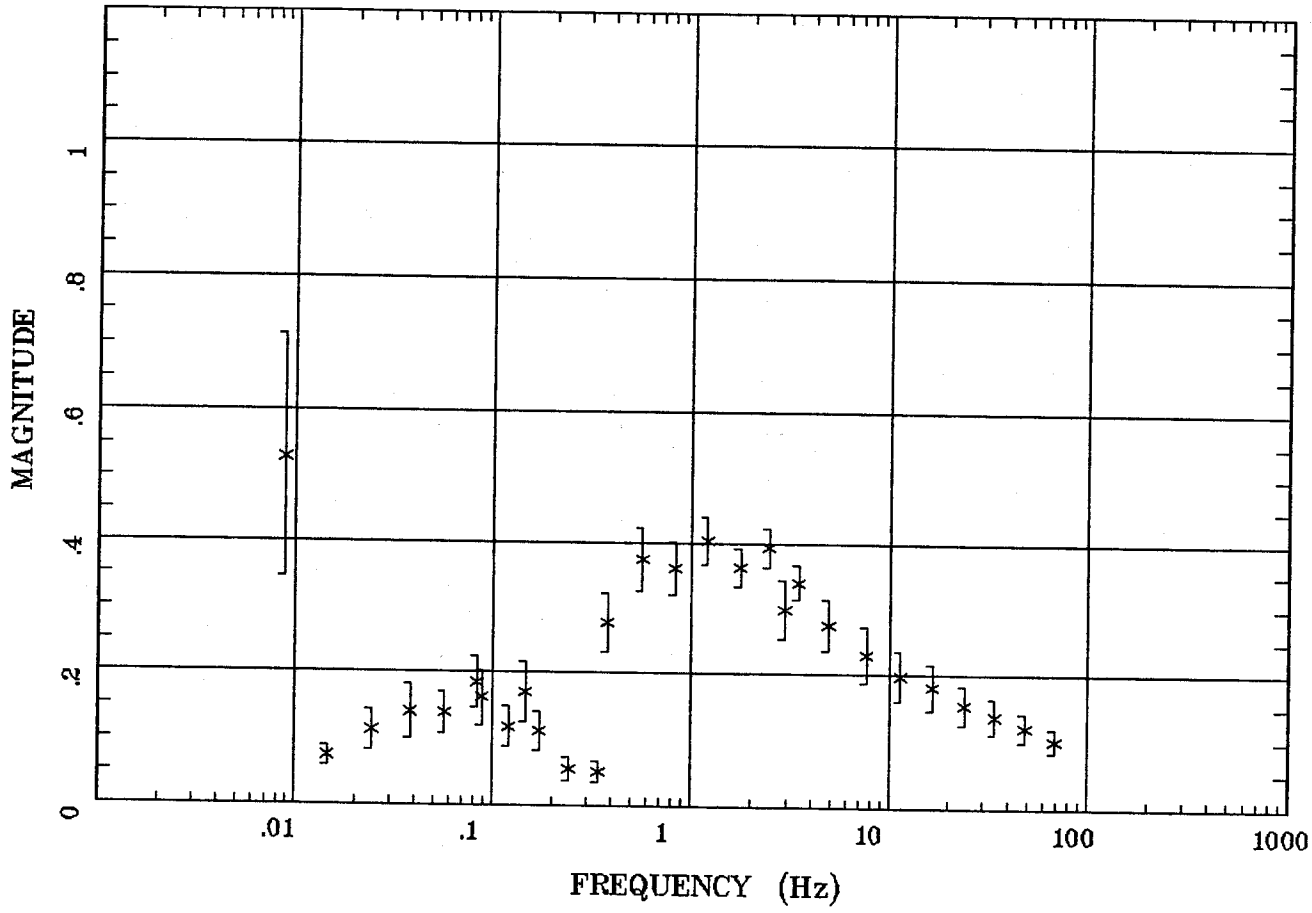

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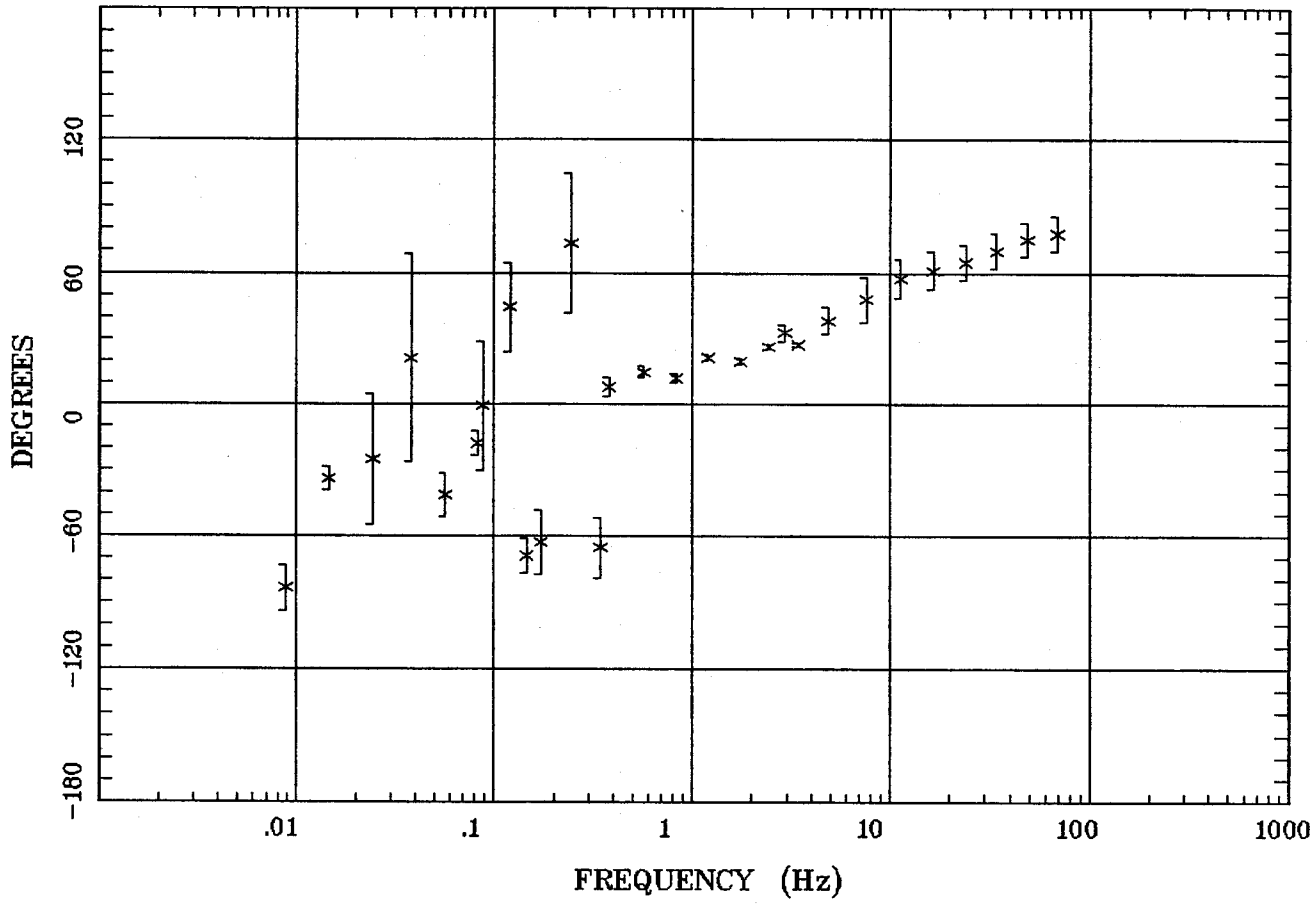
TIPPER STRIKE

Alamosa Quad, 100k



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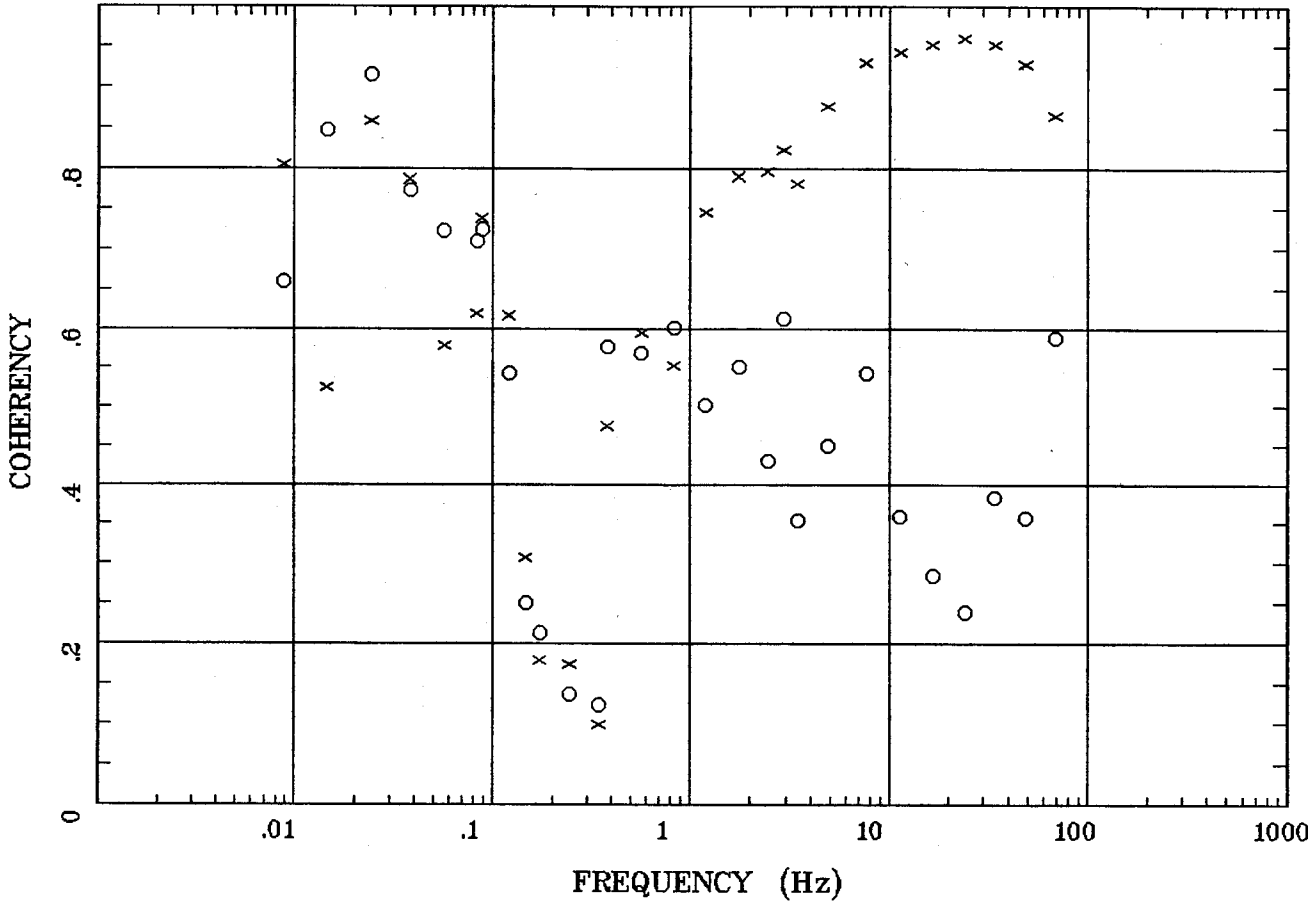
HzHx.x Coh HzHy.o

Alamosa Quad, 100k



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Station 2

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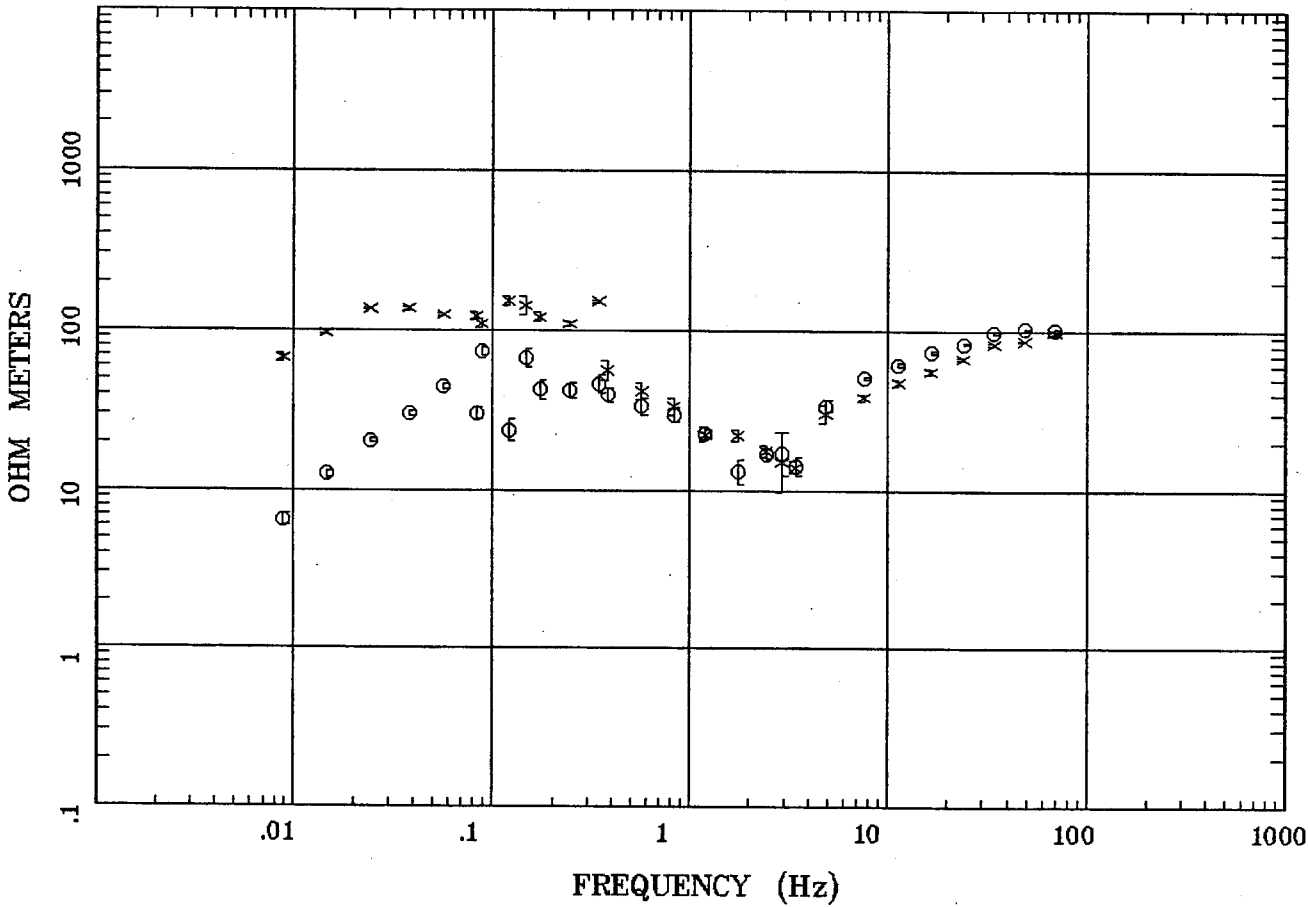

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Station 2

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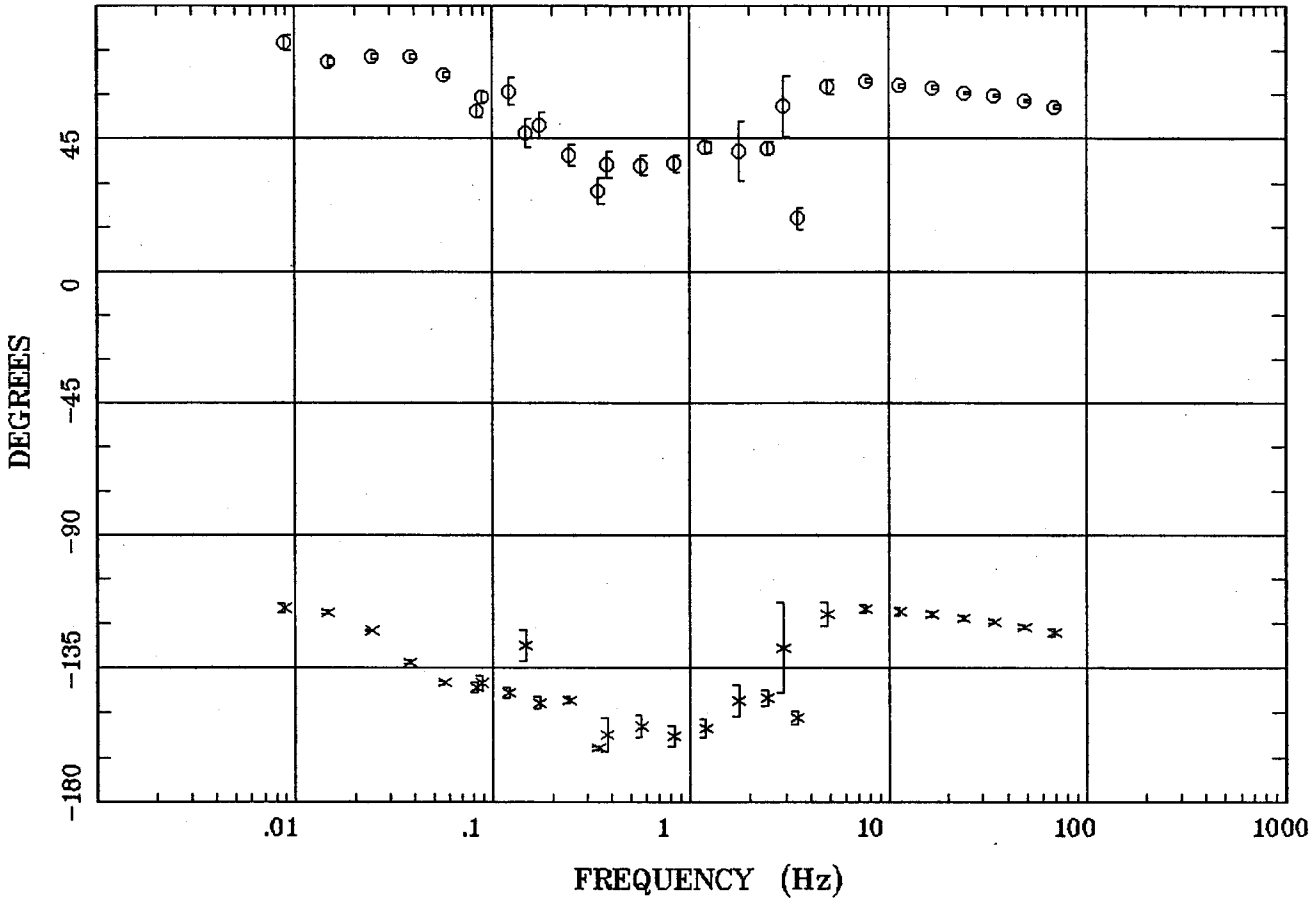

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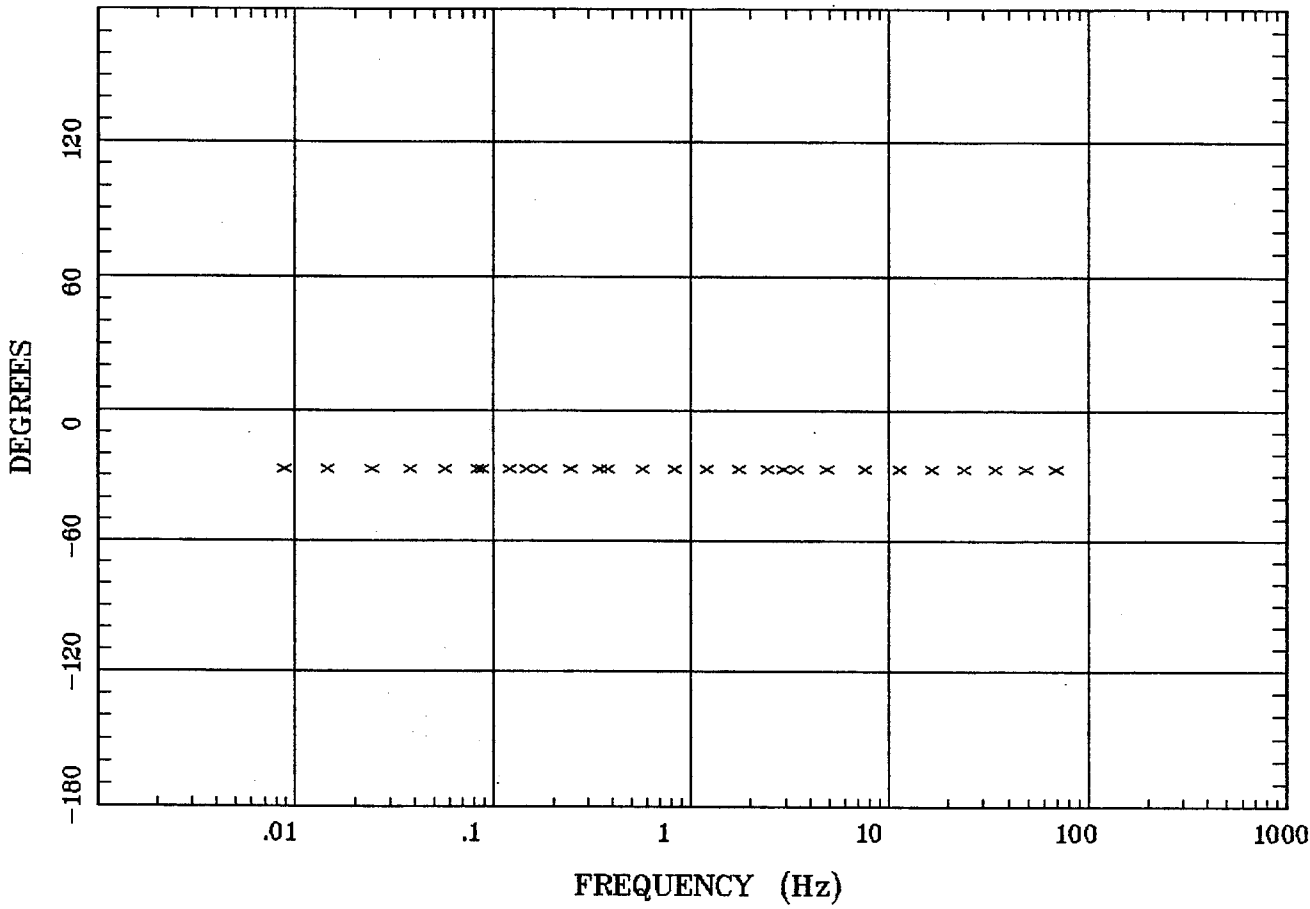

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Station 2

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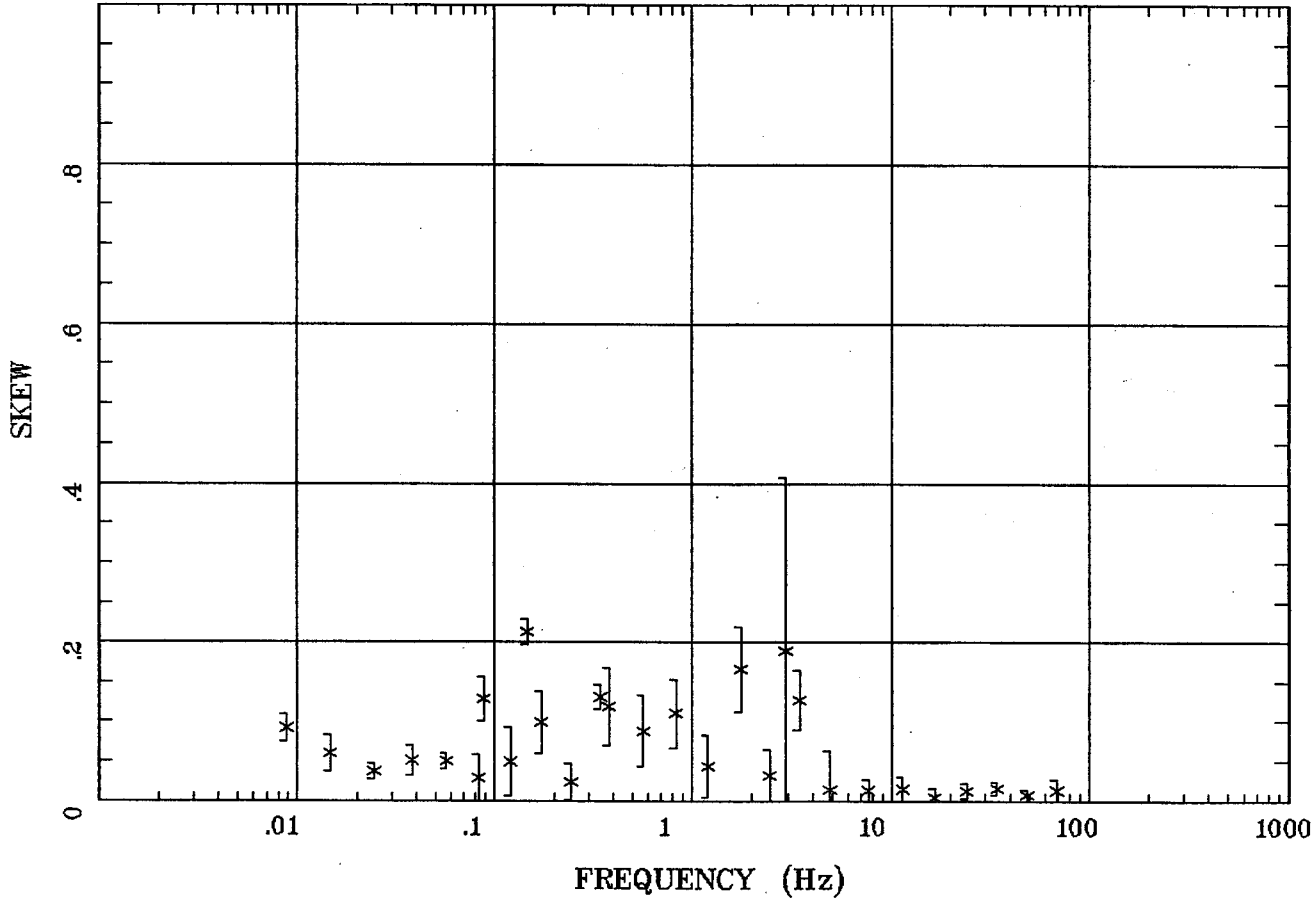

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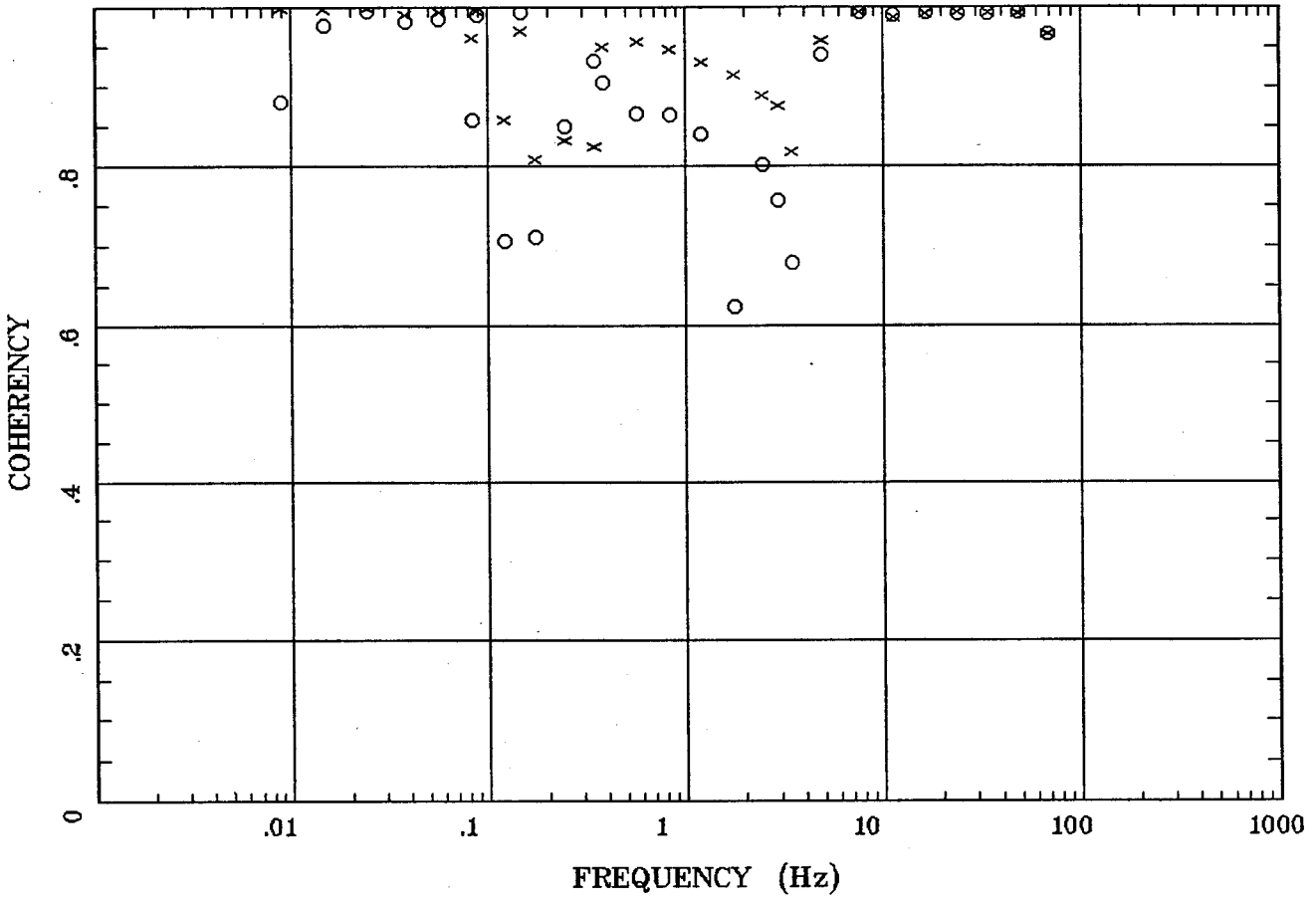
Station 2

E MULT Coh. Alamosa Quad, 100k

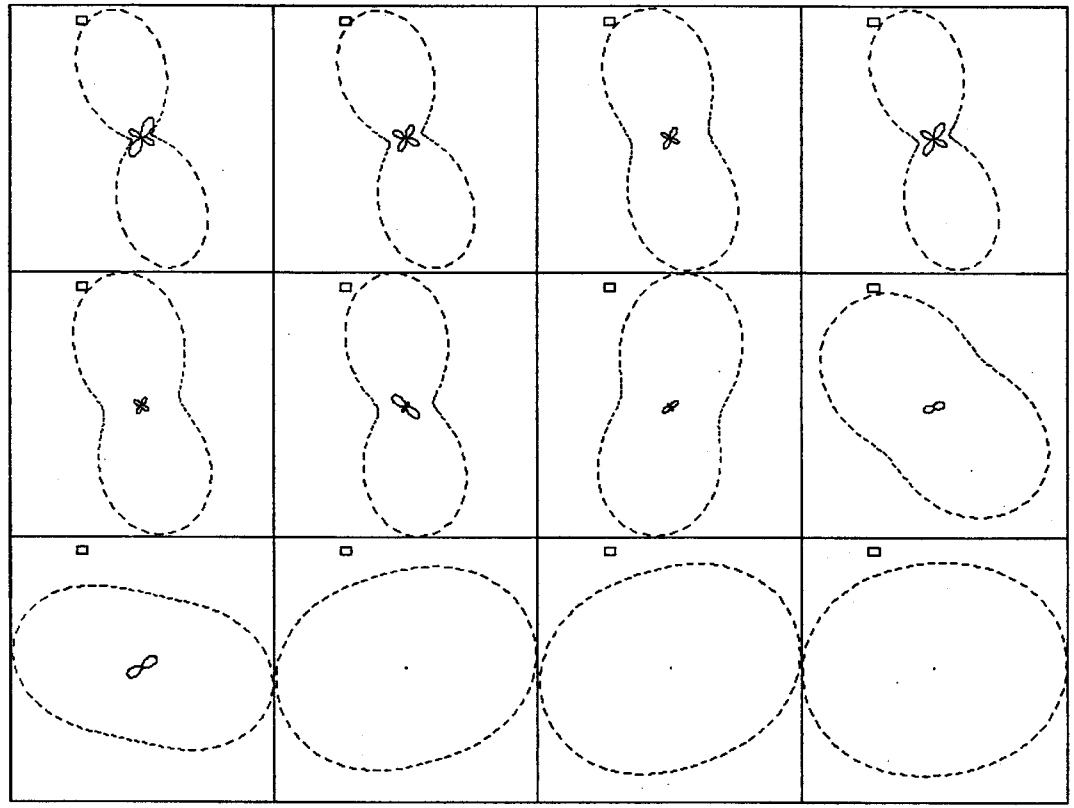


Client:
Remote: none
Acquired: 10:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl02m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:24 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k



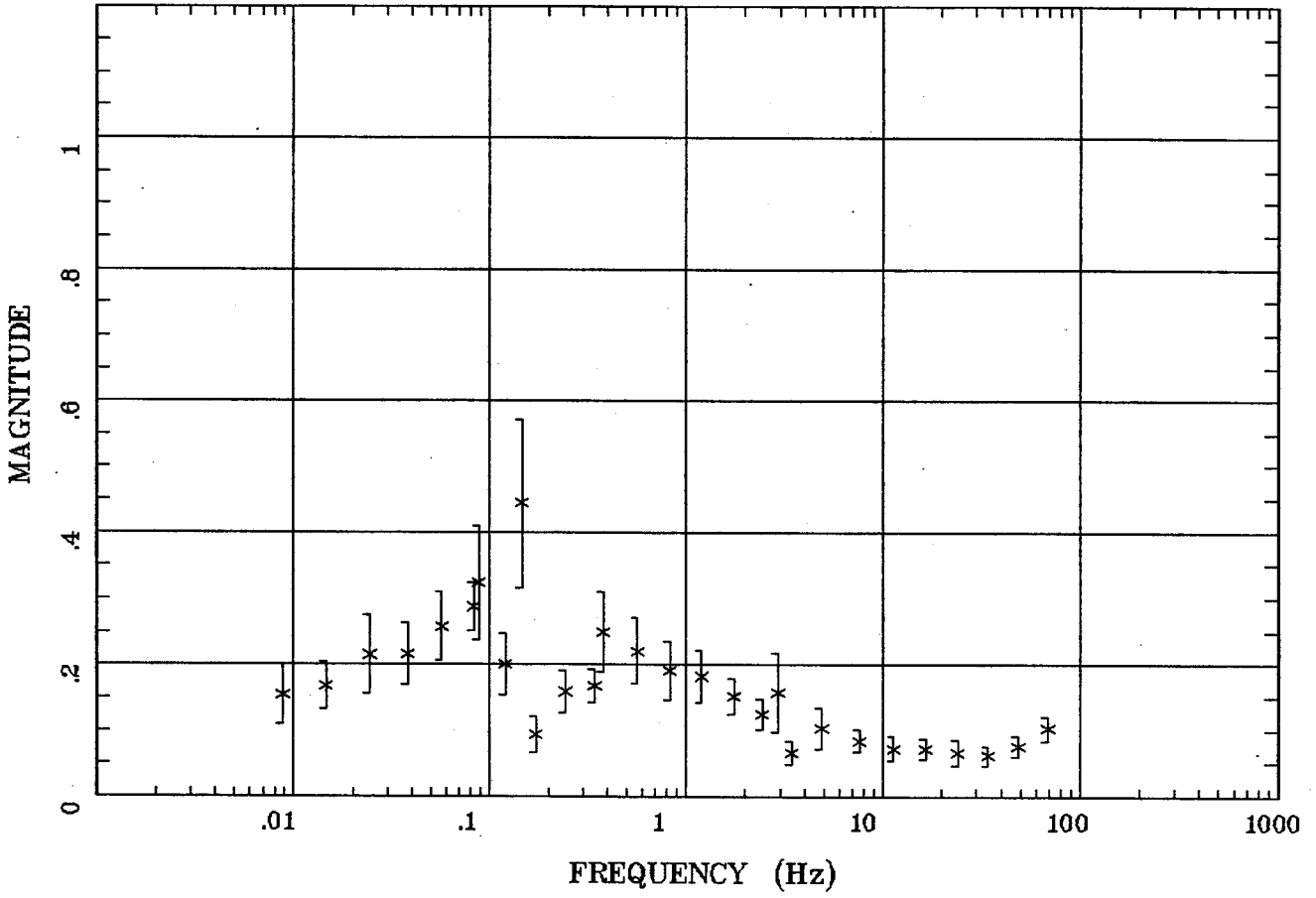
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 10:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl02m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:24 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 2

TIPPER MAGNITUDE Alamosa Quad, 100k



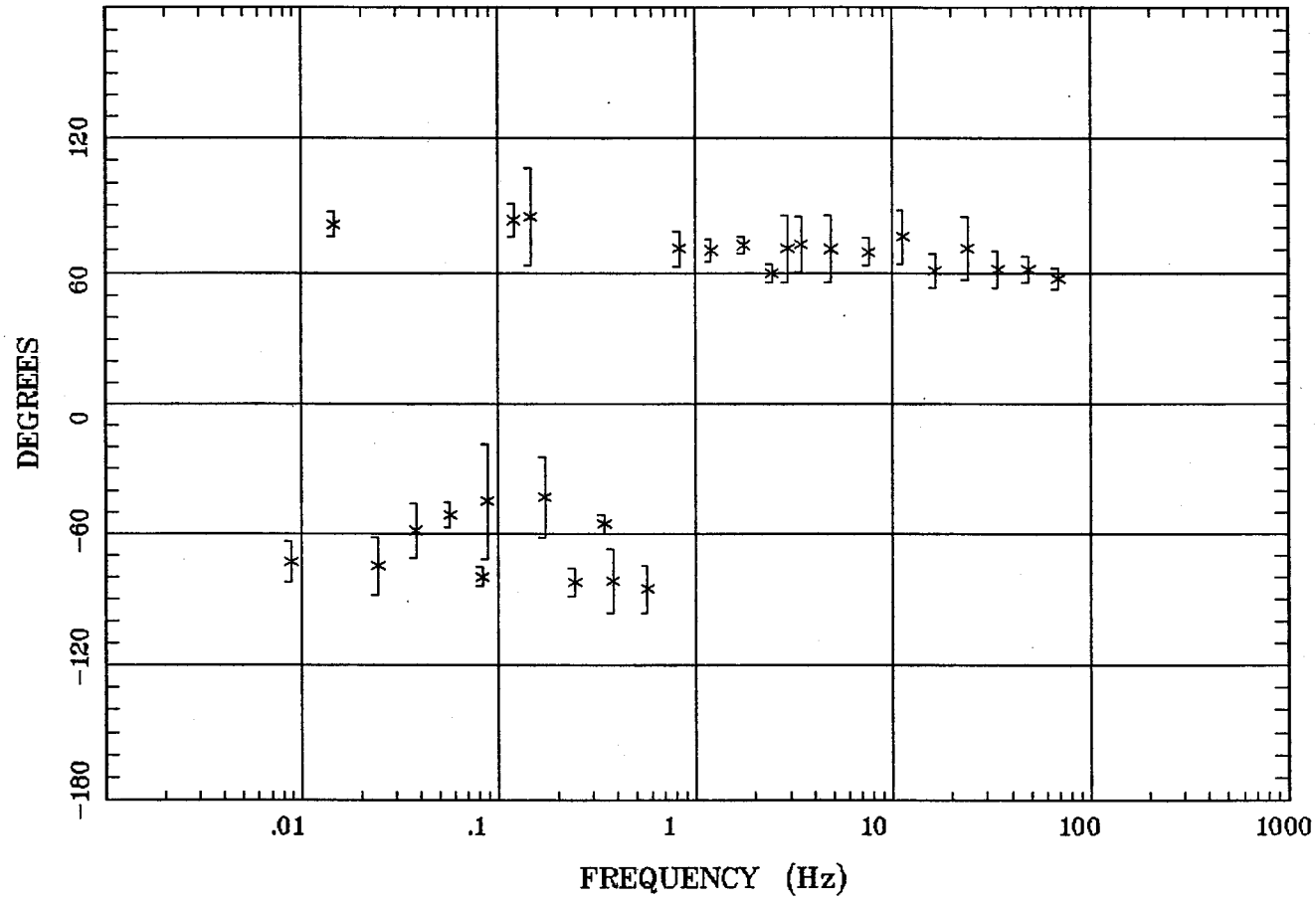
Client:
Remote: none
Acquired: 10:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl02m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:24 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 2

TIPPER STRIKE

Alamosa Quad, 100k

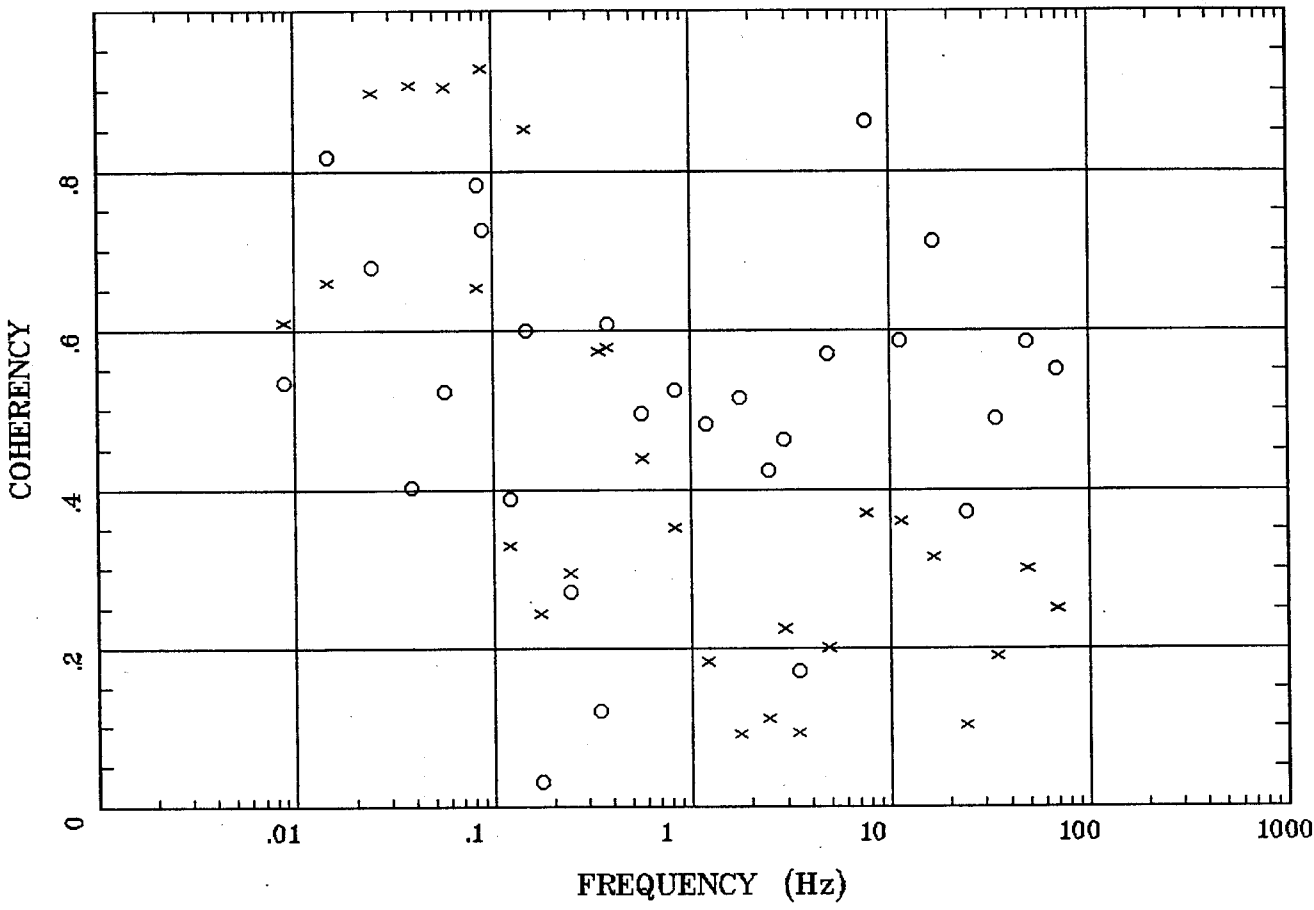


Client:
Remote: none
Acquired: 10:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl02m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:24 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

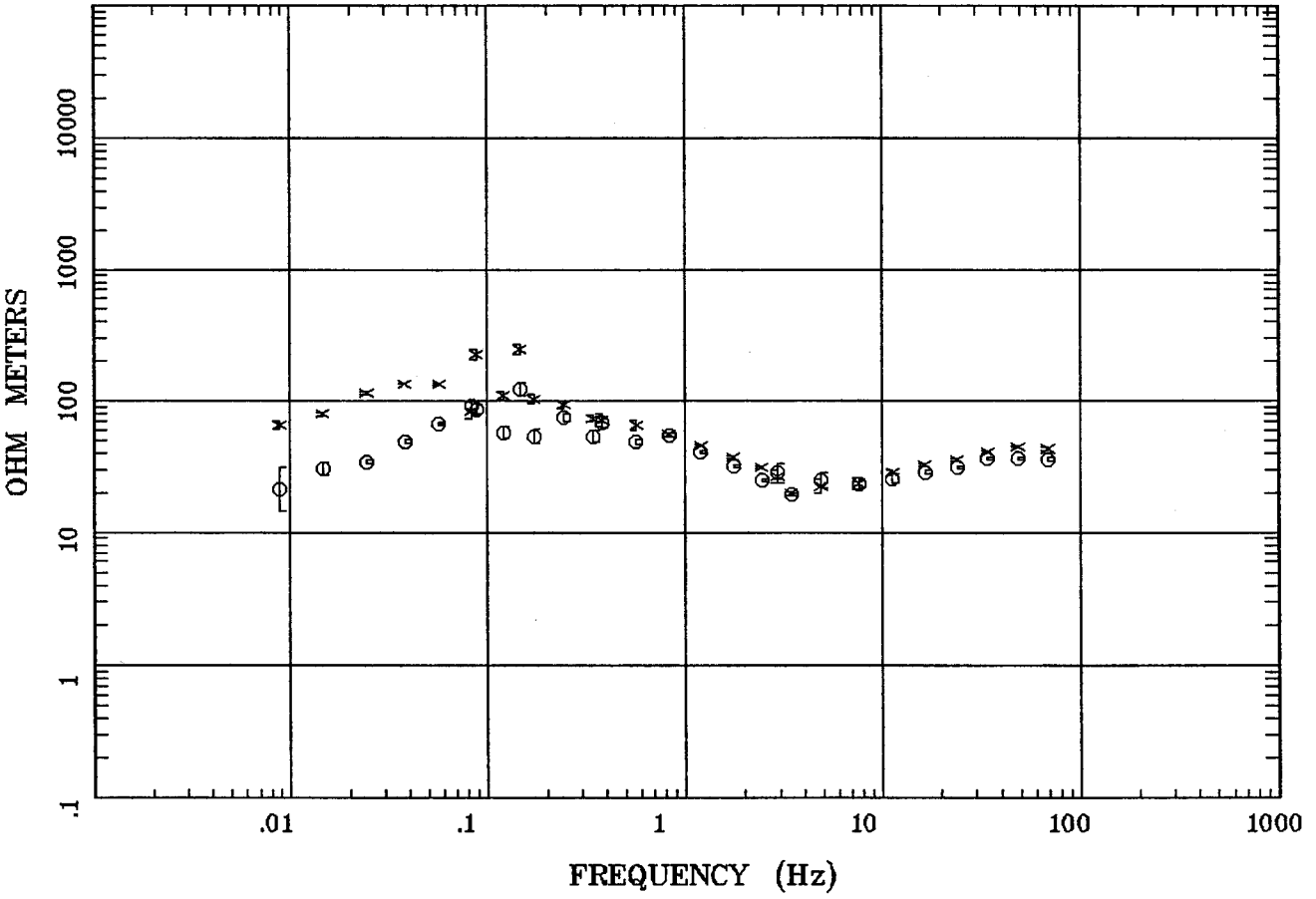


Client:
Remote: none
Acquired: 10:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl02m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:24 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 3

APPARENT RESISTIVITY Alamosa Quad, 100k

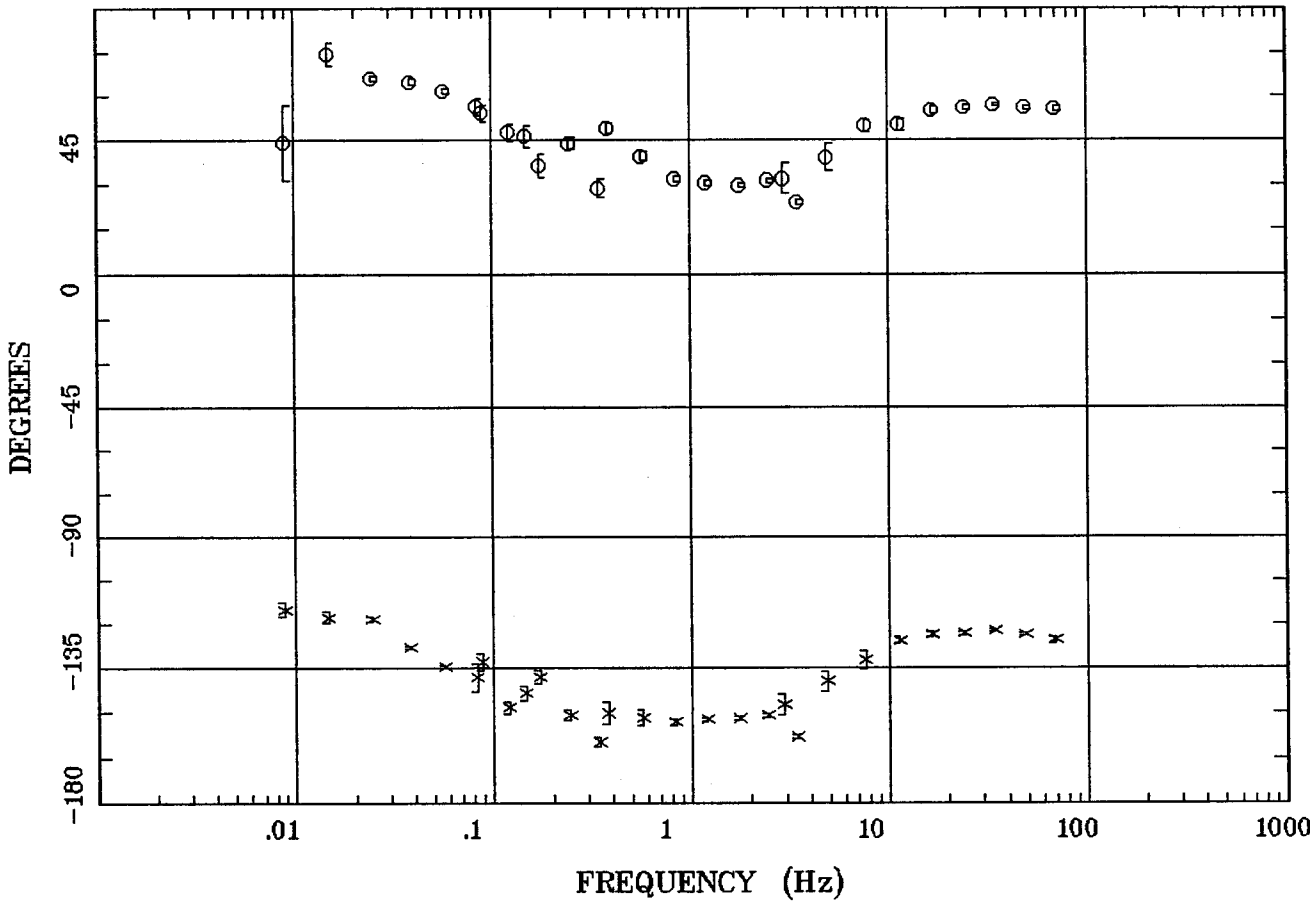


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

IMPEDANCE PHASE

Alamosa Quad, 100k

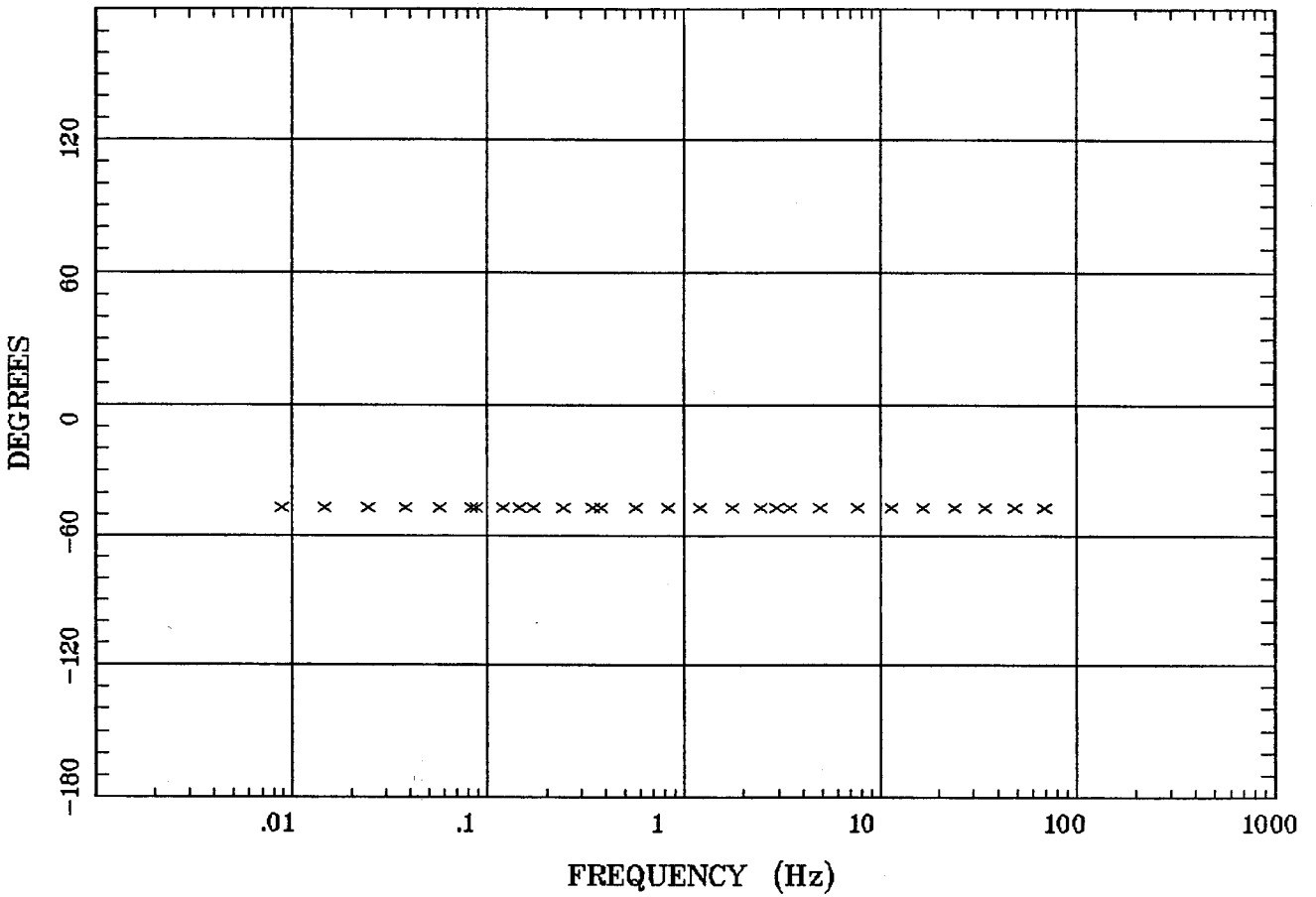


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

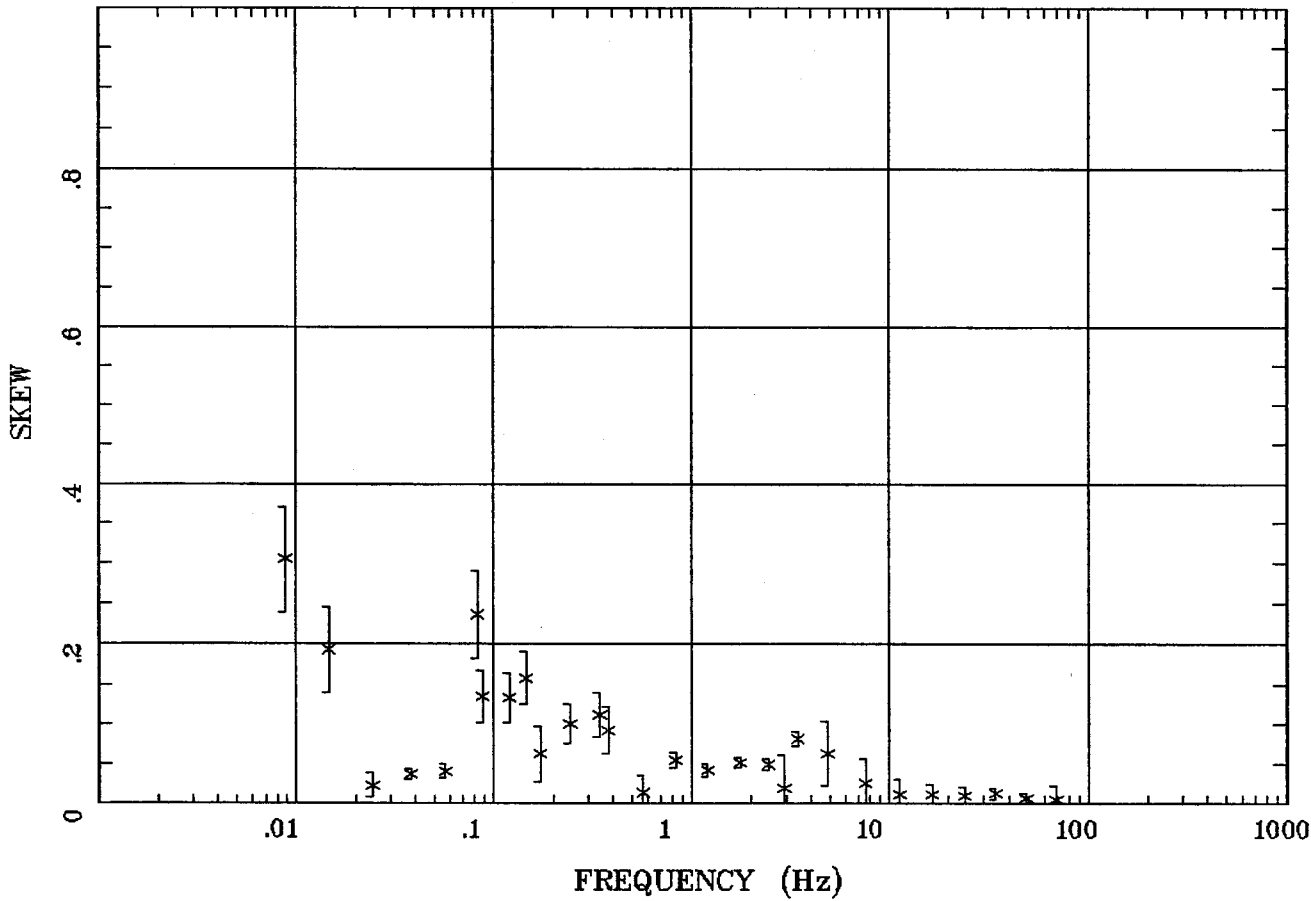


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 11:08 Sep 24, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

Alamosa Quad, 100k

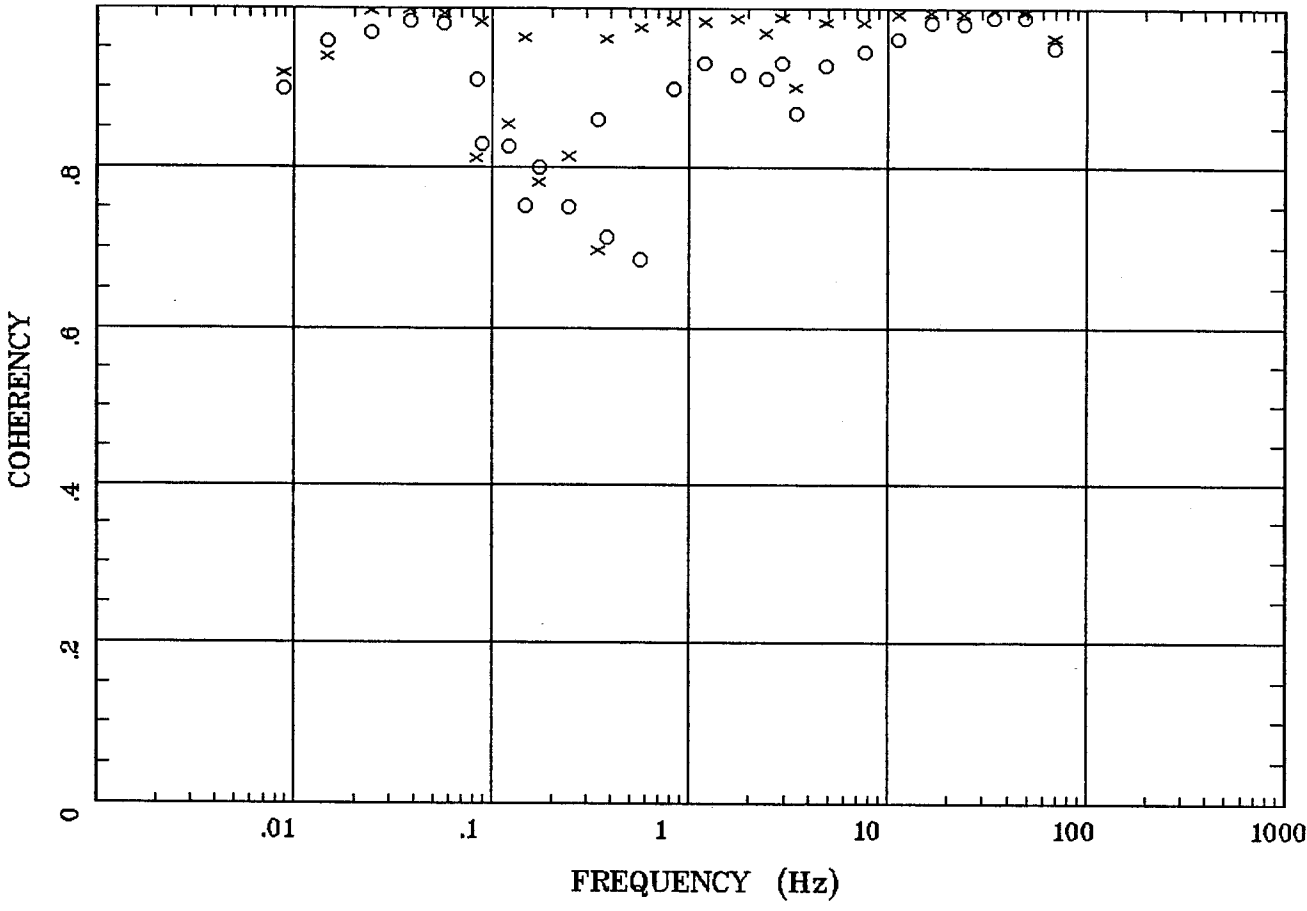


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

E MULT Coh.

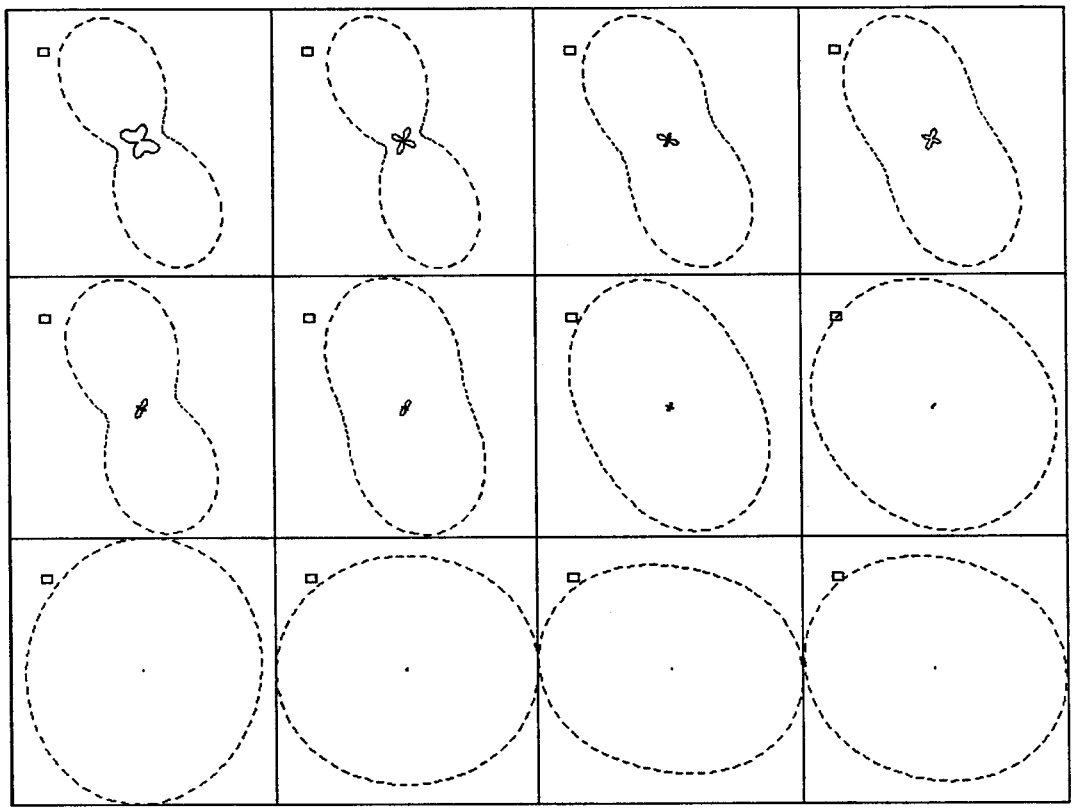
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k



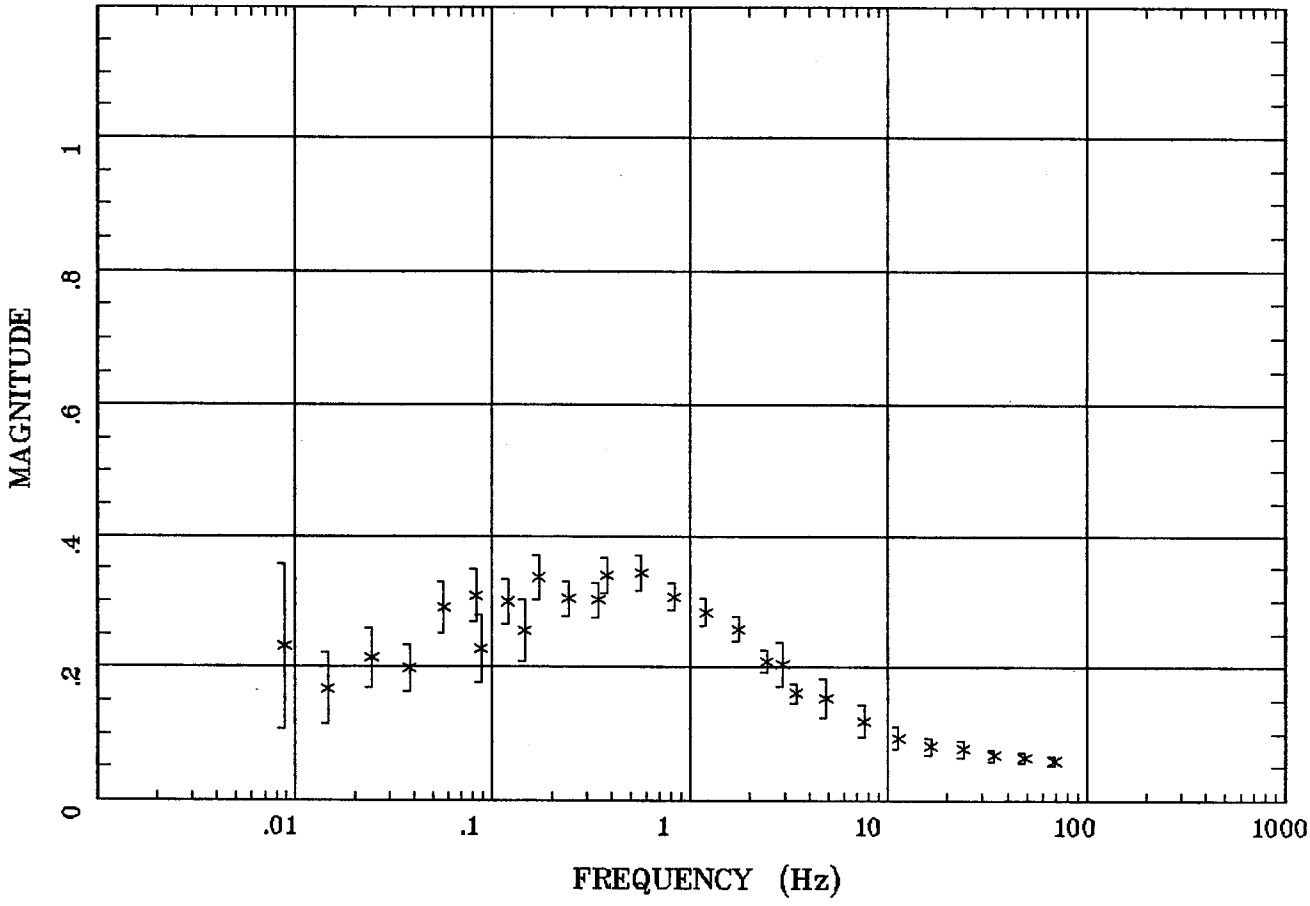
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE

Alamosa Quad, 100k

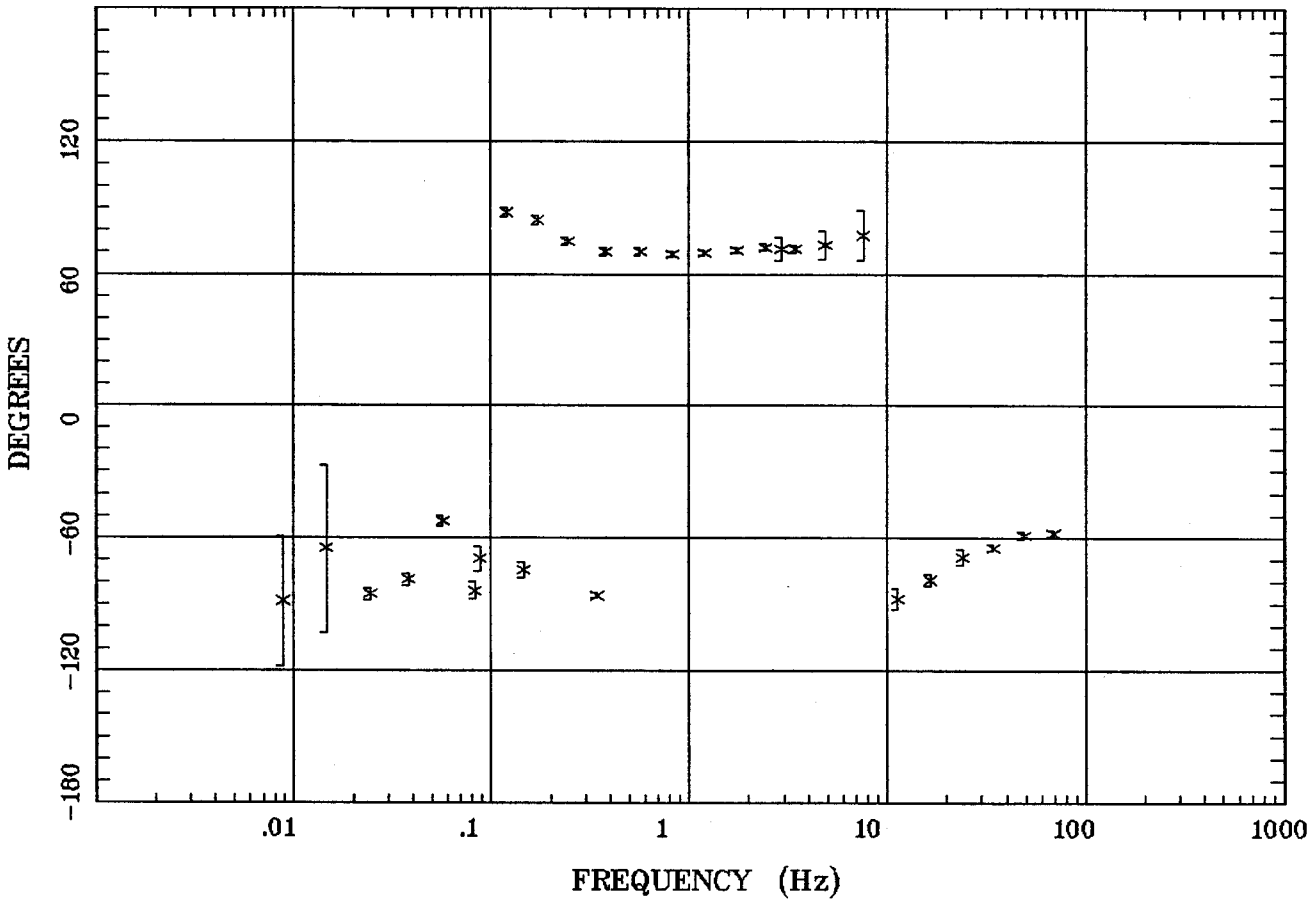


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

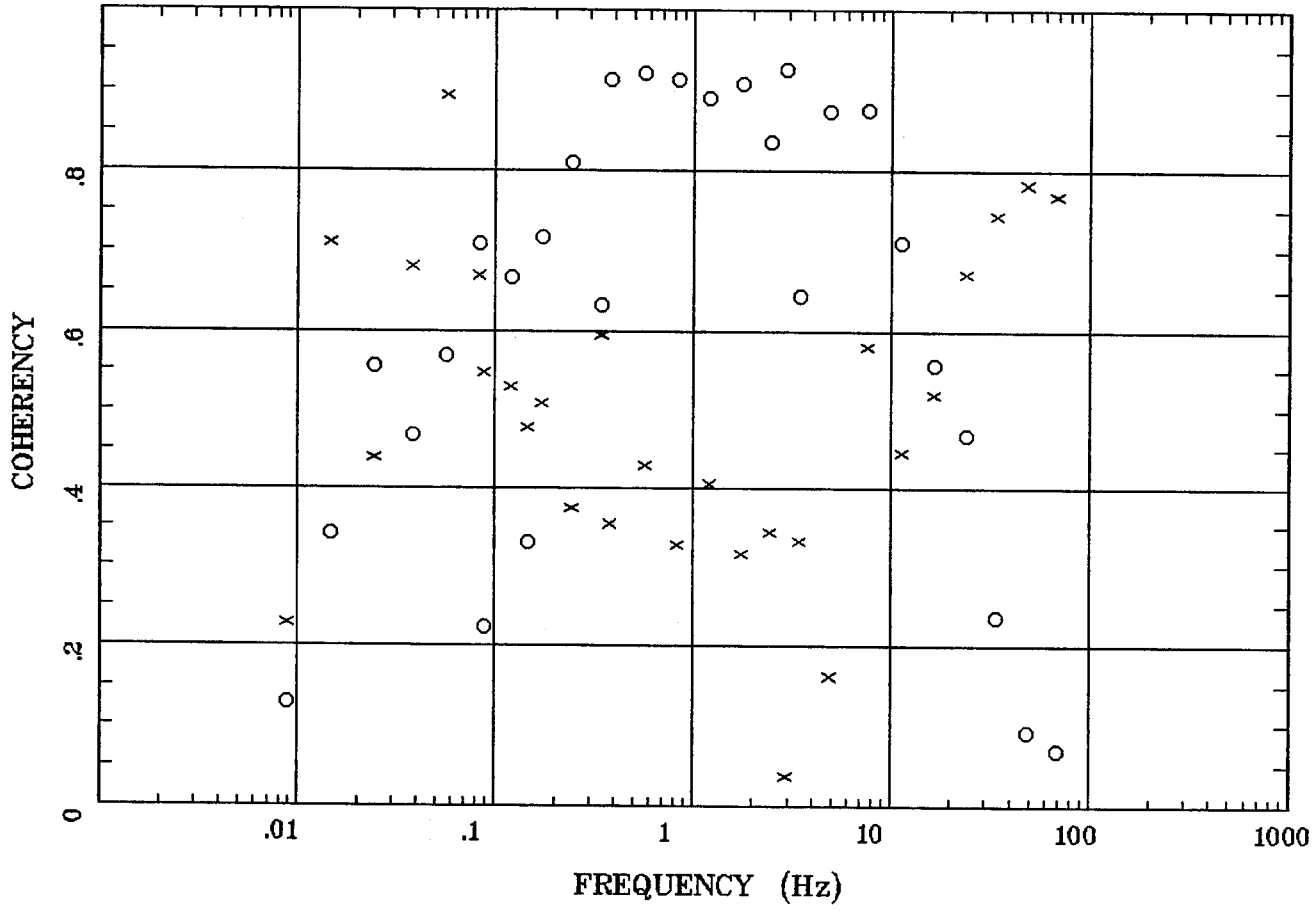


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

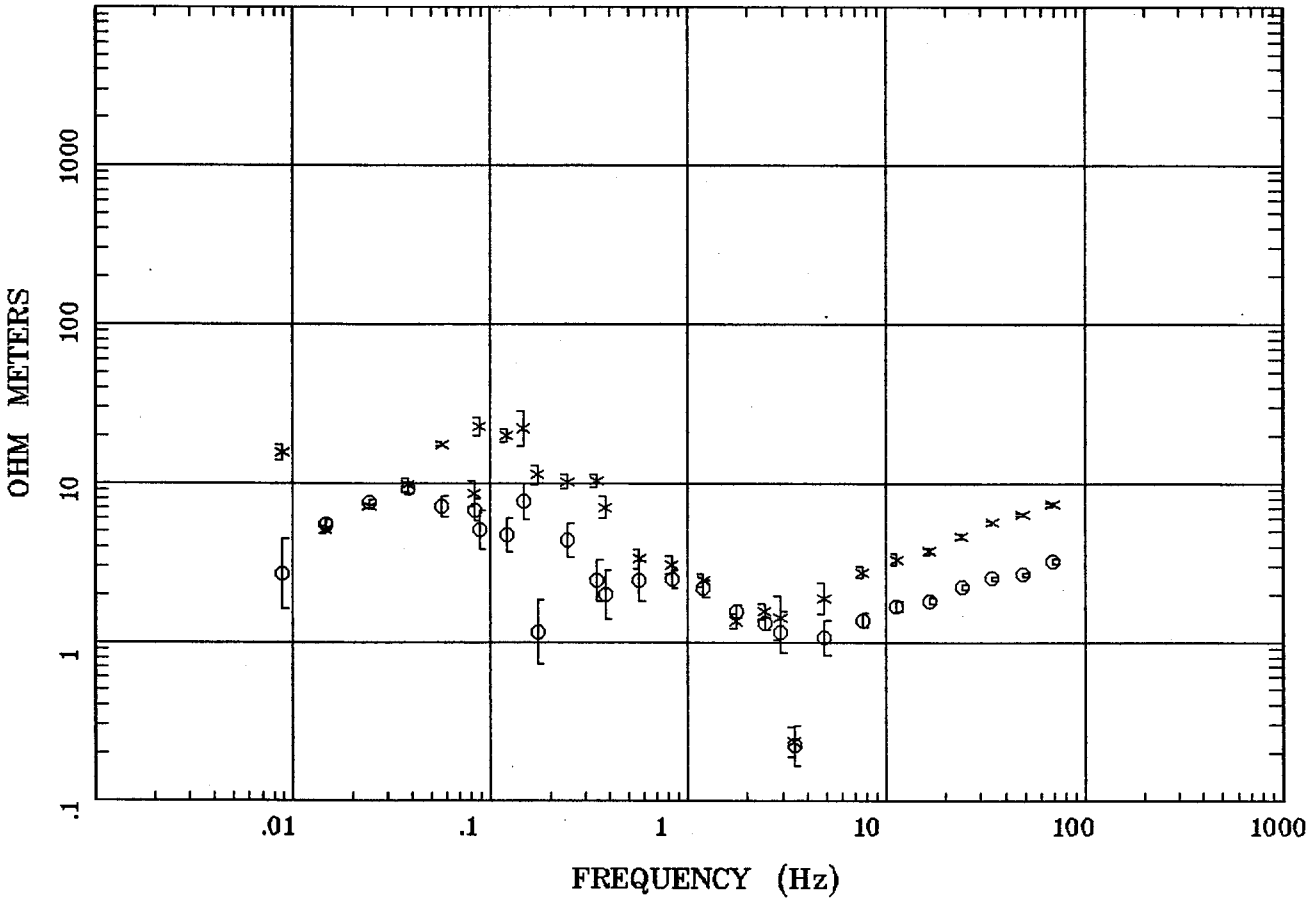


Client:
Remote: none
Acquired: 15:0 Aug 01, 2006
Survey Co:USGS

Rotation:
Filename: sl03m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

Station 4

APPARENT RESISTIVITY Alamosa Quad, 100k



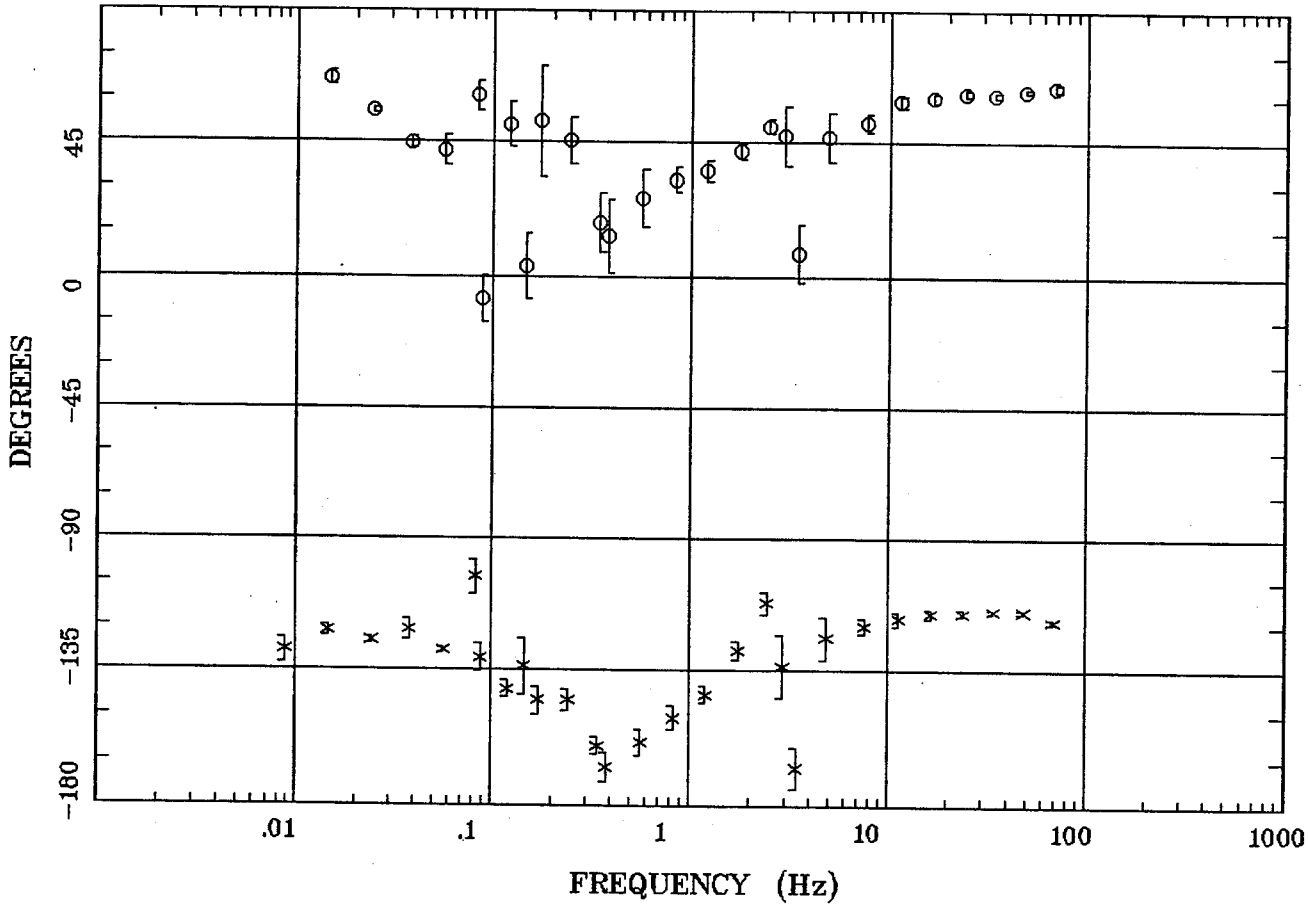
Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 4

IMPEDANCE PHASE

Alamosa Quad, 100k



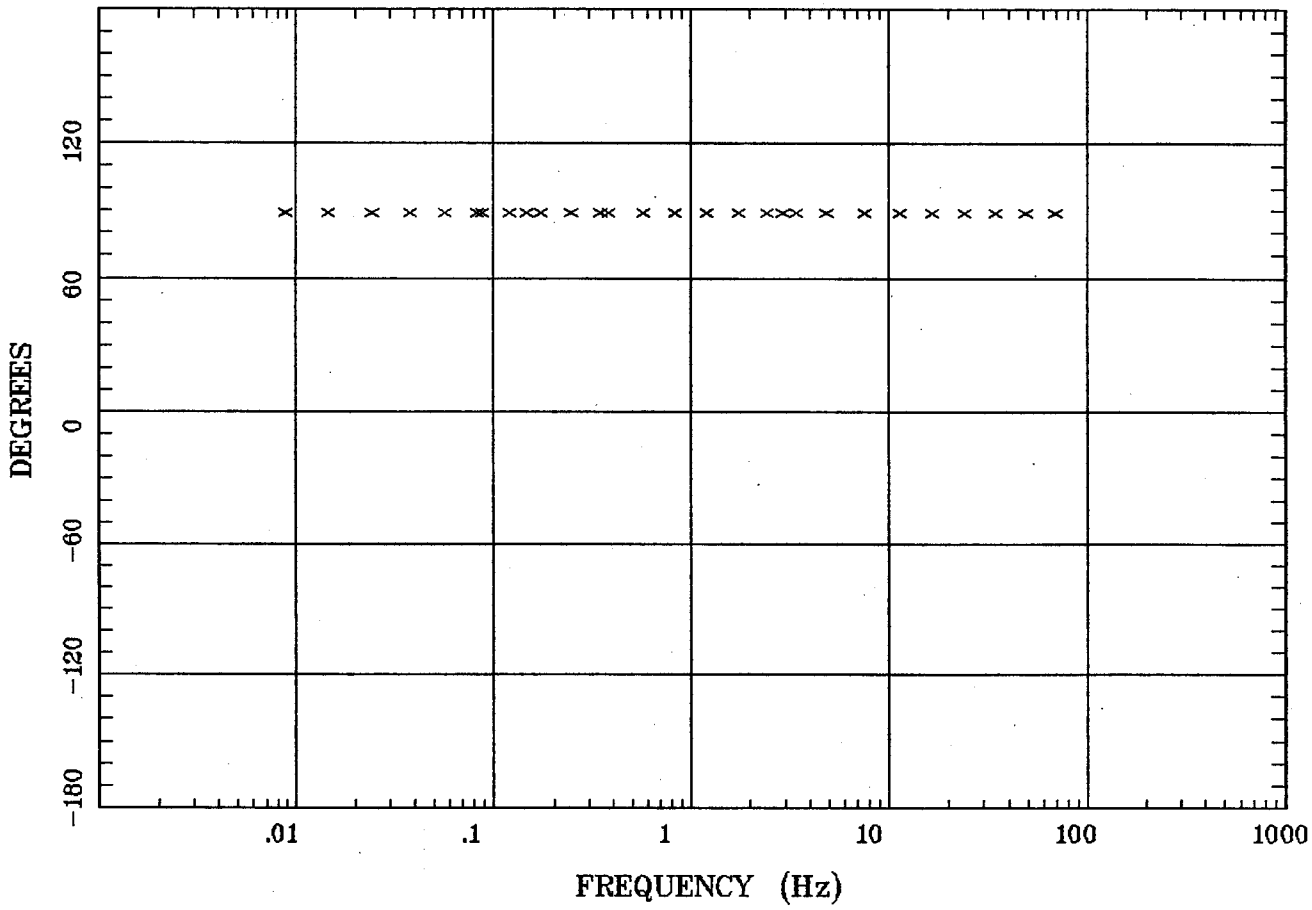
Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 4

ROTATION ANGLE

Alamosa Quad, 100k



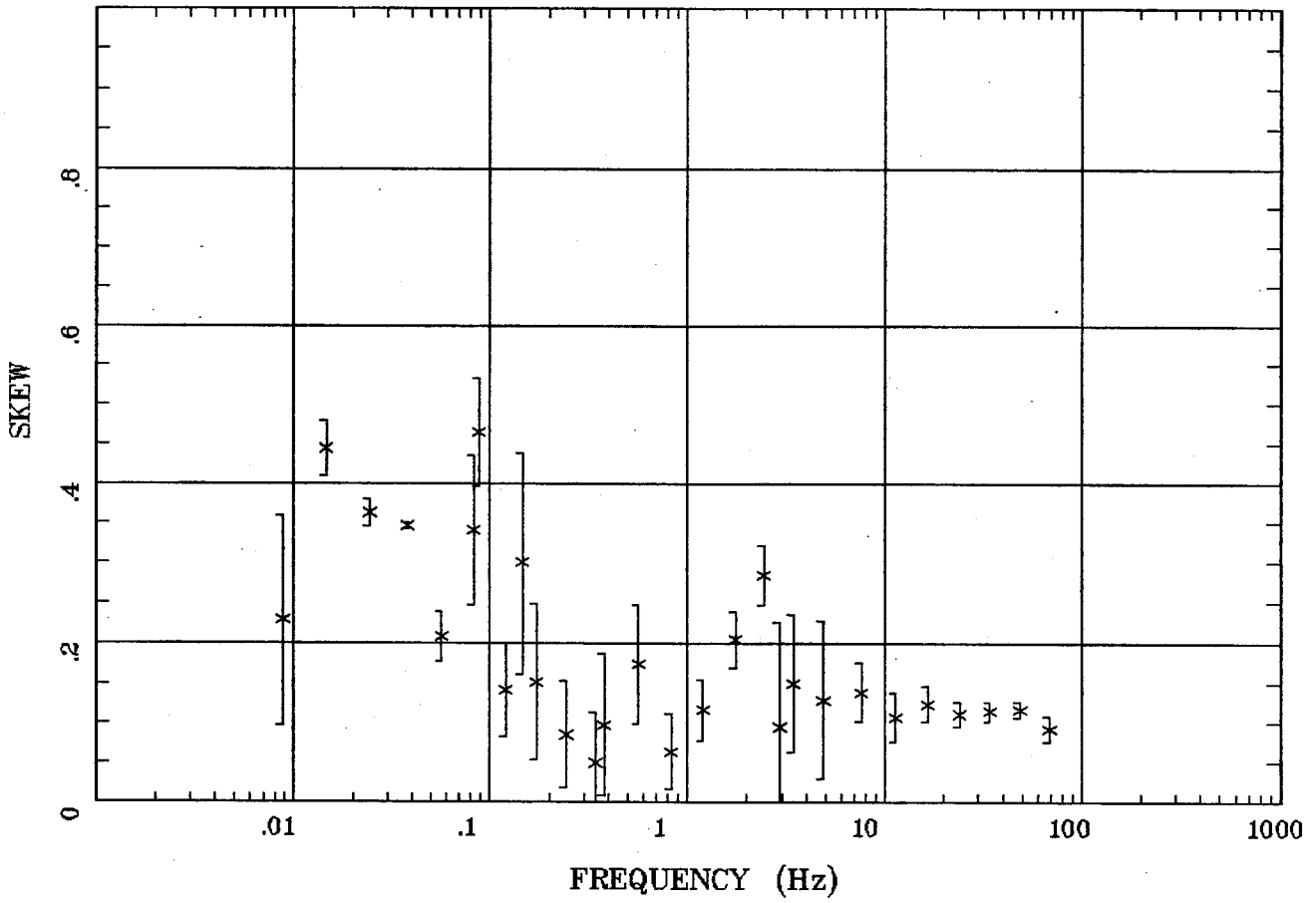
Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

Station 4

IMPEDANCE SKEW

Alamosa Quad, 100k



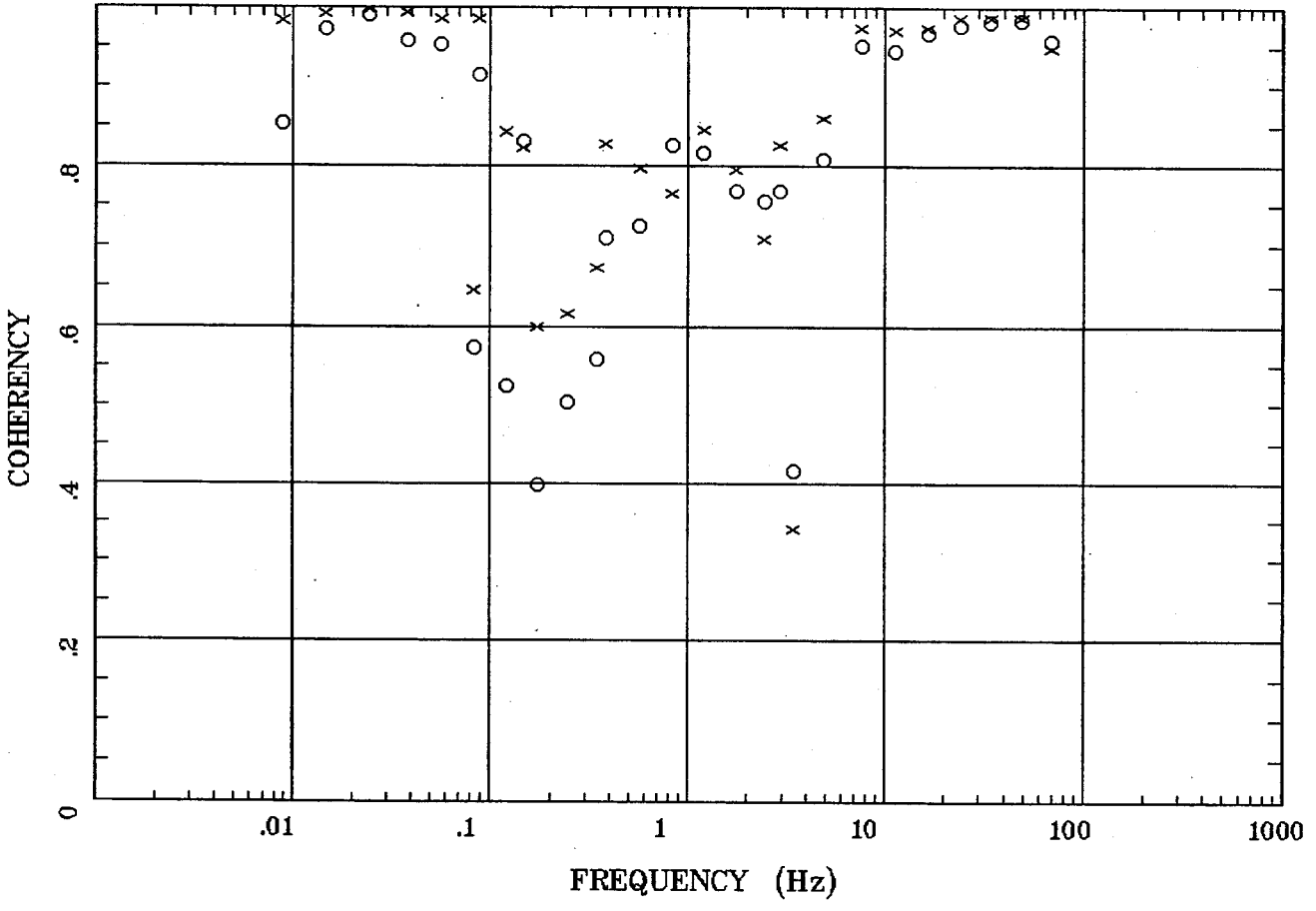
Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

Station 4

E MULT Coh.

Alamosa Quad, 100k

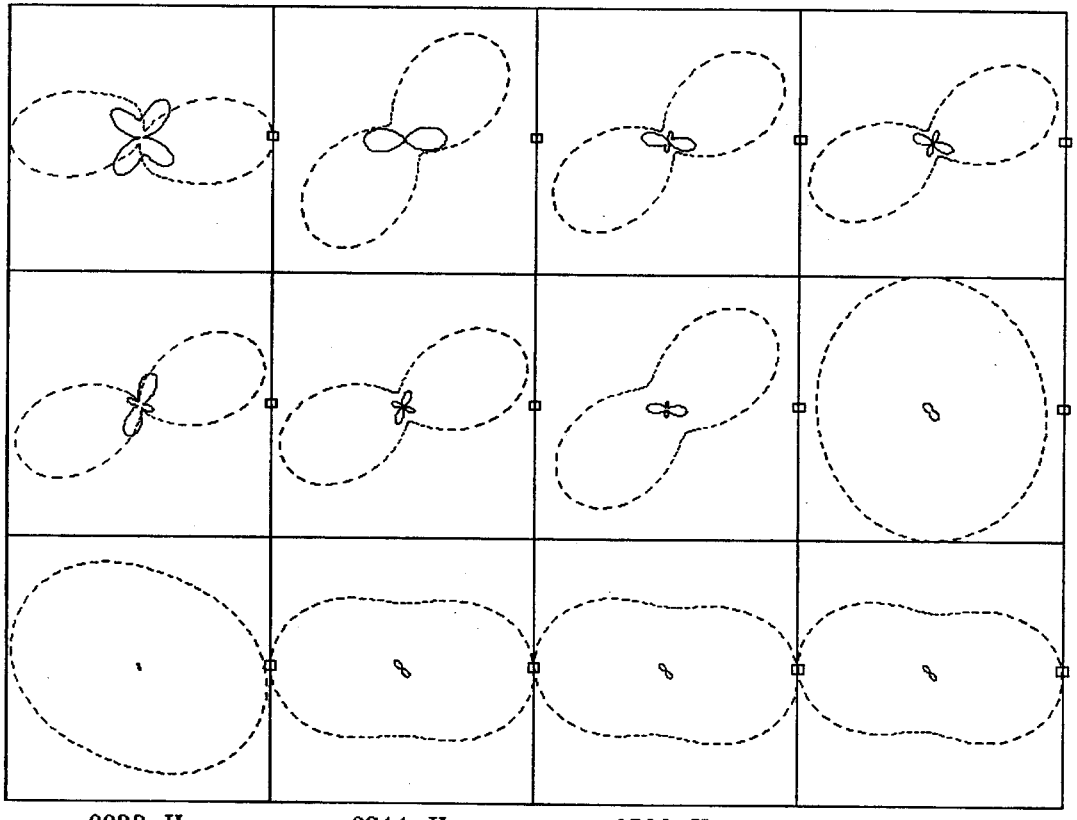


Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k



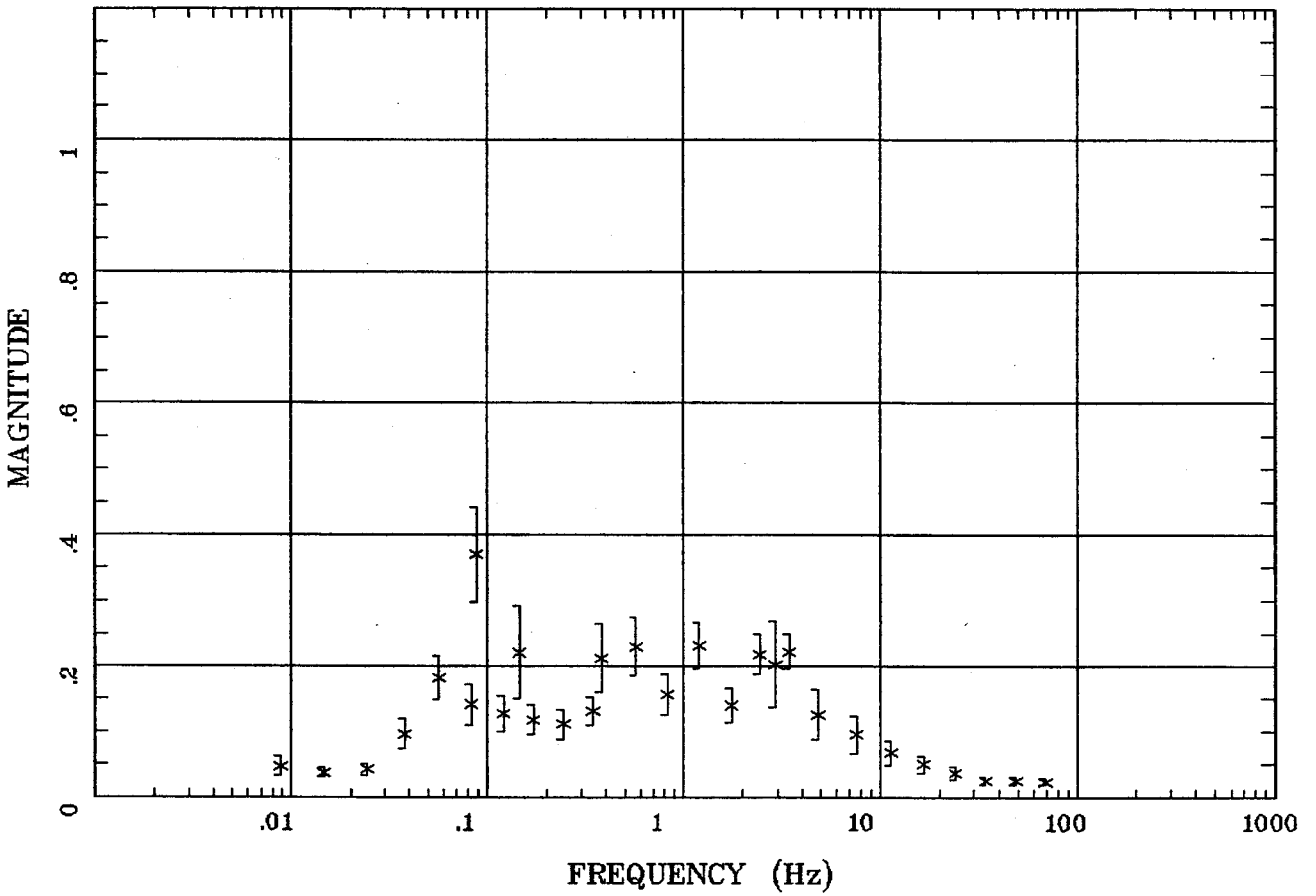
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 4

TIPPER MAGNITUDE Alamosa Quad, 100k



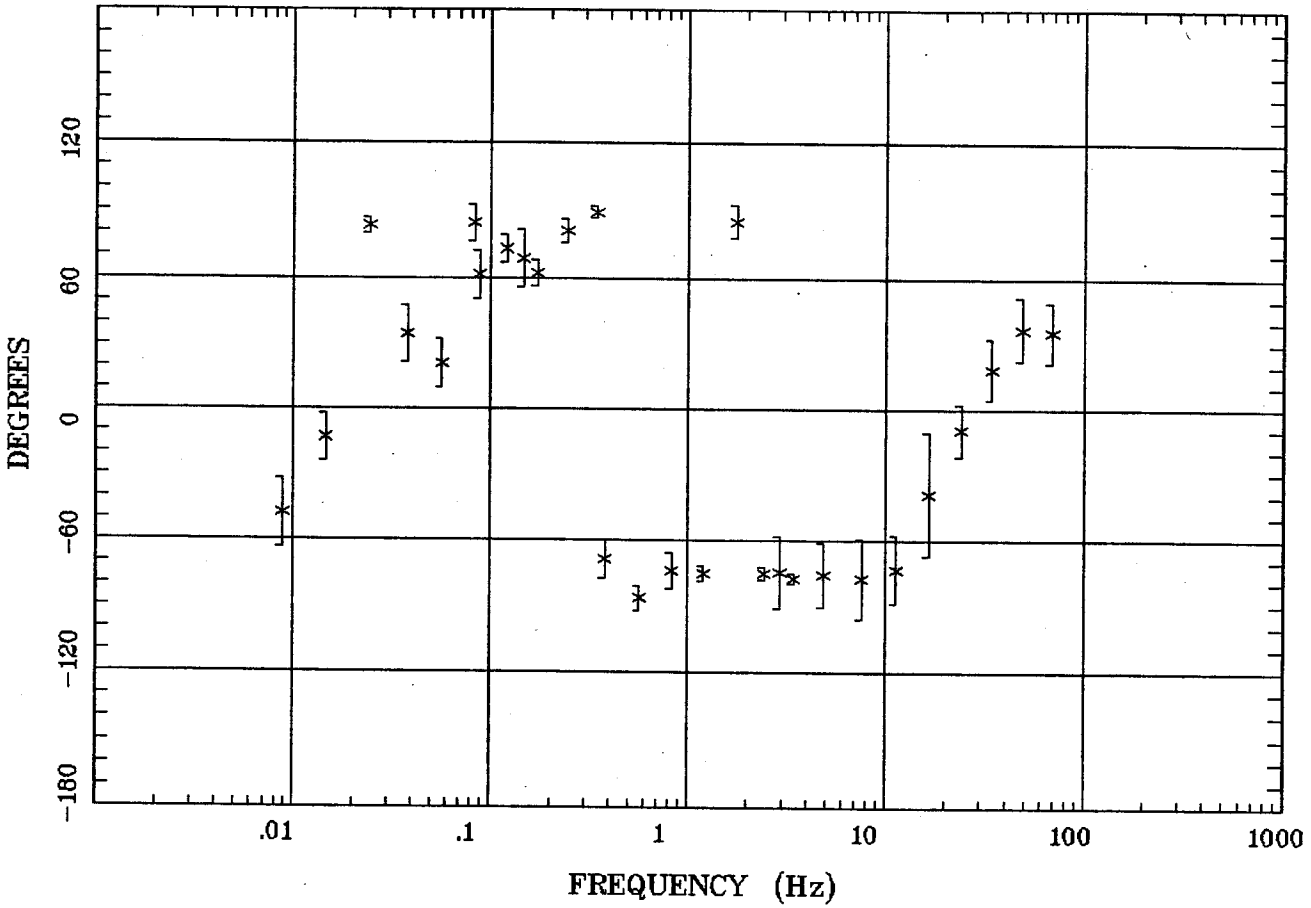
Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

Station 4

TIPPER STRIKE

Alamosa Quad, 100k



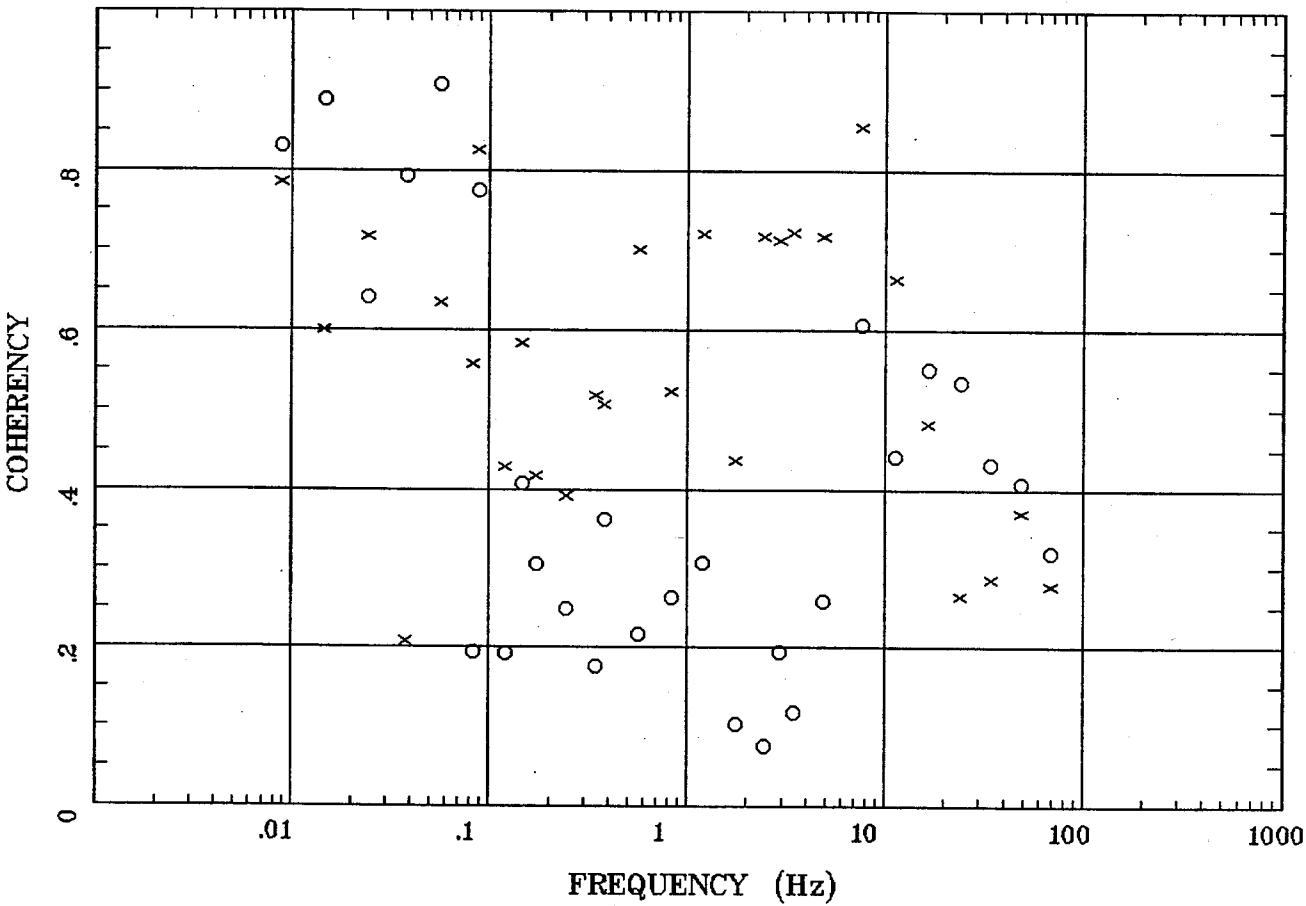
Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 4

HzHx.x Coh HzHy.o

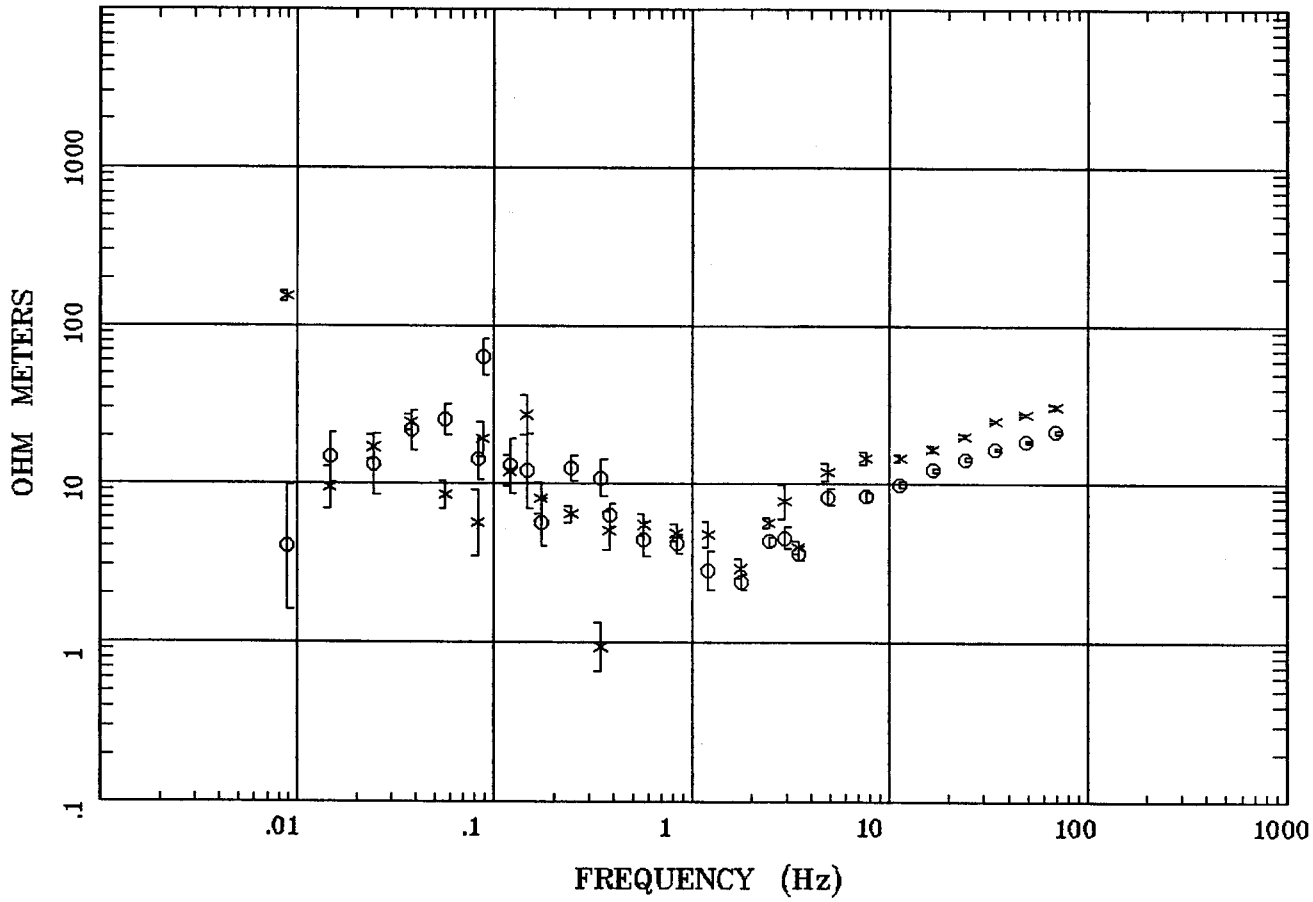
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 13:0 Aug 02, 2006
Survey Co:USGS

Rotation:
Filename: sl04m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:49 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k

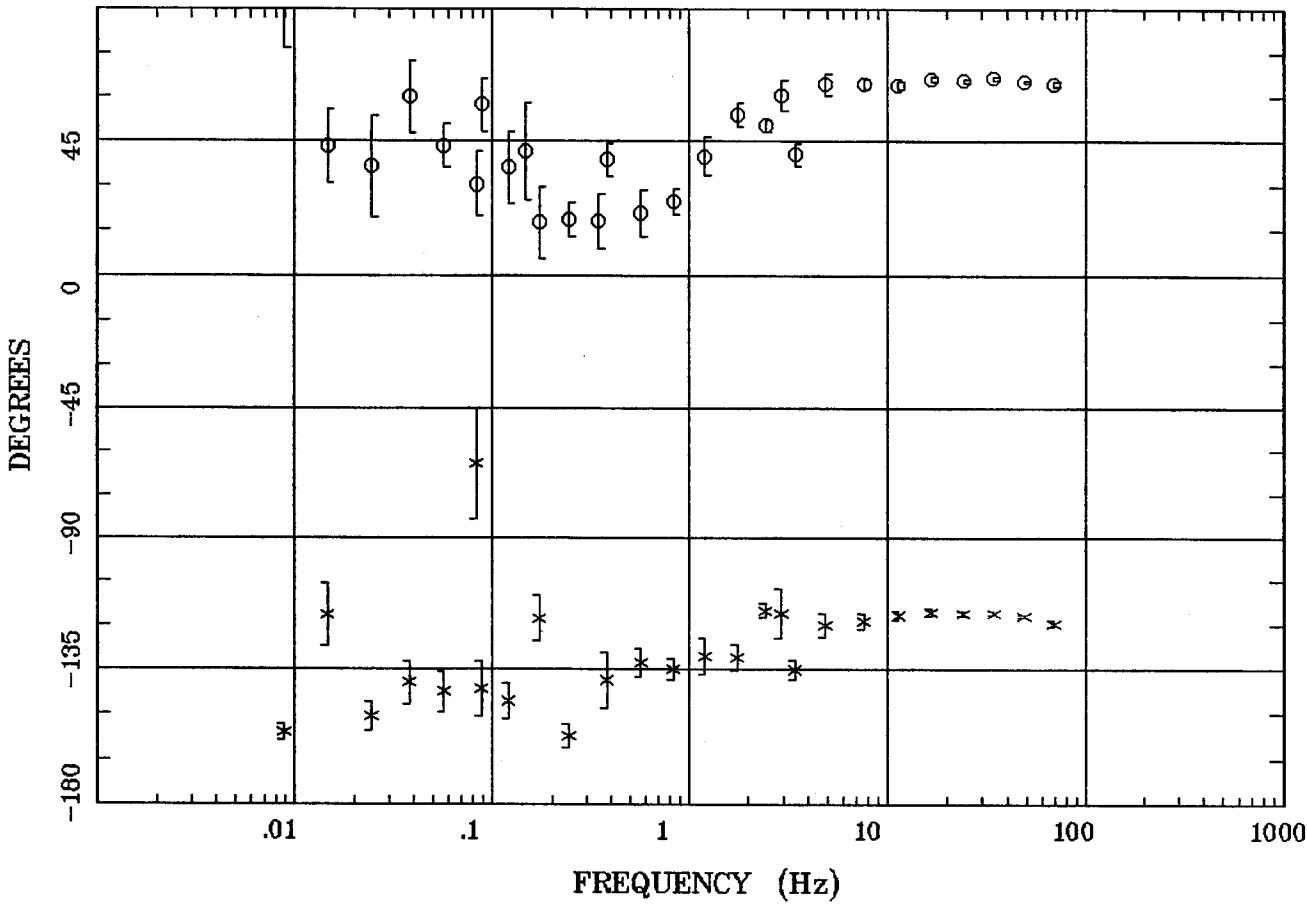


Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE

Alamosa Quad, 100k

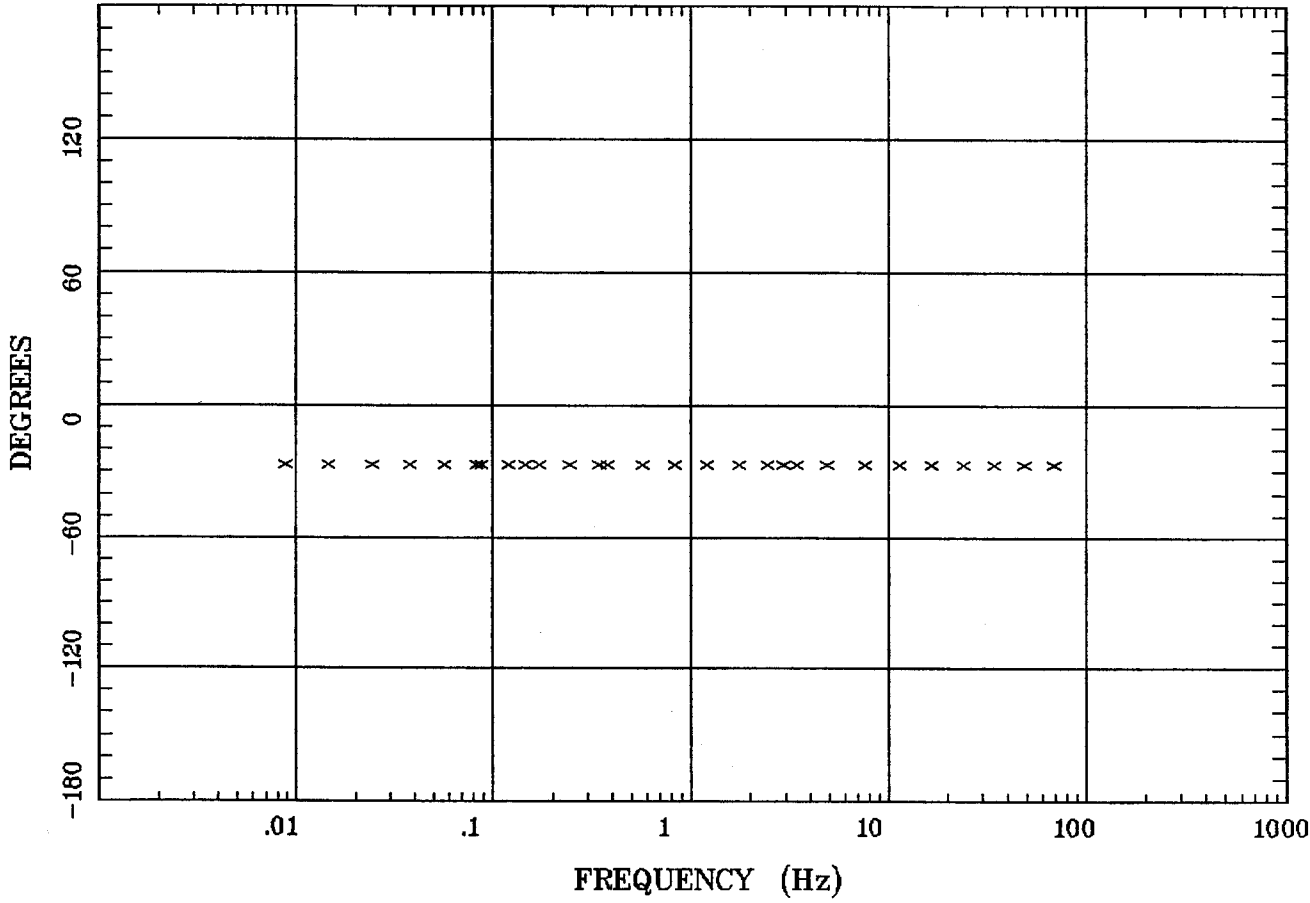


Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

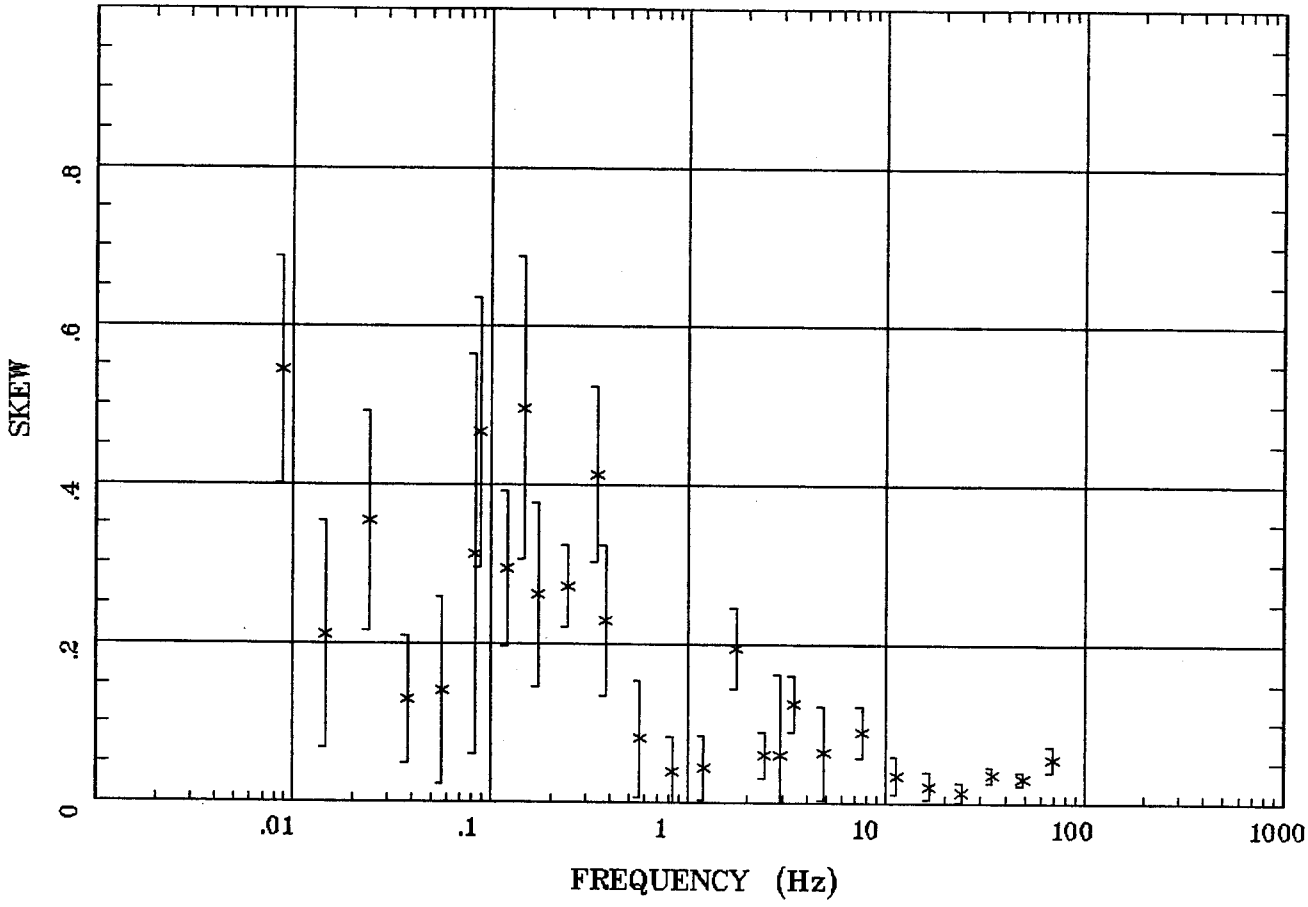


Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

Alamosa Quad, 100k

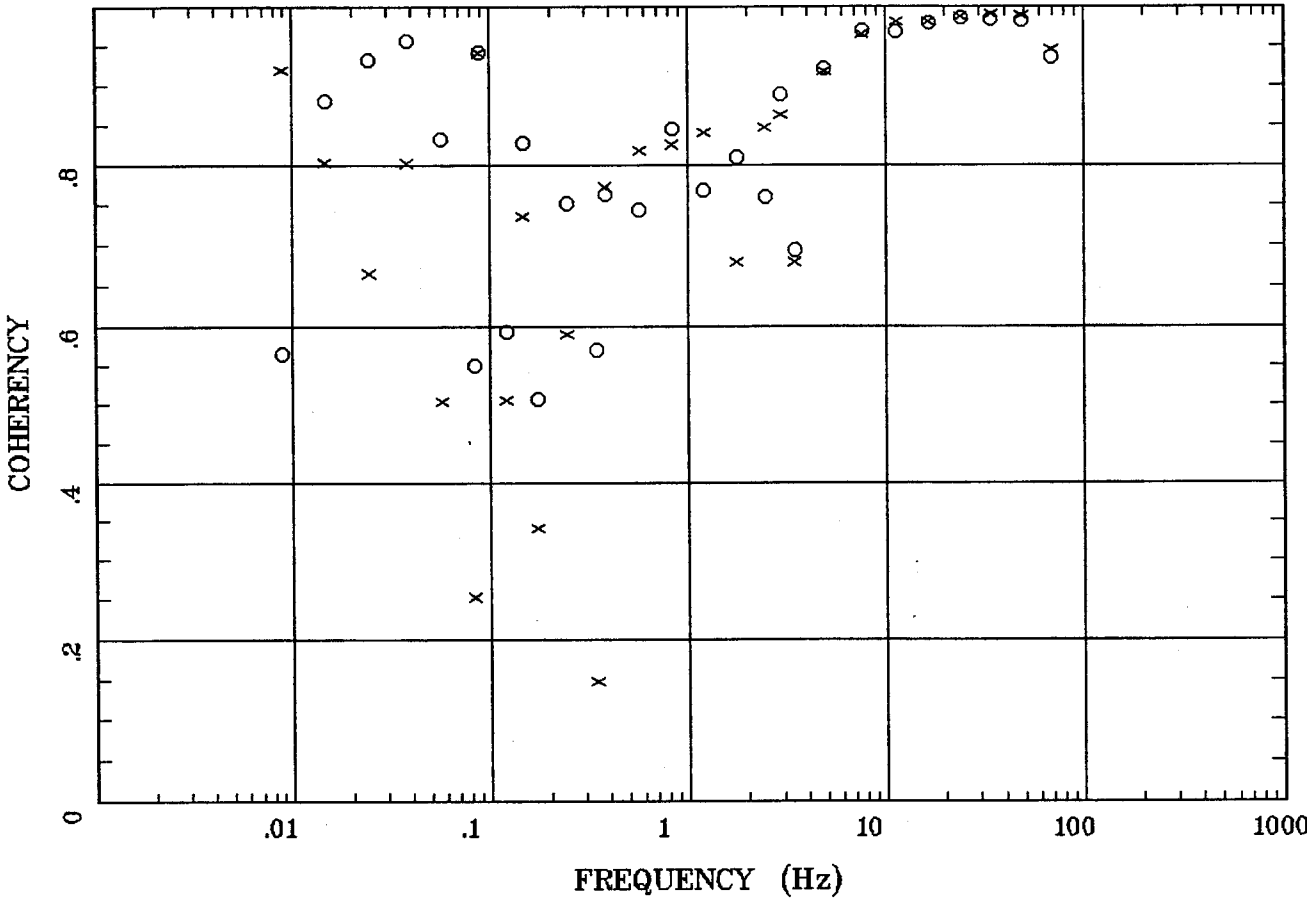


Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

E MULT Coh.

Alamosa Quad, 100k

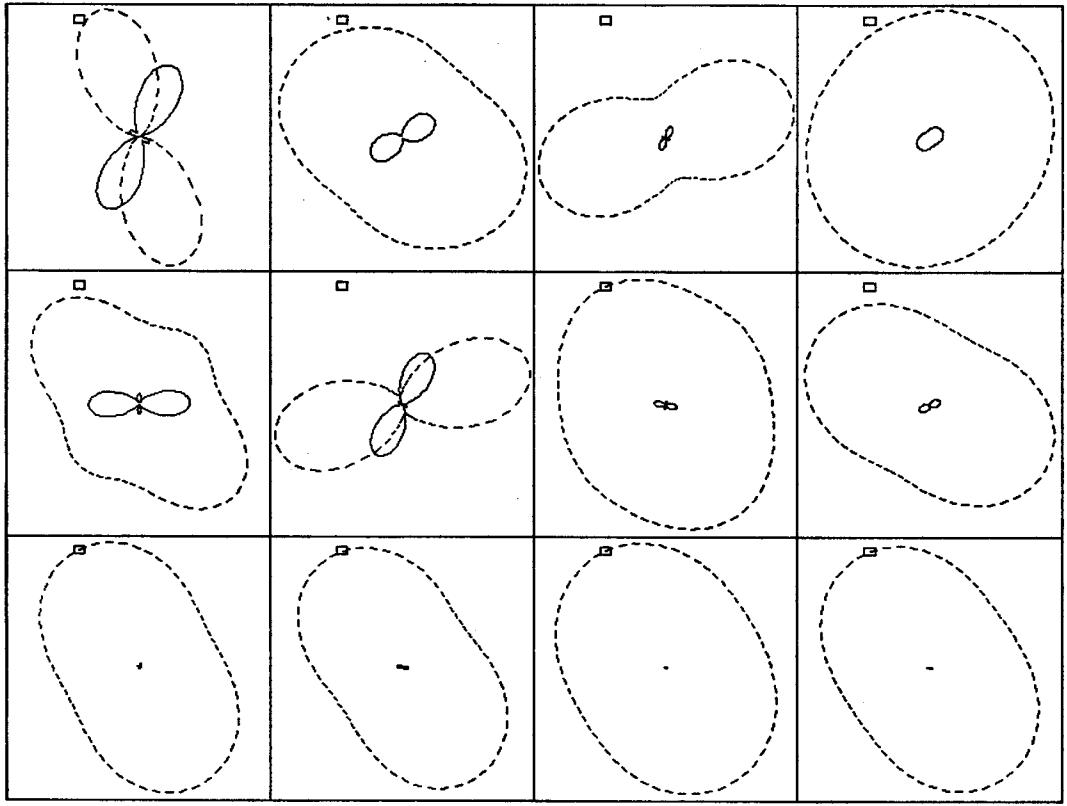


Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k

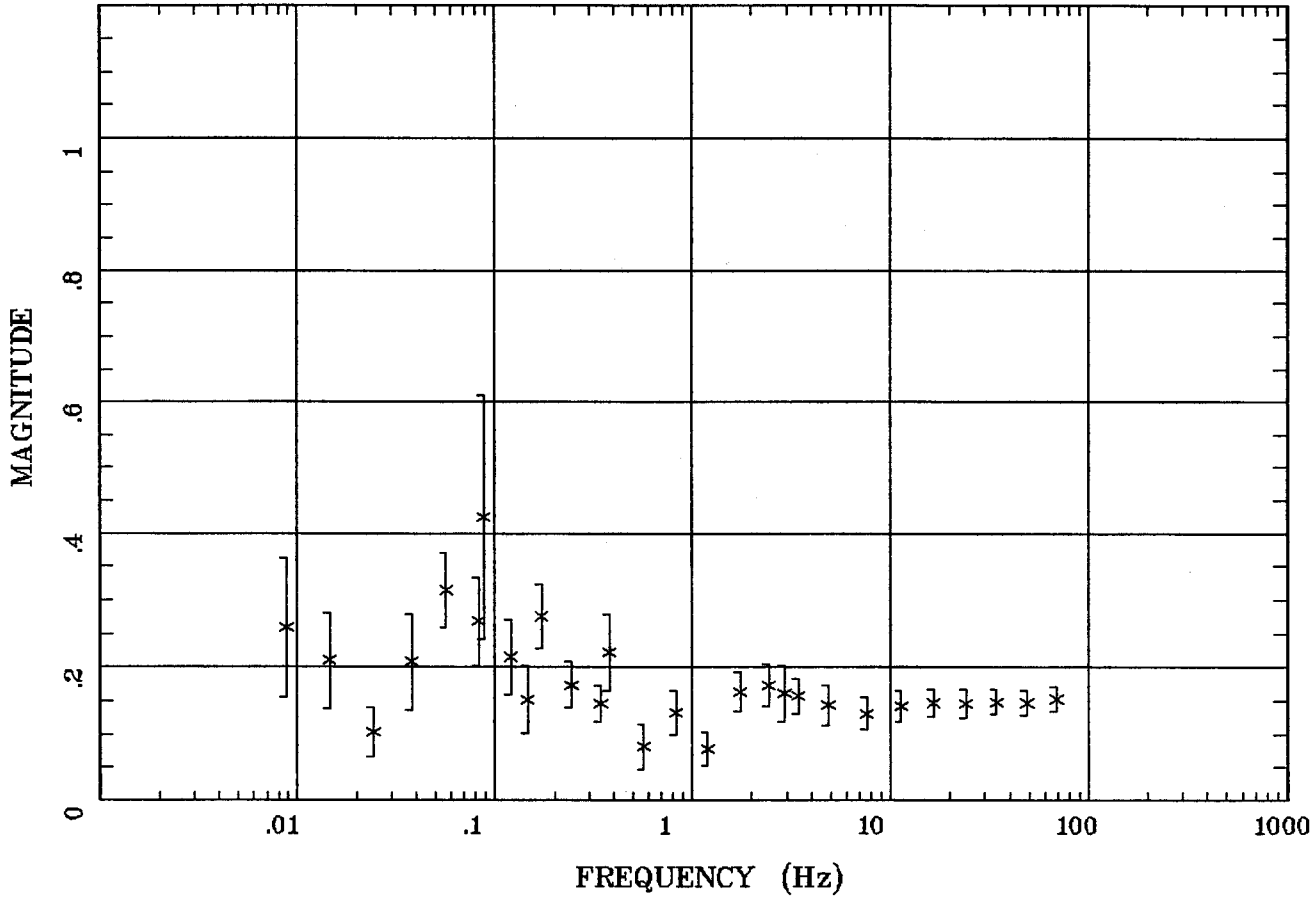


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k



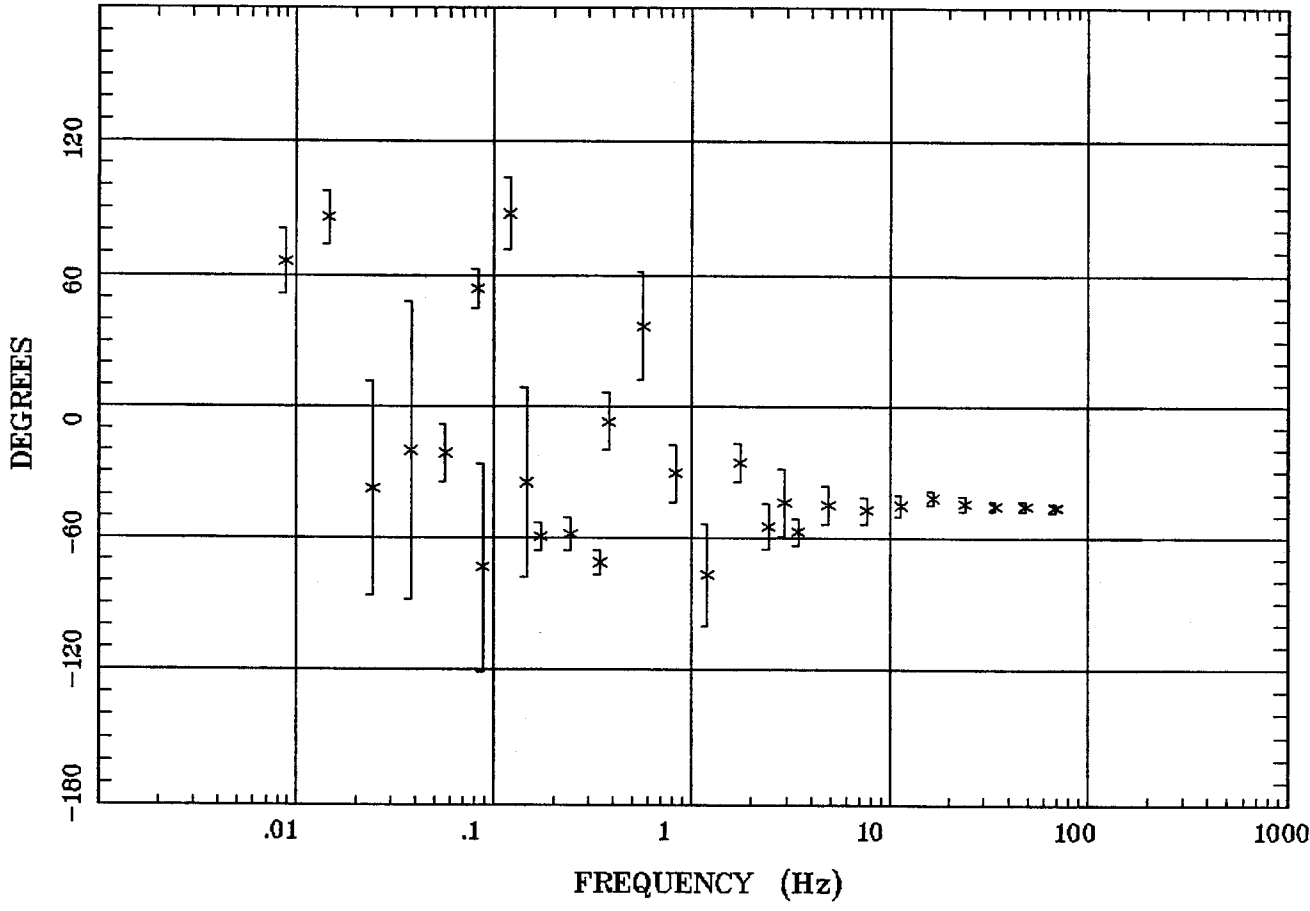
Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

Station 5

TIPPER STRIKE

Alamosa Quad, 100k



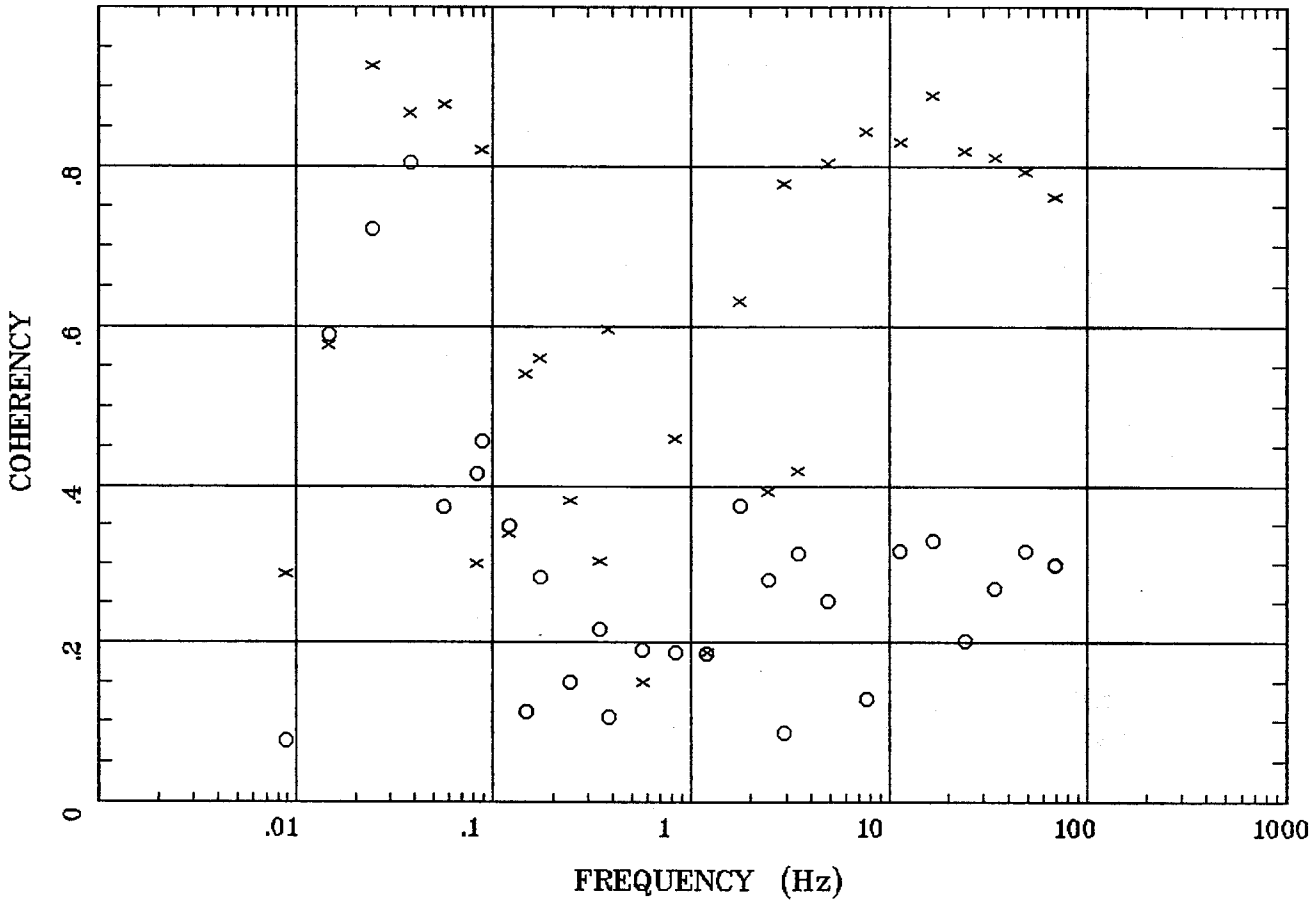
Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

Station 5

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

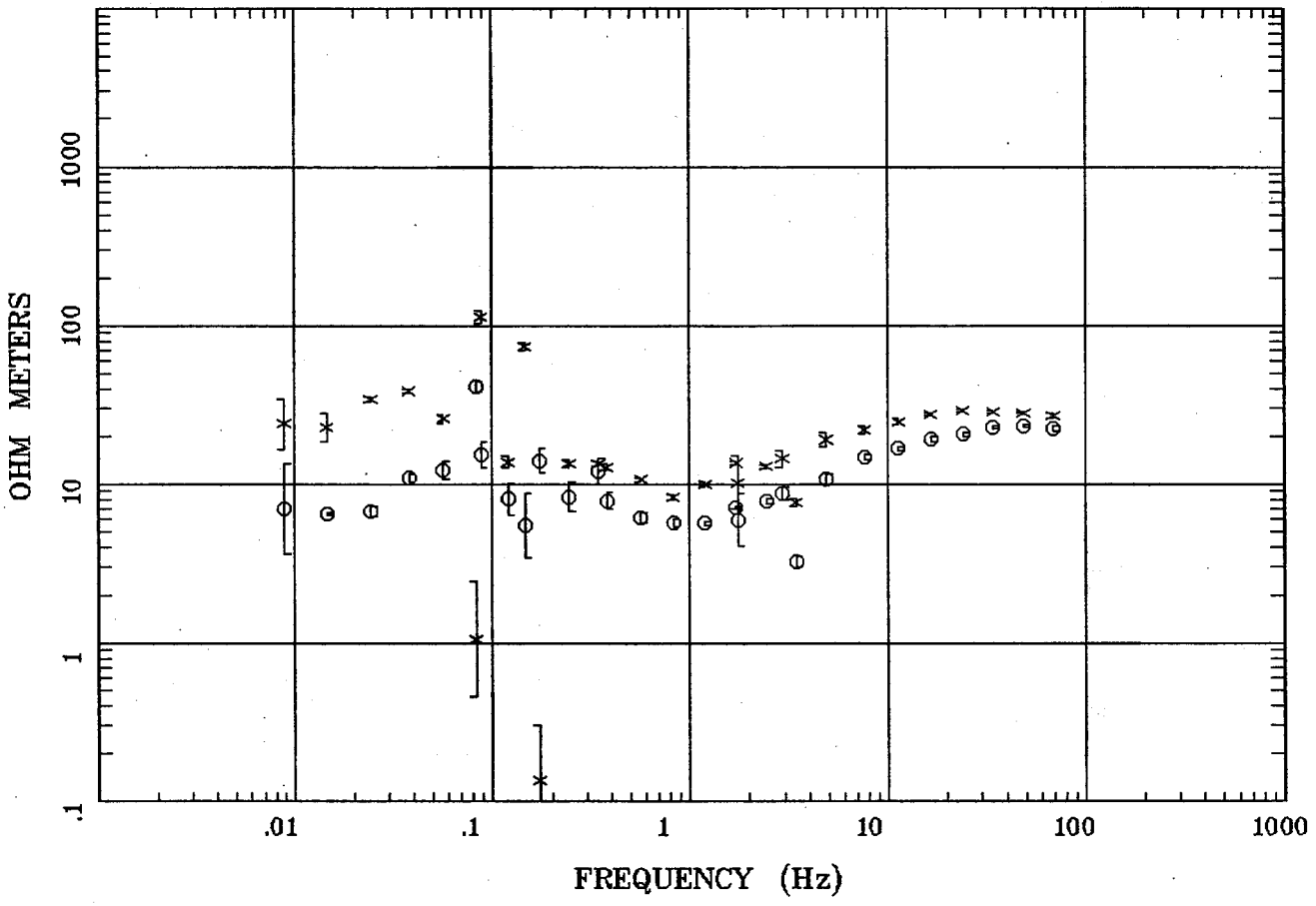


Client:
Remote: none
Acquired: 10:4 Aug 03, 2006
Survey Co:USGS

Rotation:
Filename: sl05m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:19 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

Station 6

APPARENT RESISTIVITY Alamosa Quad, 100k

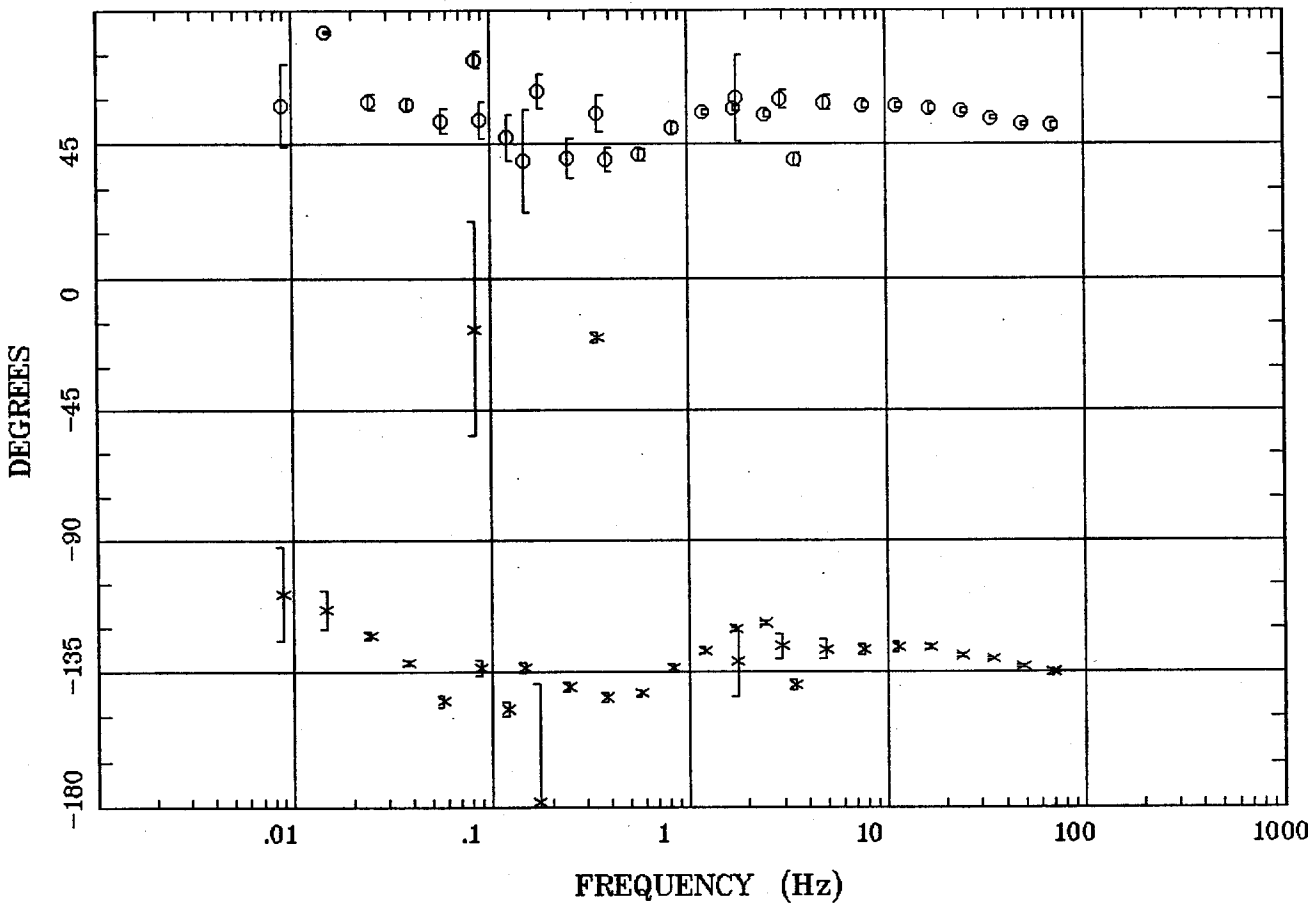


Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:33 Oct 19, 2006
< EMI - ElectroMagnetic Instruments >

Station 6

IMPEDANCE PHASE Alamosa Quad, 100k

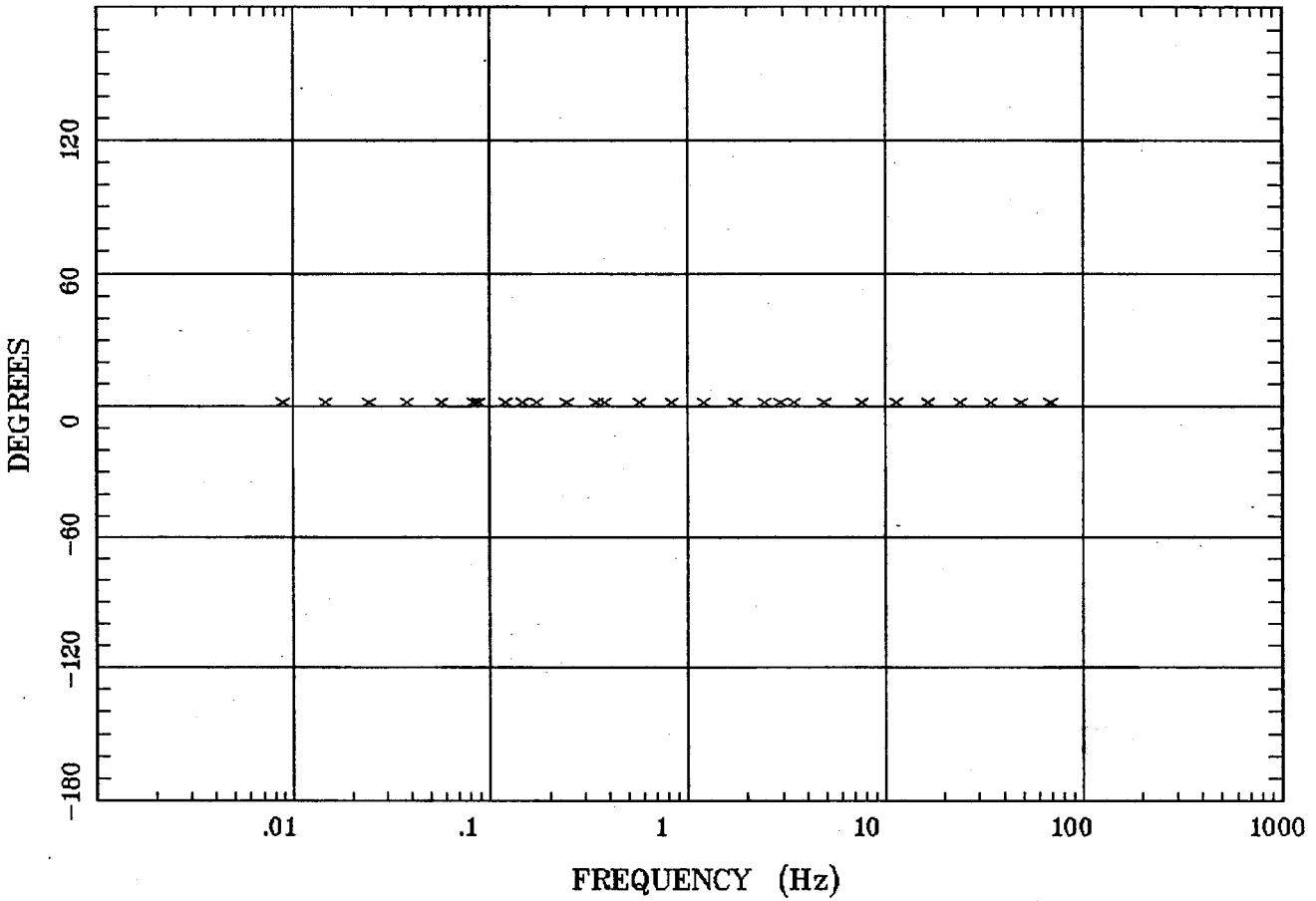


Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:33 Oct 19, 2006
< EMI – ElectroMagnetic Instruments >

Station 6

ROTATION ANGLE Alamosa Quad, 100k



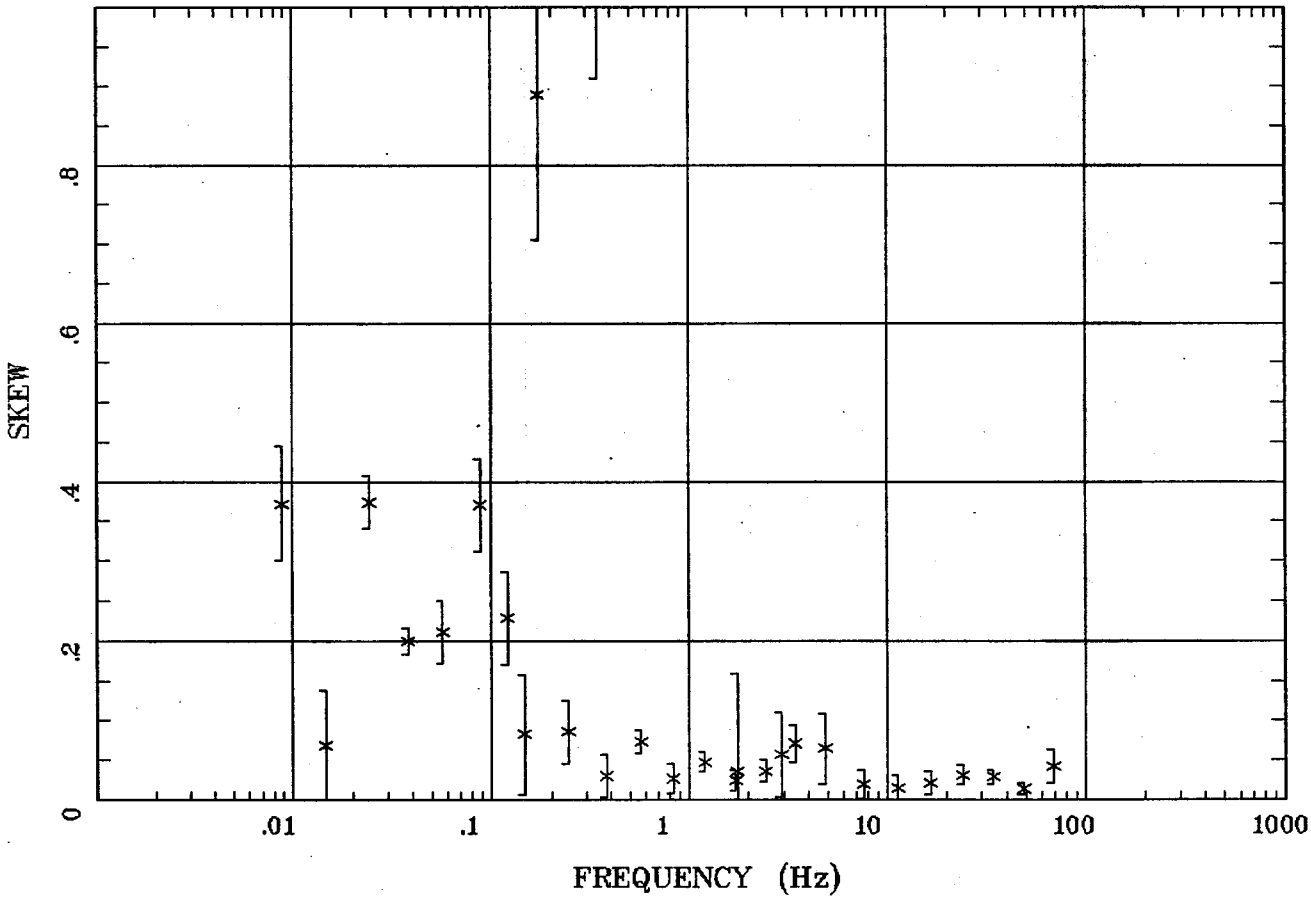
Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:33 Oct 19, 2006
< EMI - ElectroMagnetic Instruments >

Station 6

IMPEDANCE SKEW

Alamosa Quad, 100k

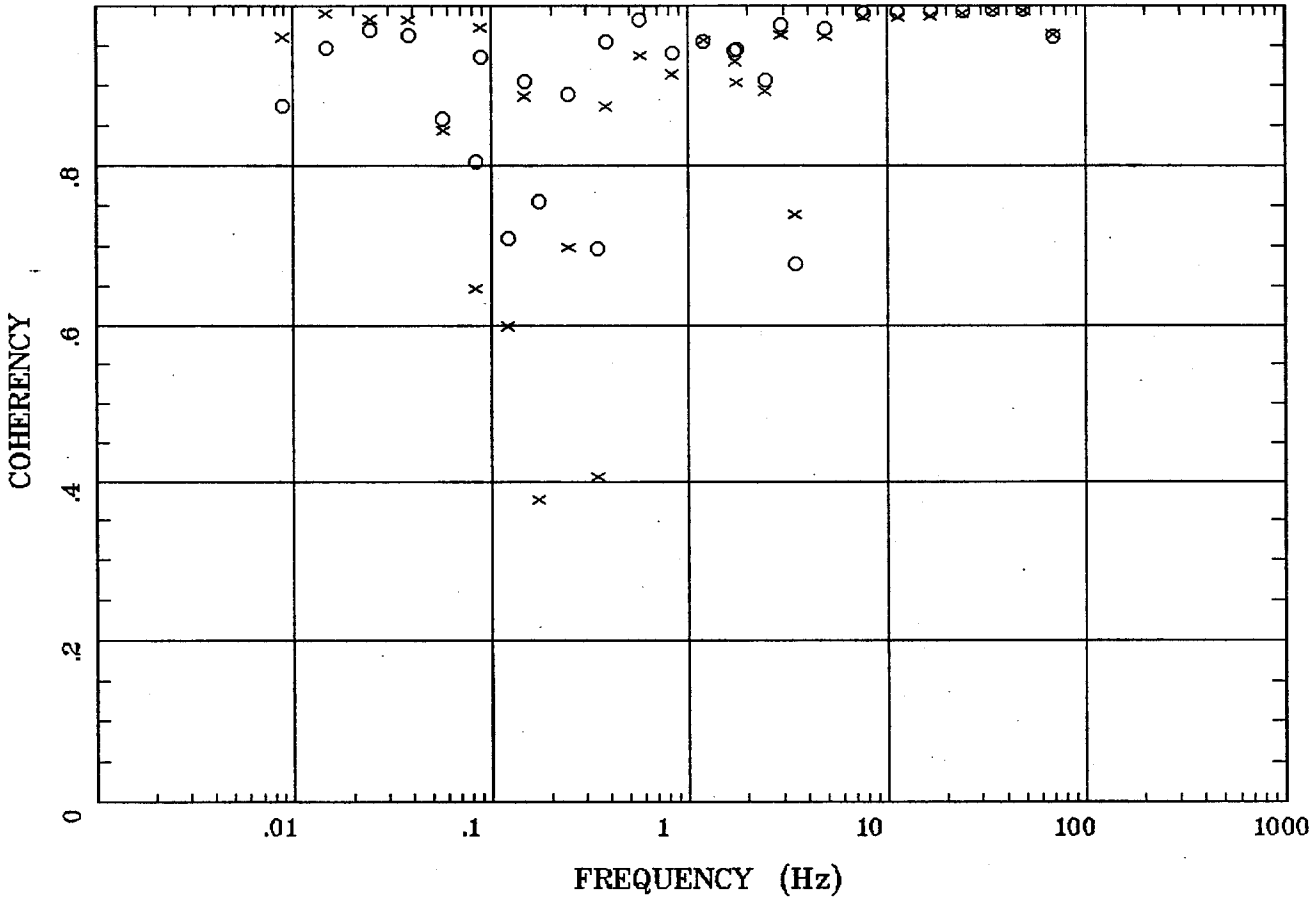


Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:33 Oct 19, 2006
< EMI – ElectroMagnetic Instruments >

Station 6

E MULT Coh. Alamosa Quad, 100k



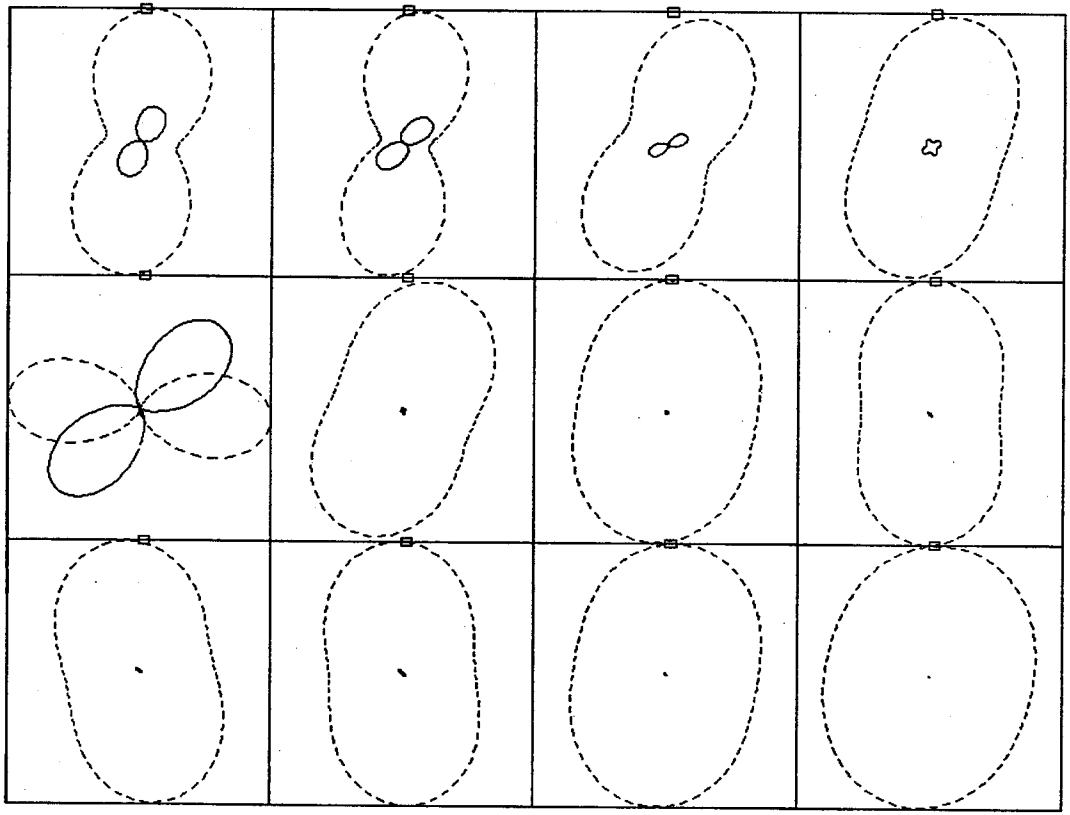
Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:33 Oct 19, 2006
< EMI - ElectroMagnetic Instruments >

09

POLAR PLOTS

Alamosa Quad, 100k



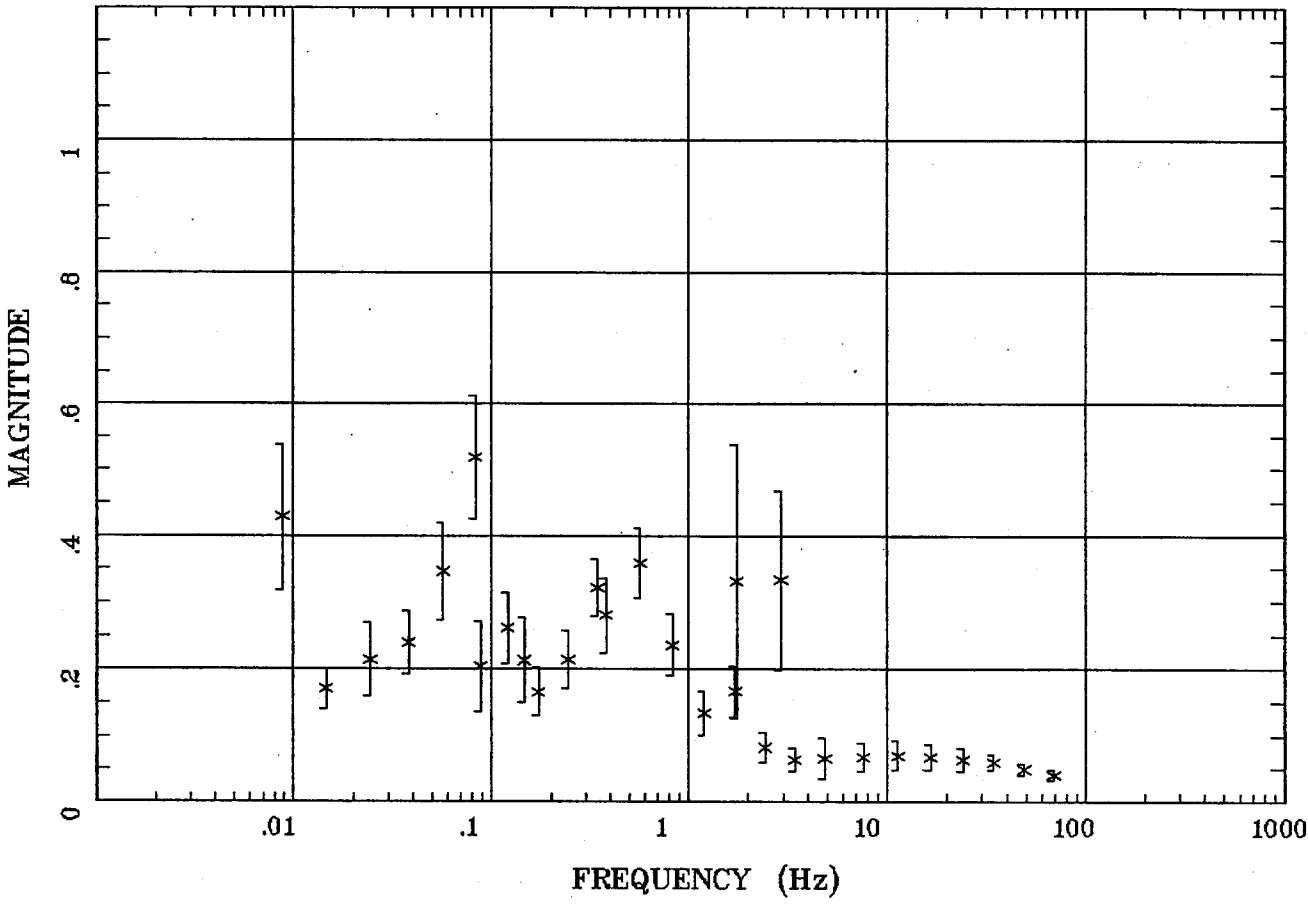
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.381 Hz	.830 Hz	1.719 Hz
2.930 Hz	4.883 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:33 Oct 19, 2006
< EMI – ElectroMagnetic Instruments >

Station 6

TIPPER MAGNITUDE Alamosa Quad, 100k

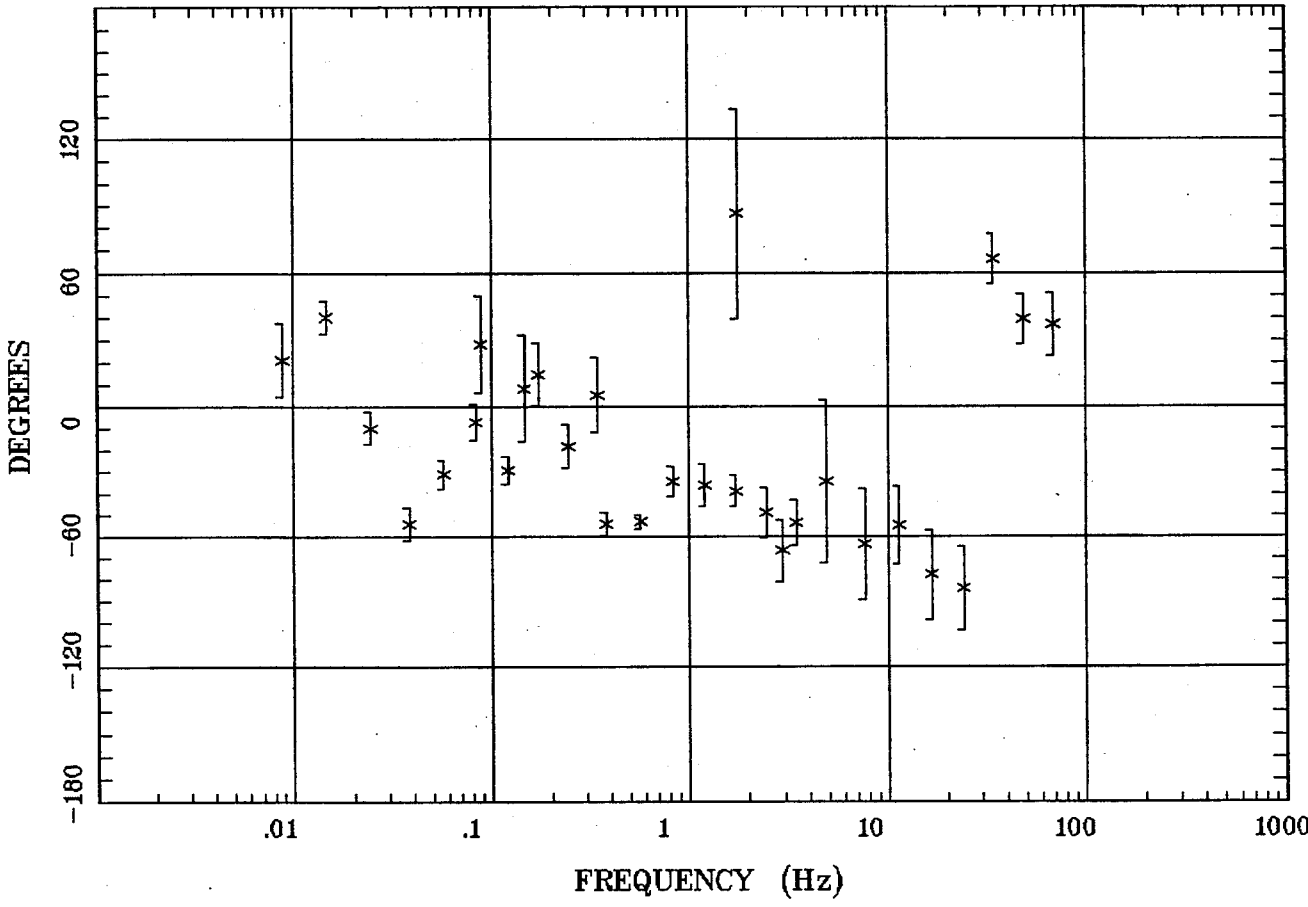


Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:34 Oct 19, 2006
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

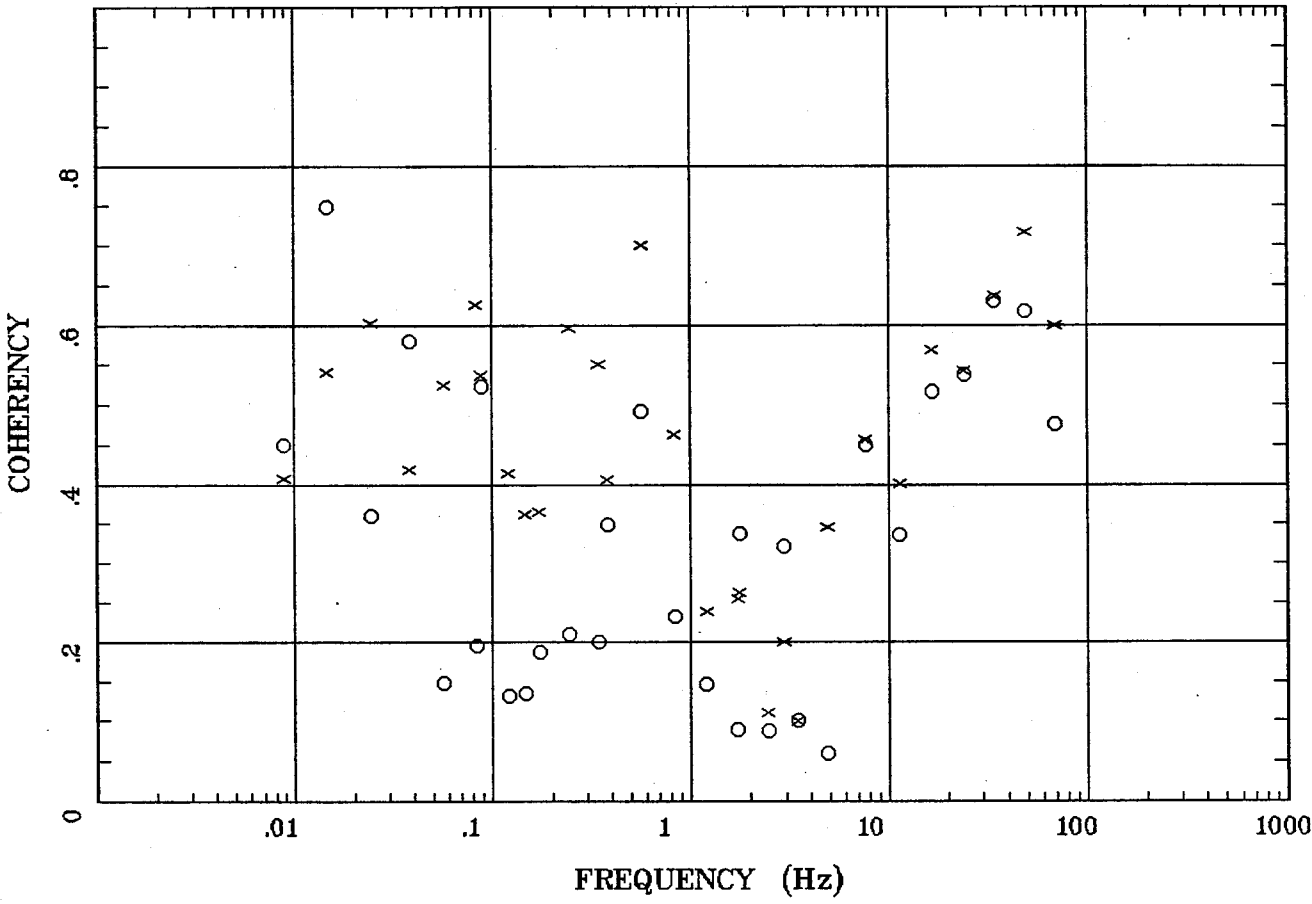


Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:34 Oct 19, 2006
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

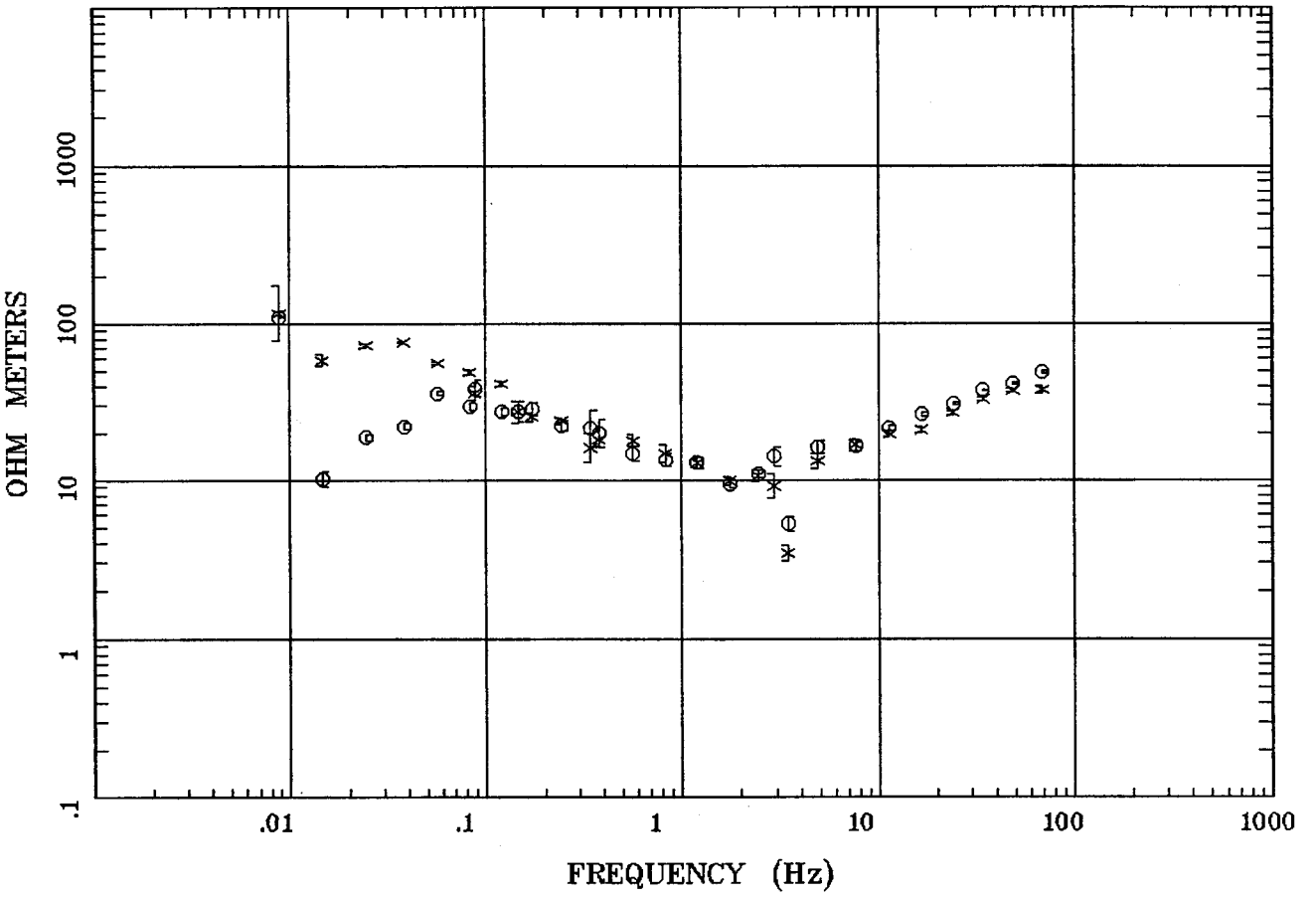
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:0 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl06mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:34 Oct 19, 2006
< EMI – ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k

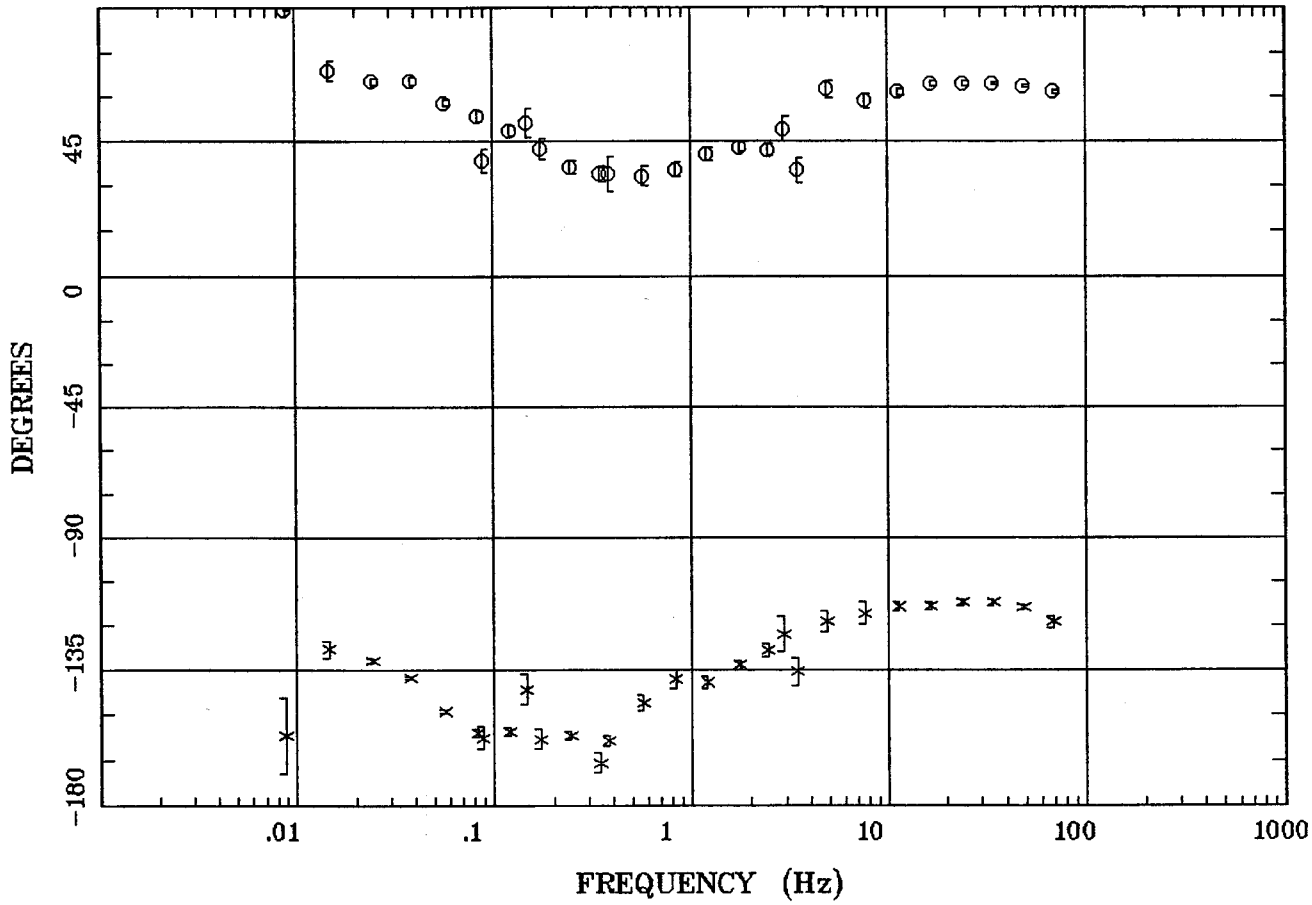


Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:25 Mar 21, 2007
< EMI – ElectroMagnetic Instruments >

Station 7

IMPEDANCE PHASE Alamosa Quad, 100k

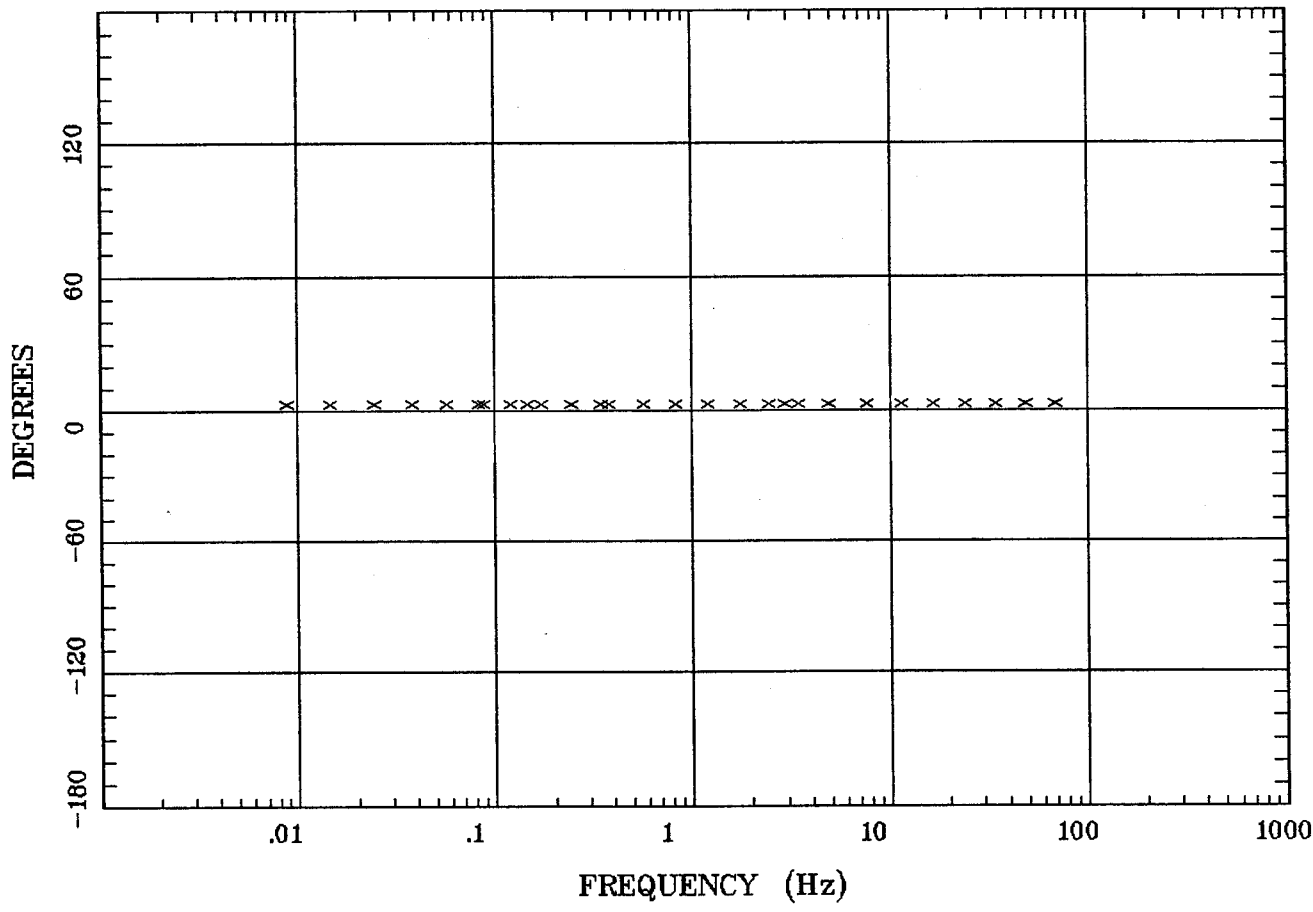


Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:25 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

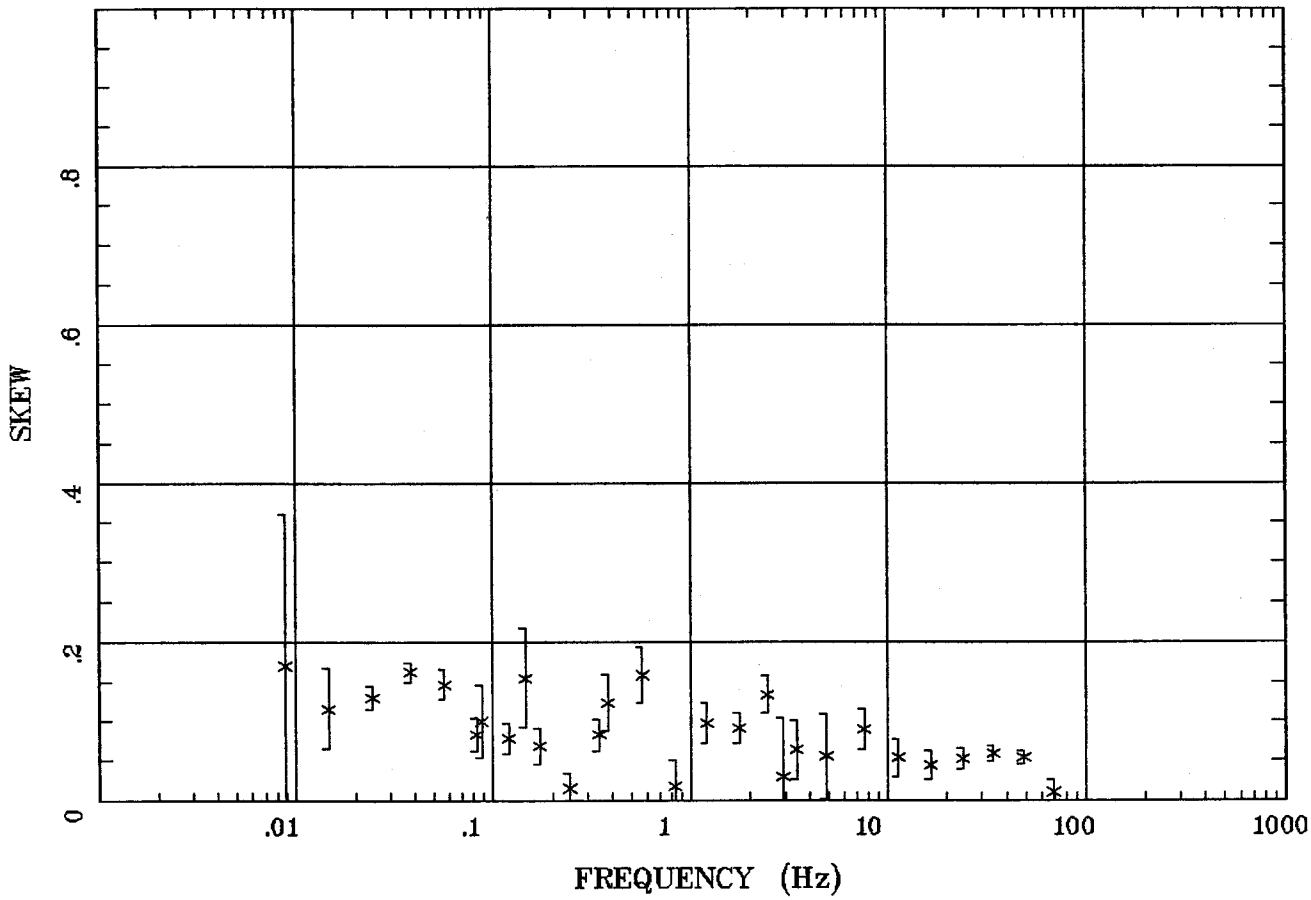


Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:25 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

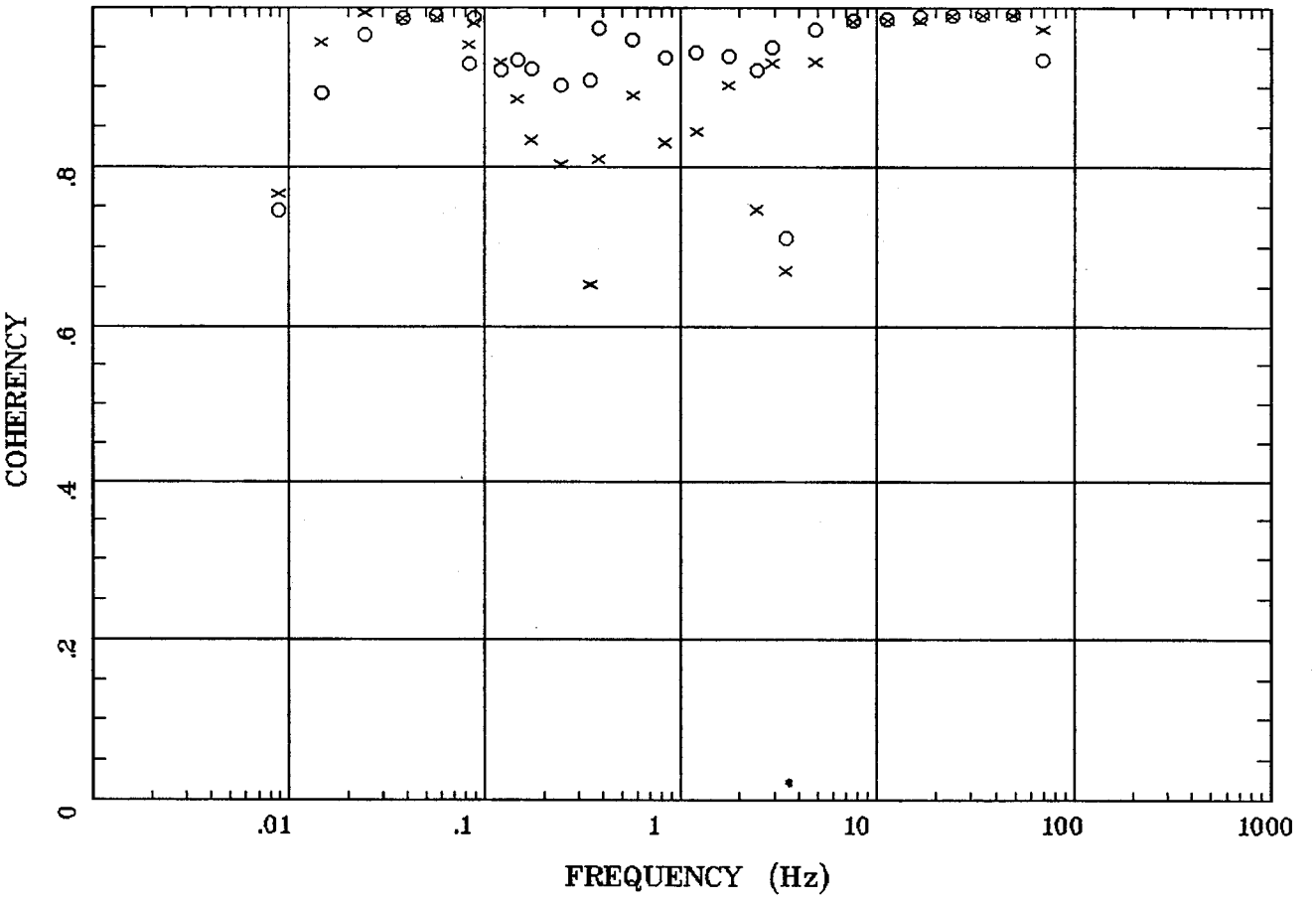
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:25 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k

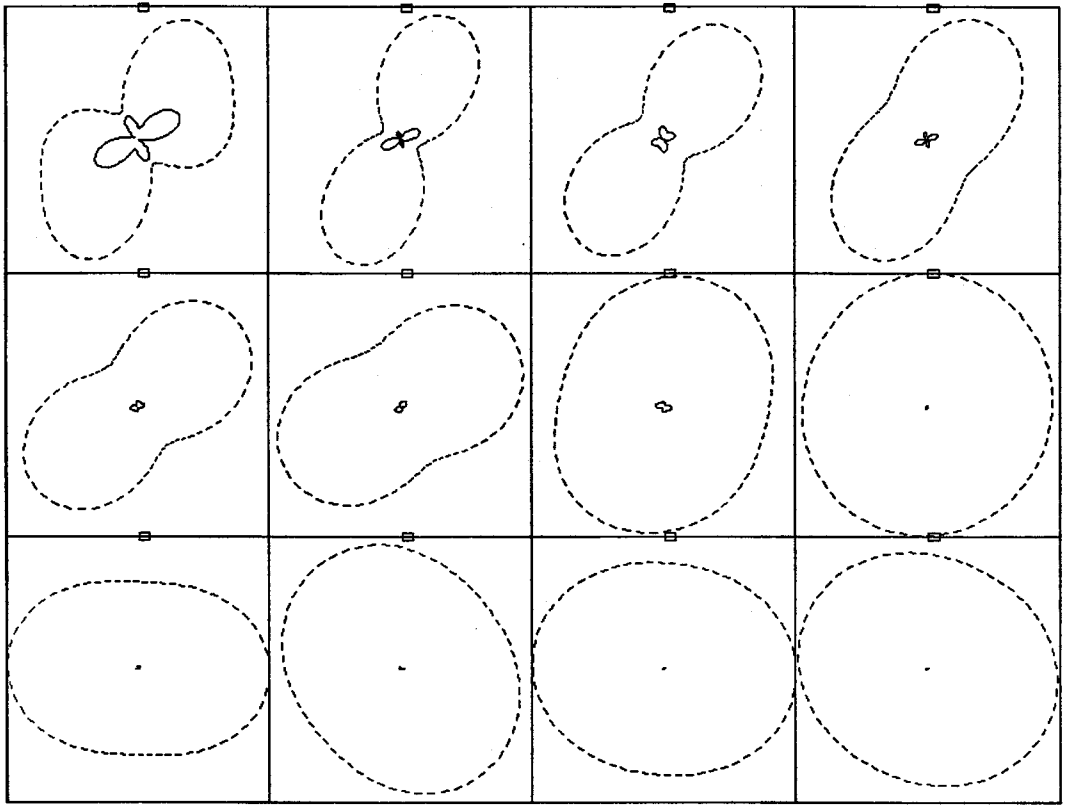


Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:25 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k

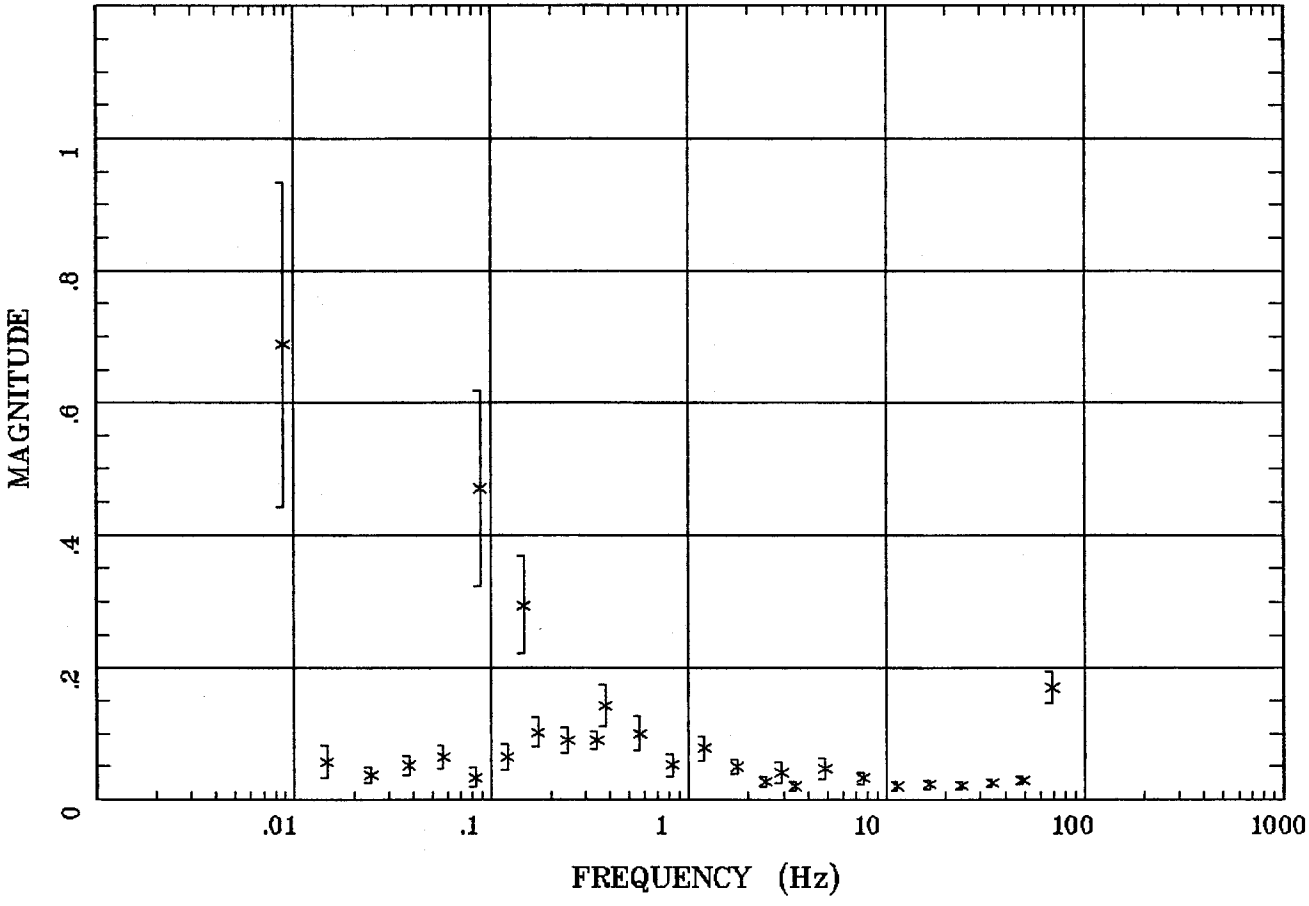


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:25 Mar 21, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k

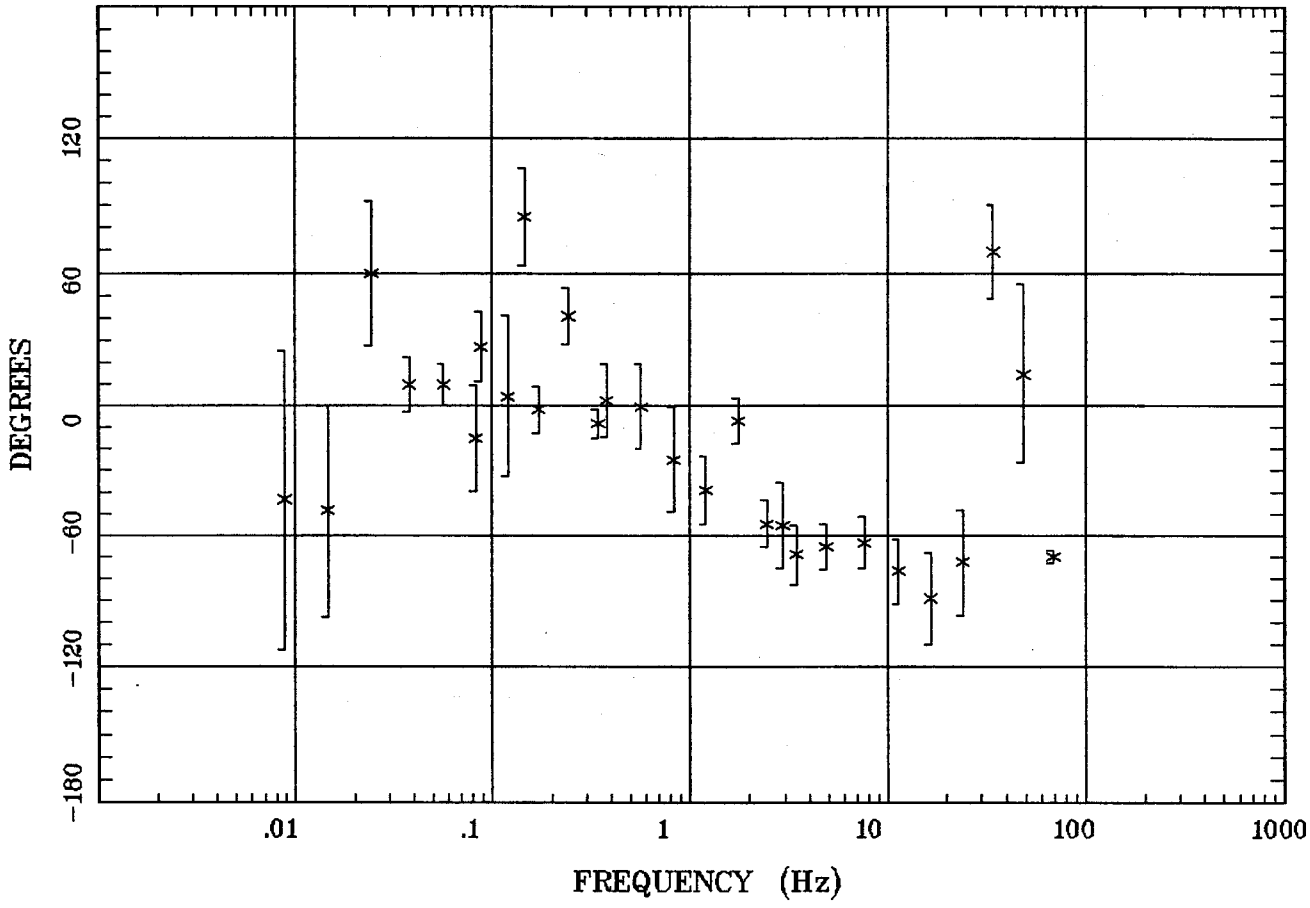


Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:26 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

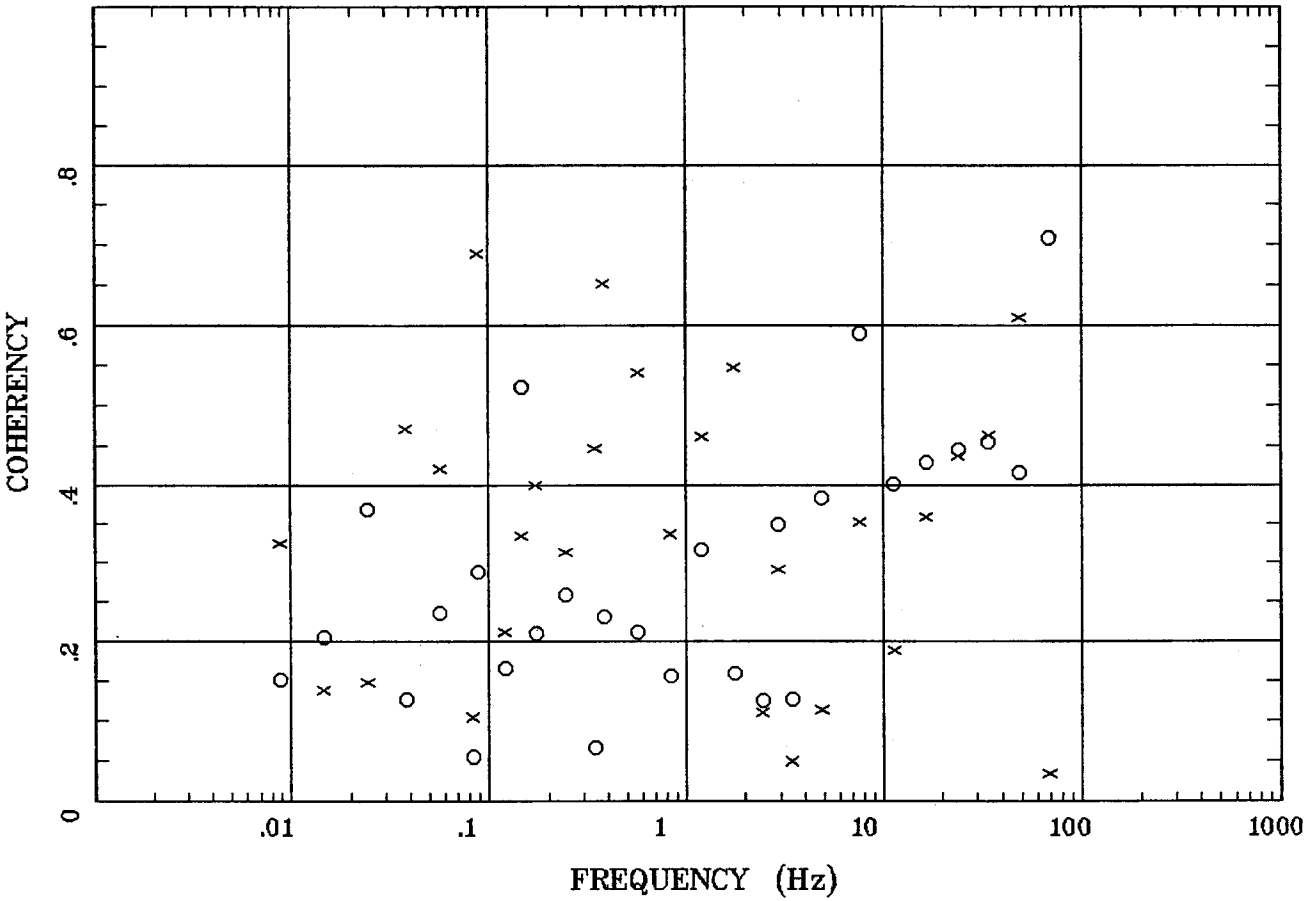
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:26 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

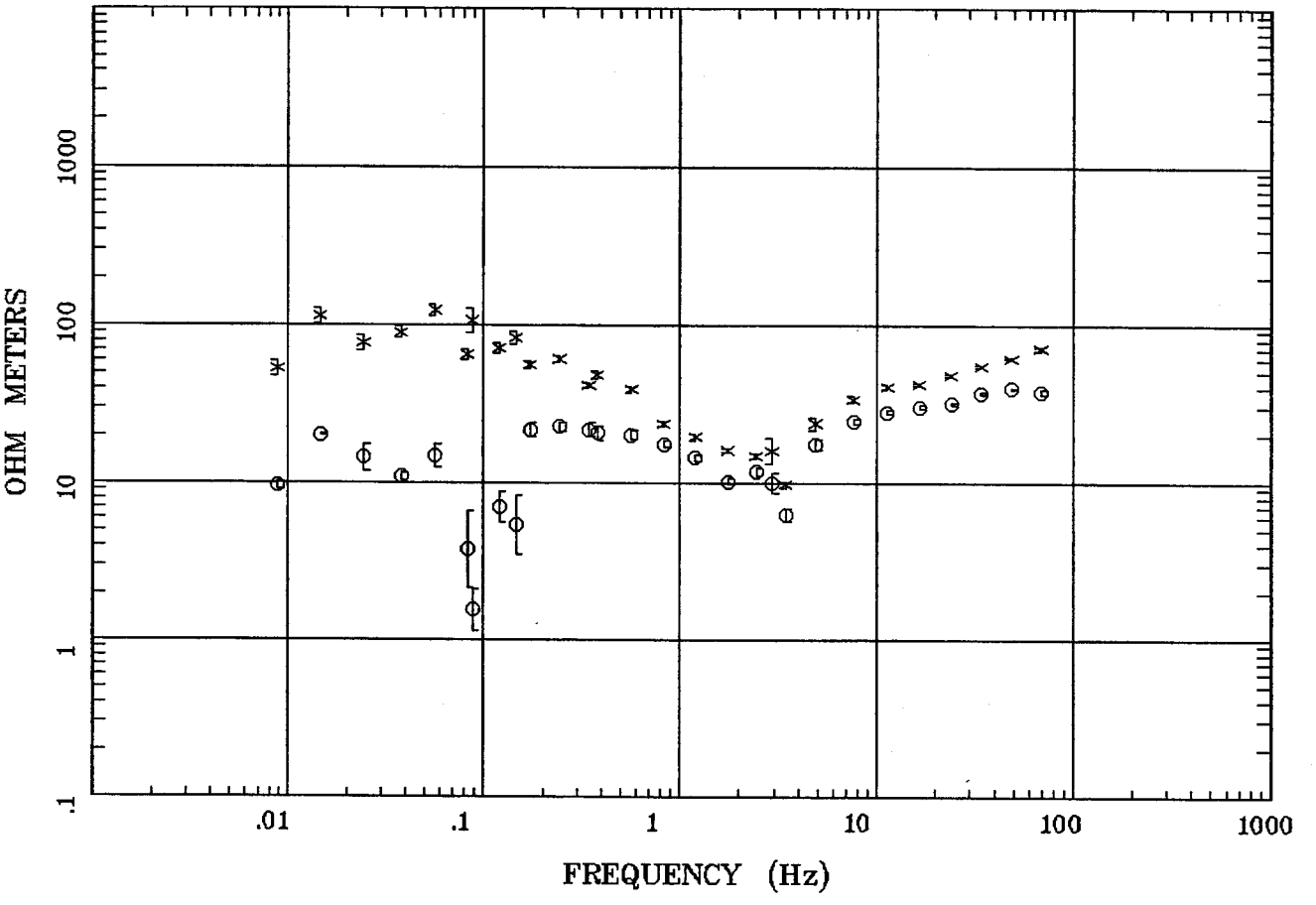
HzHx.x Coh HzHy.o Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:2 Aug 04, 2006
Survey Co:USGS

Rotation:
Filename: sl07m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:26 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k

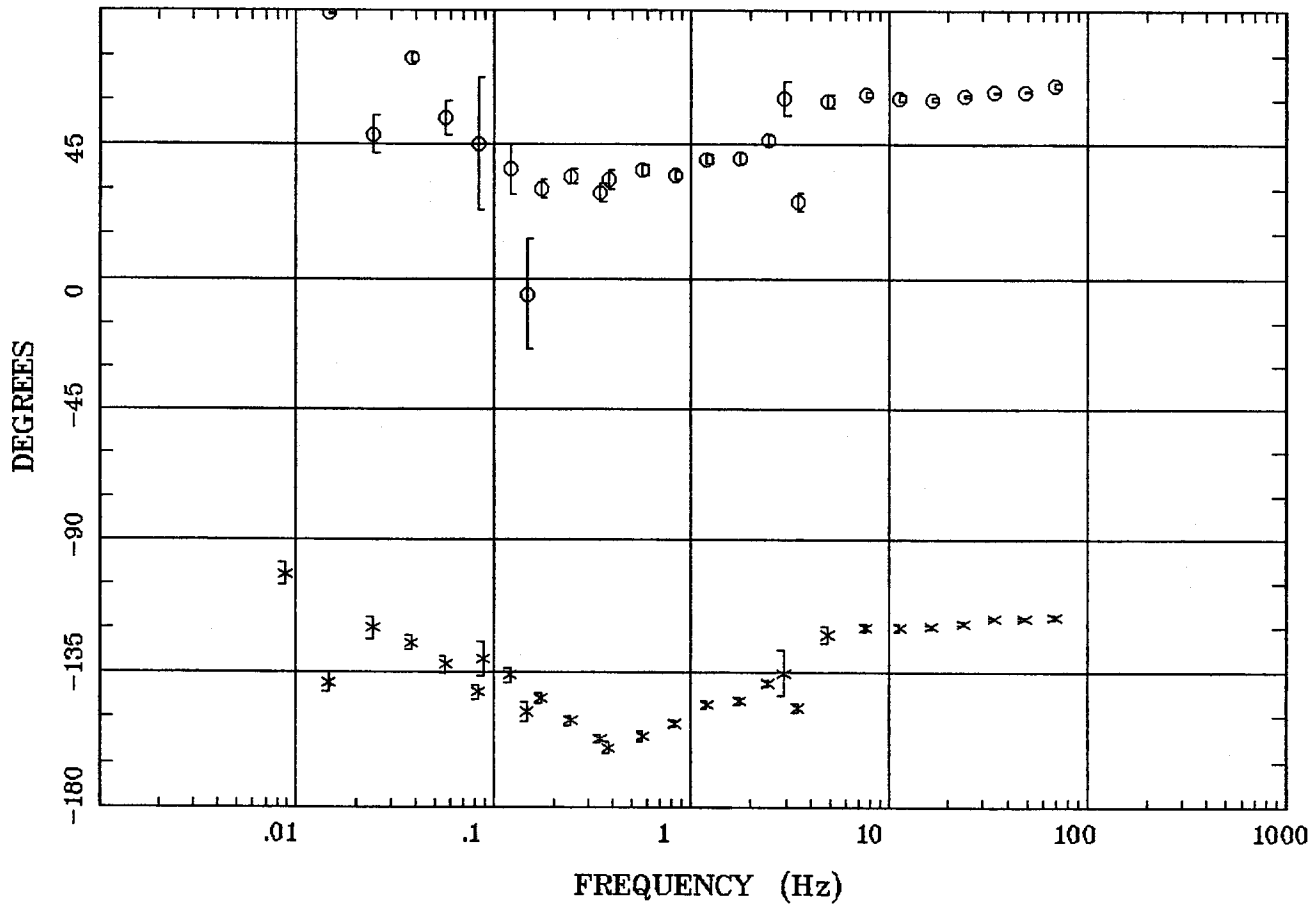


Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE

Alamosa Quad, 100k

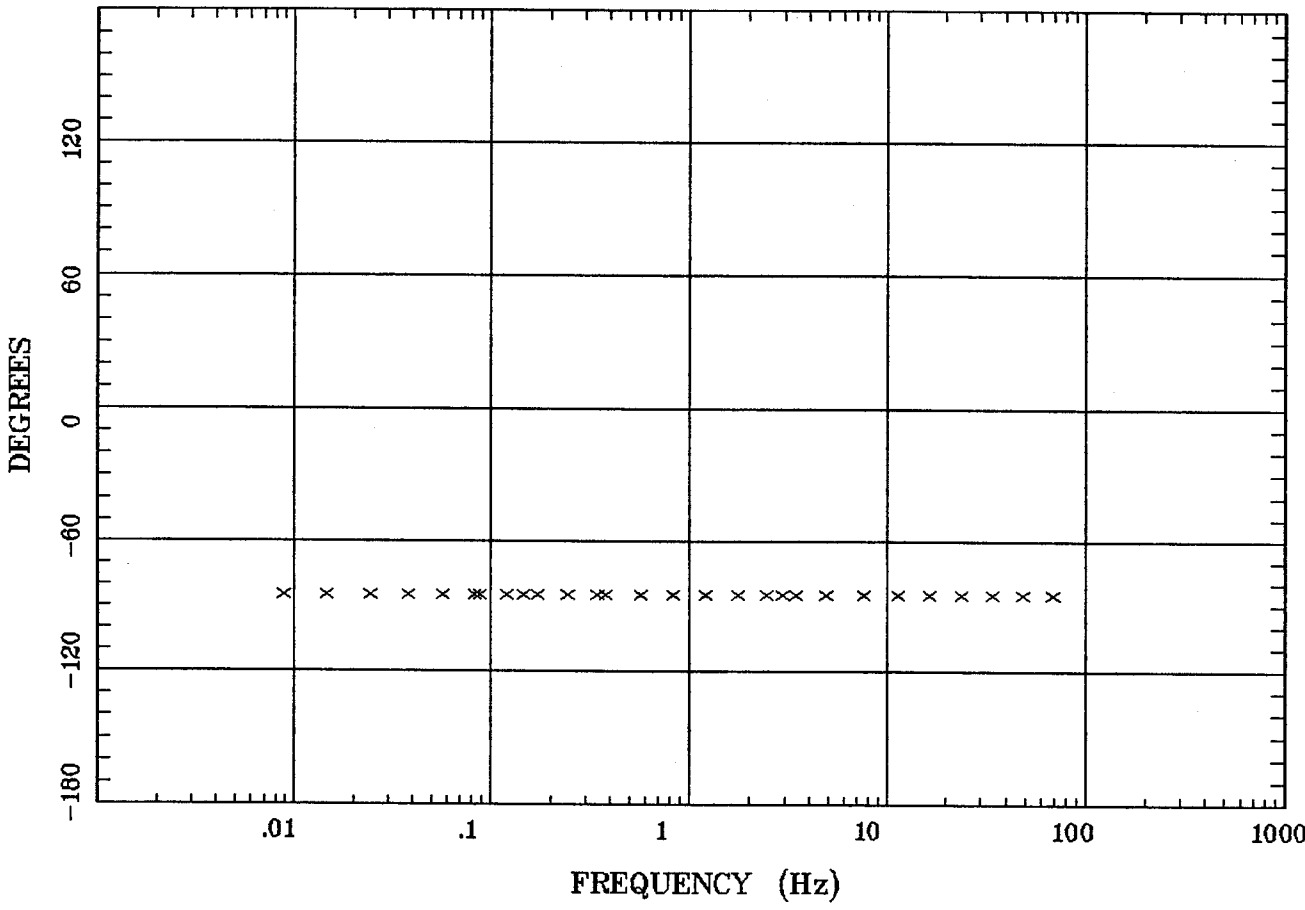


Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

ROTATION ANGLE

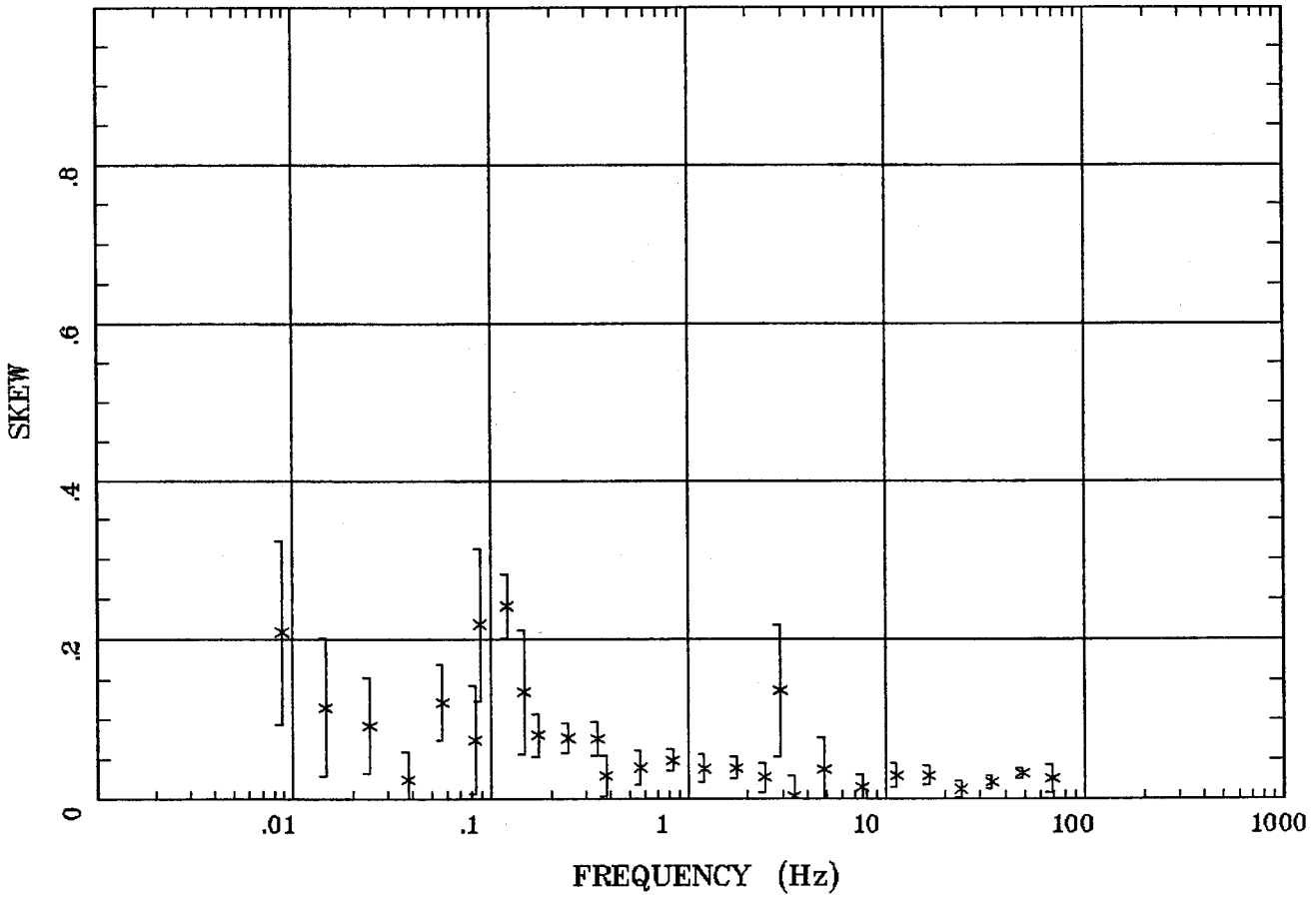
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

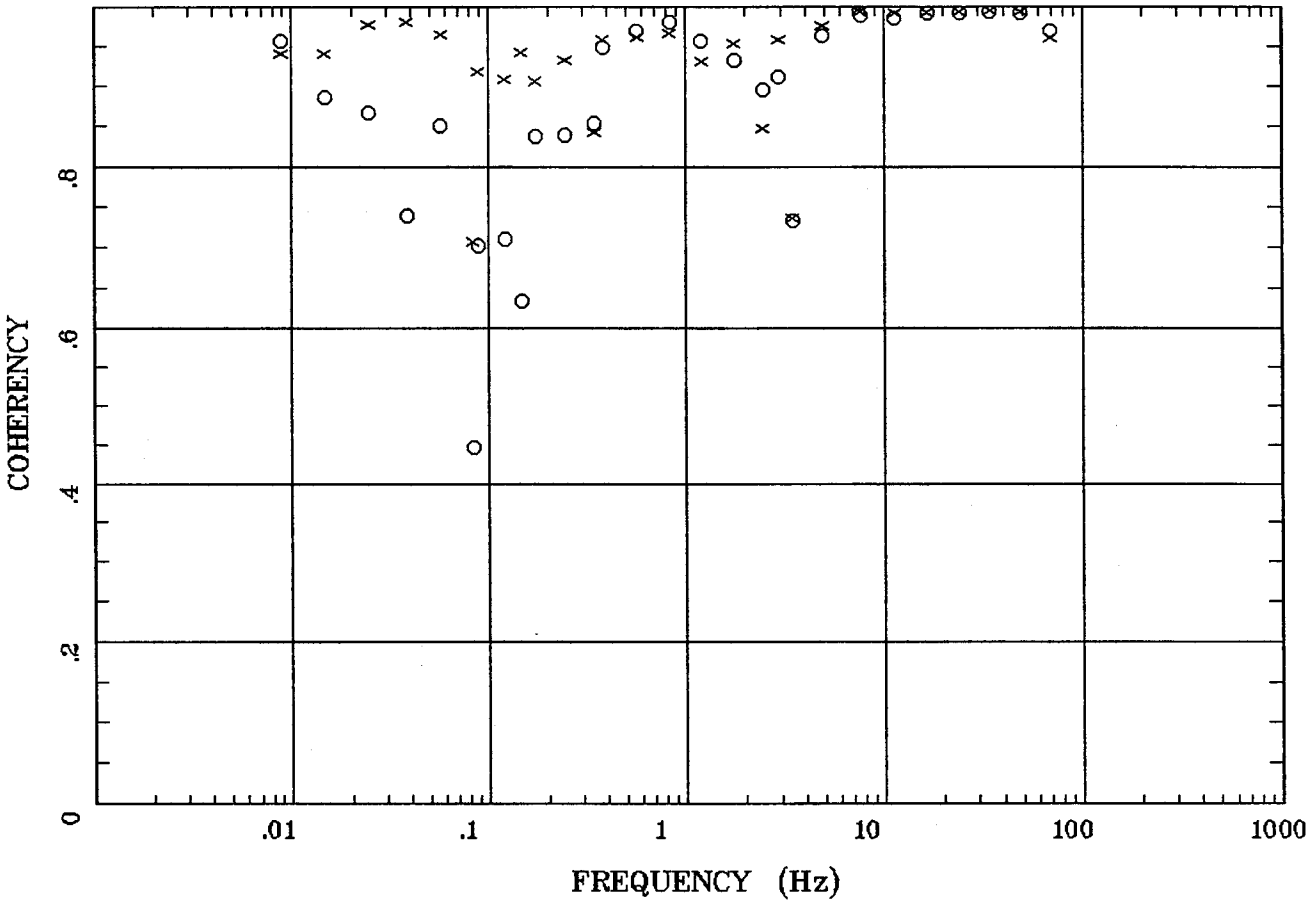
IMPEDANCE SKEW Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k

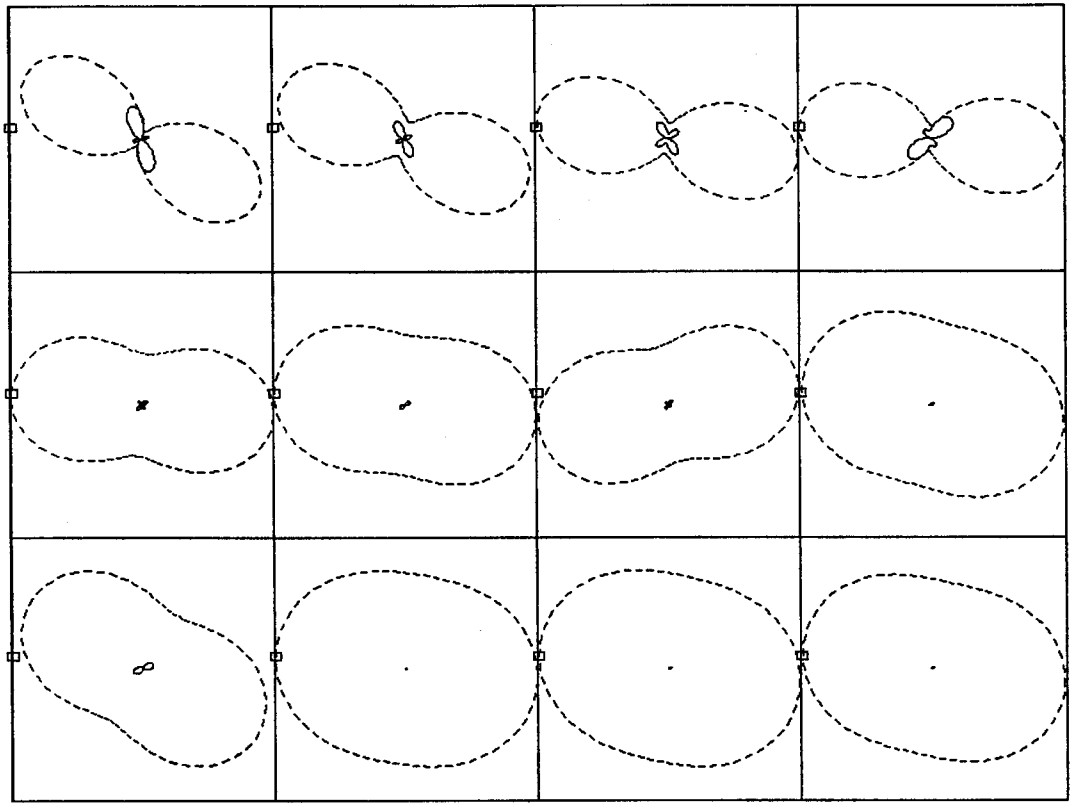


Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k



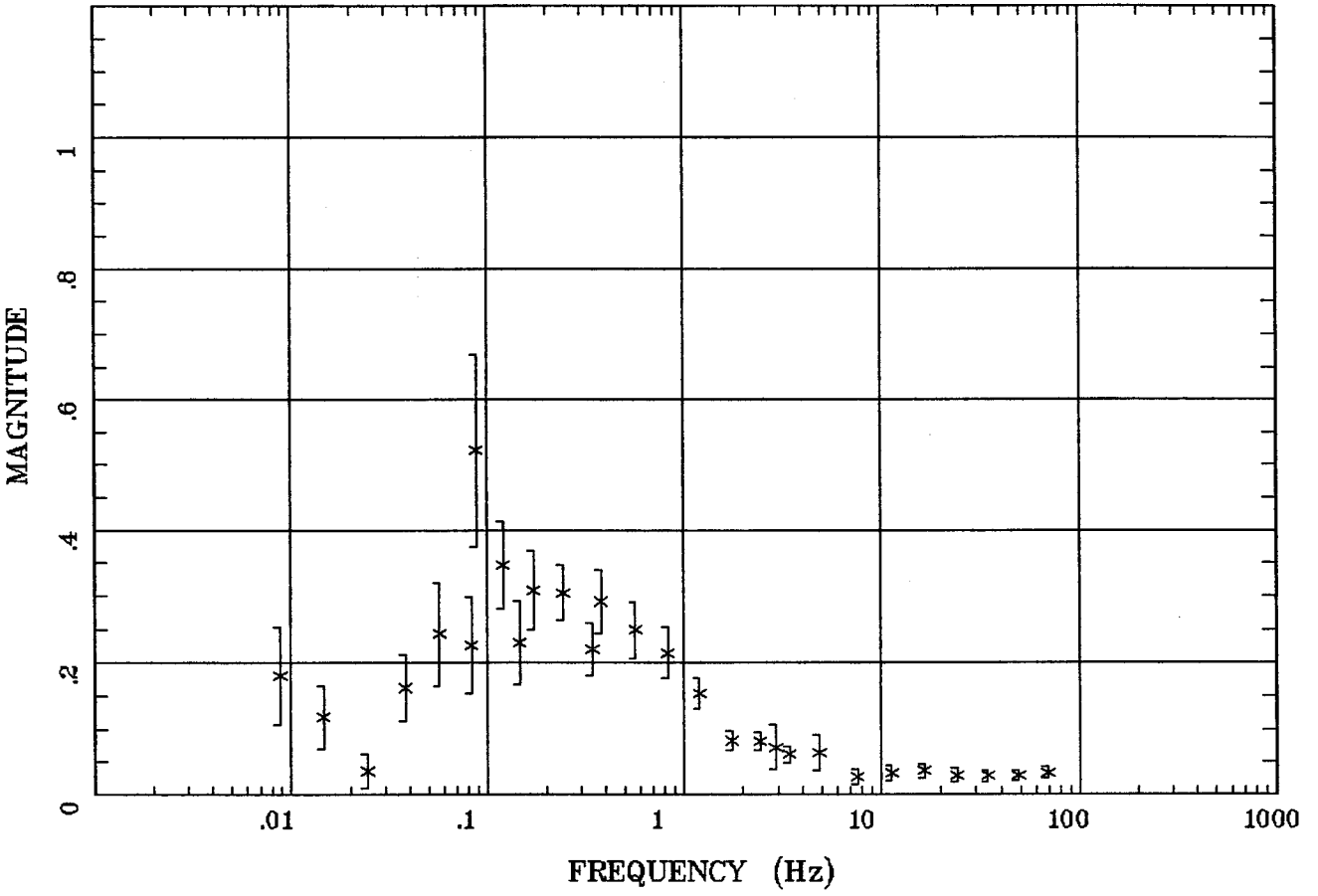
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI – ElectroMagnetic Instruments >

Station 8

TIPPER MAGNITUDE Alamosa Quad, 100k

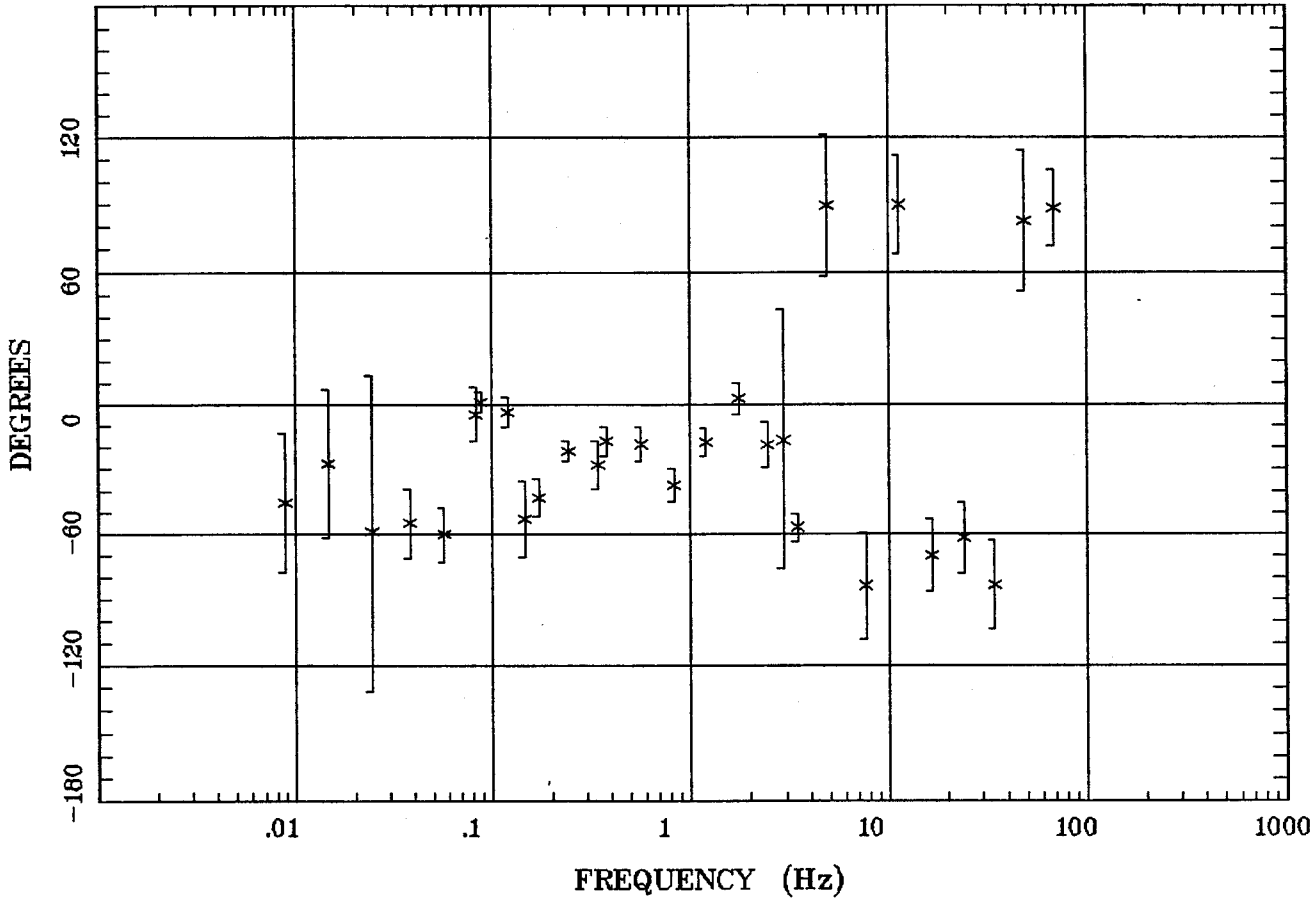


Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

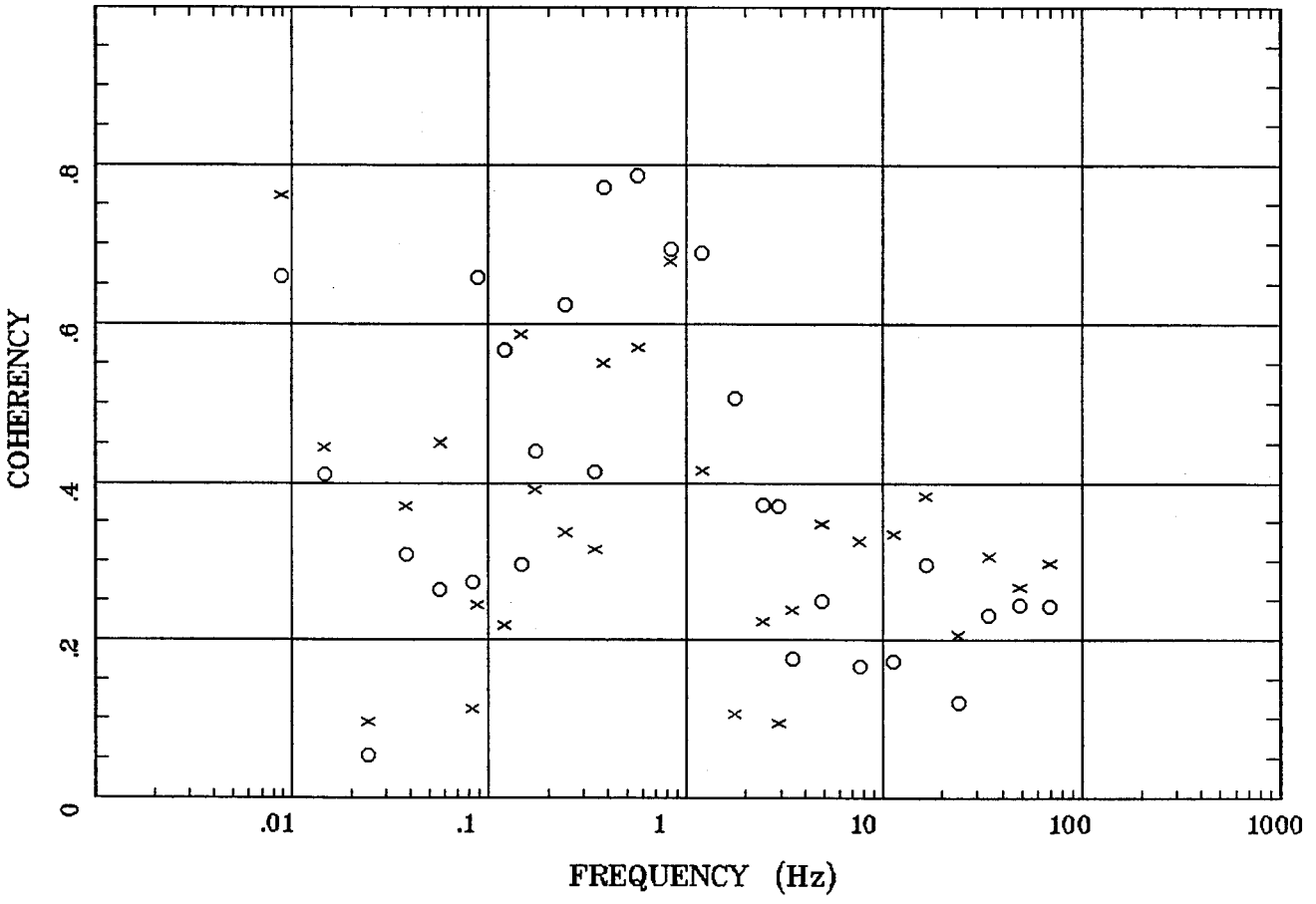


Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

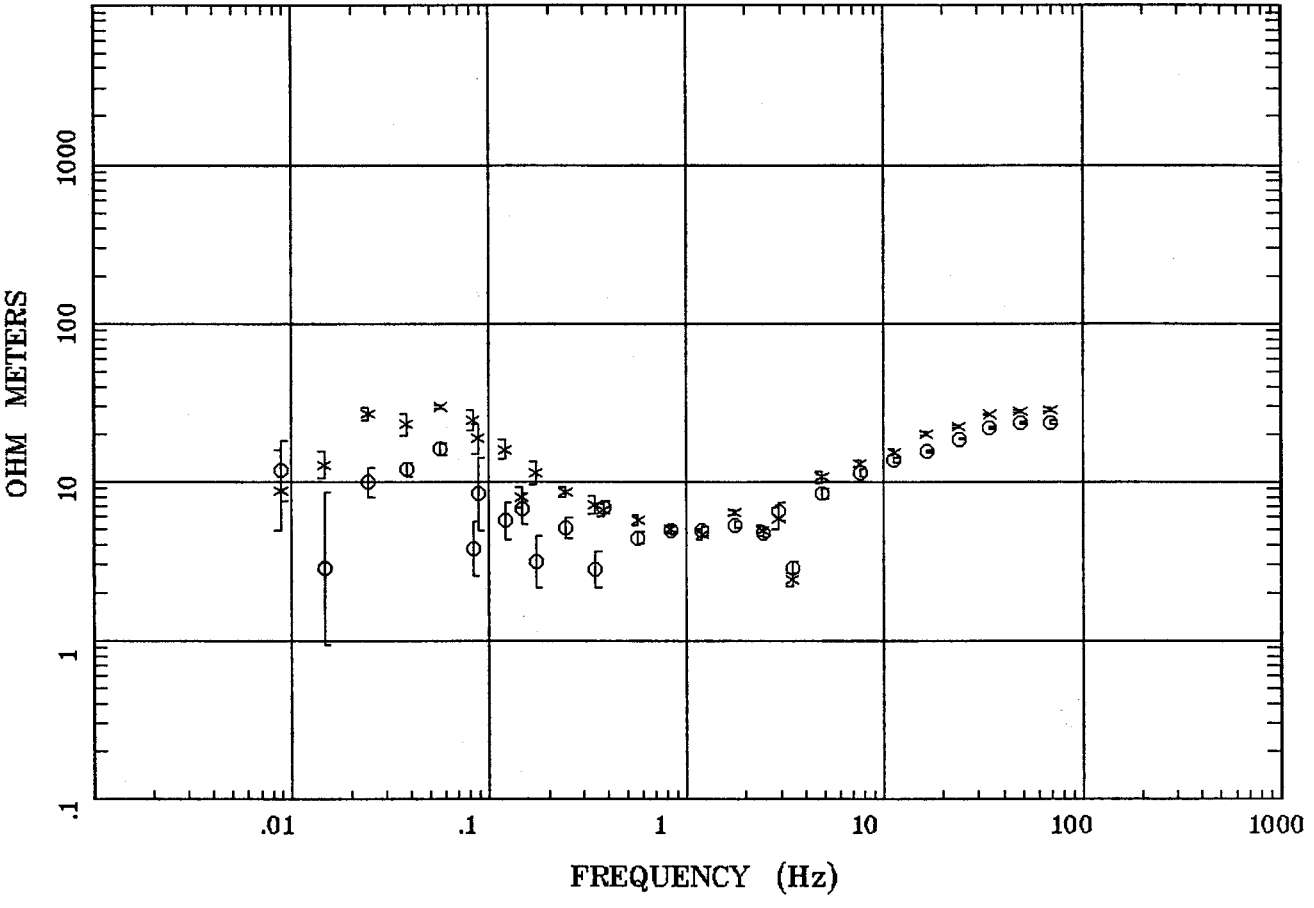
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:3 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl08m1.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:12 Mar 20, 2007
< EMI - ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k



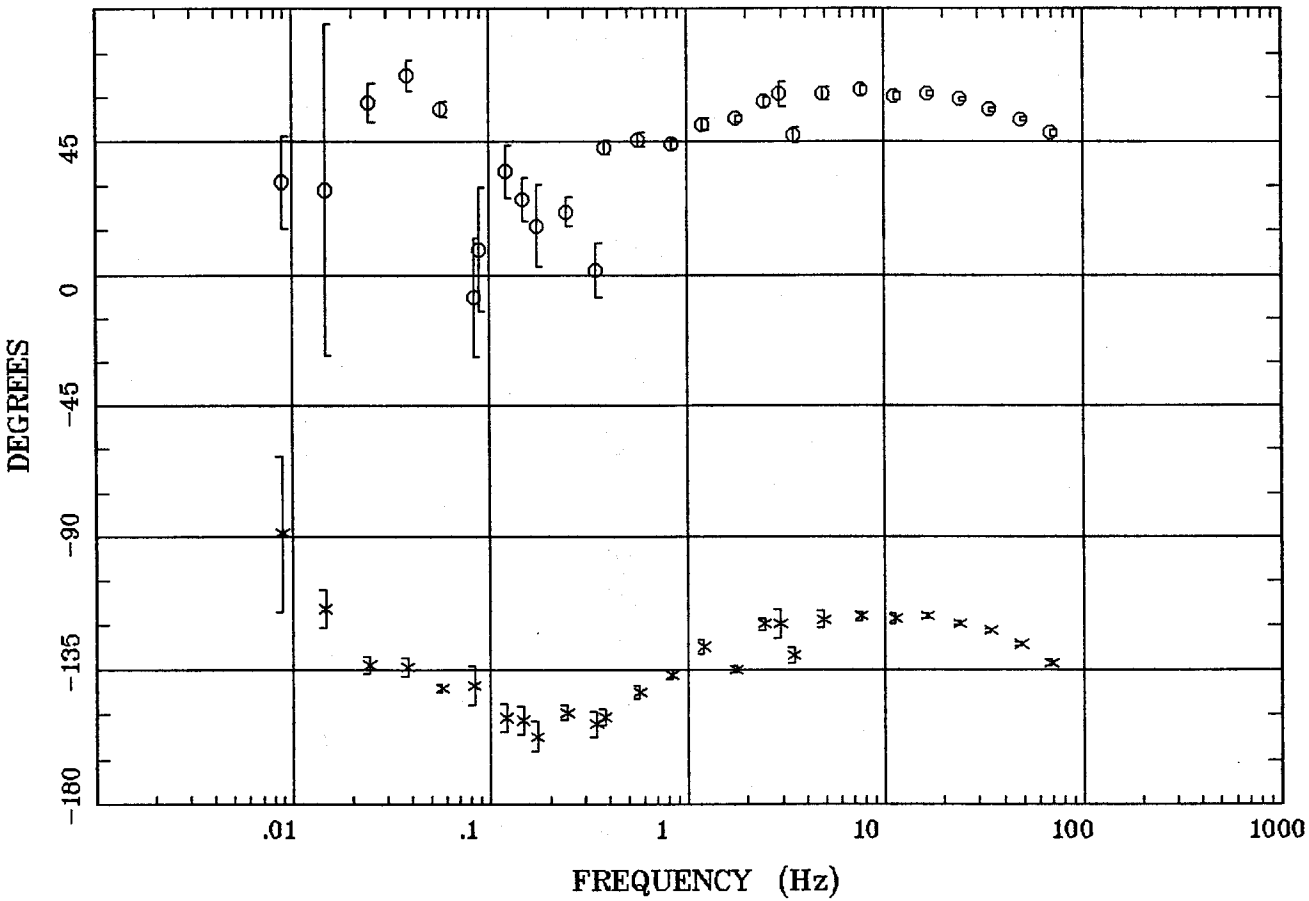
Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

Station 9

IMPEDANCE PHASE

Alamosa Quad, 100k

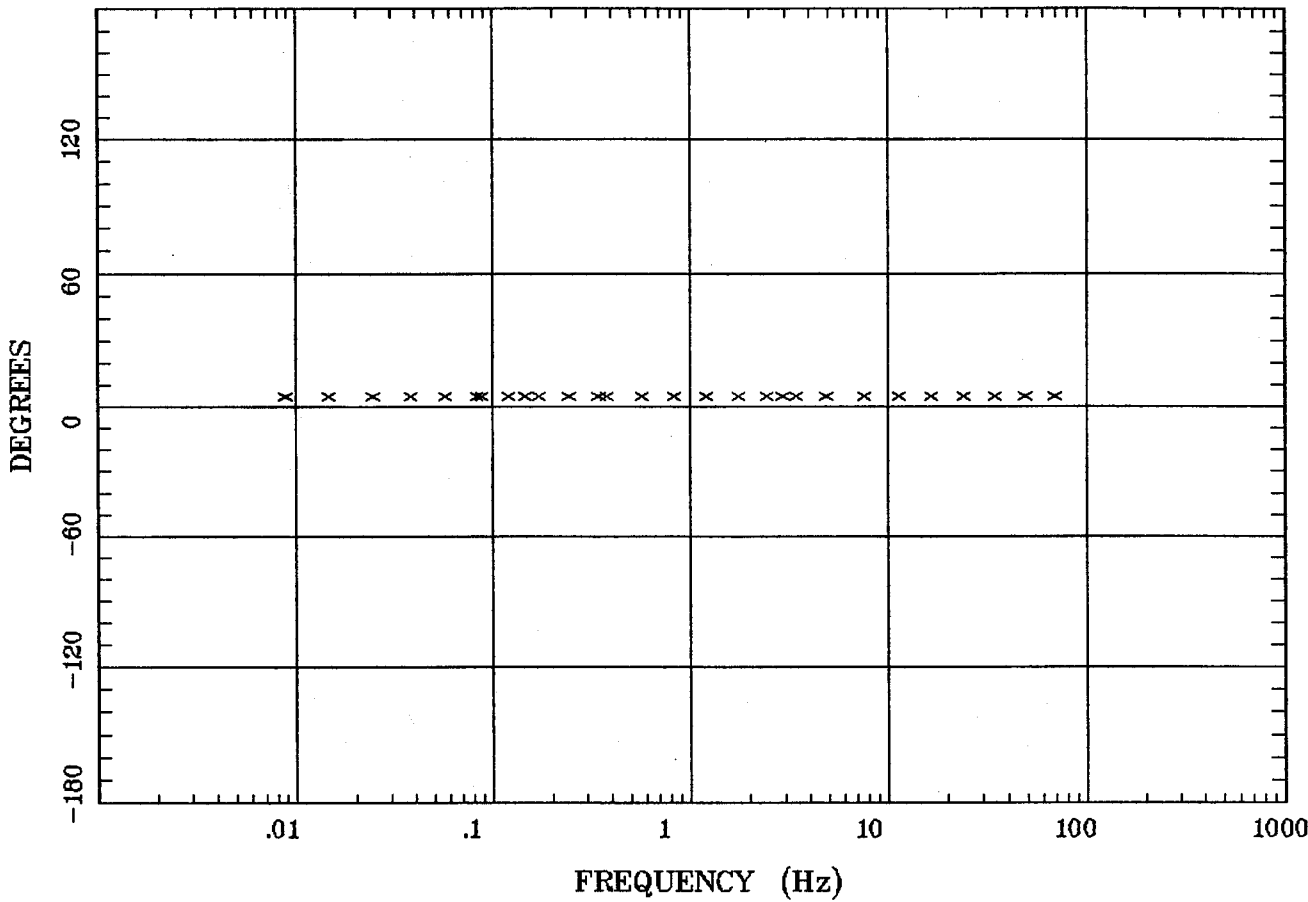


Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

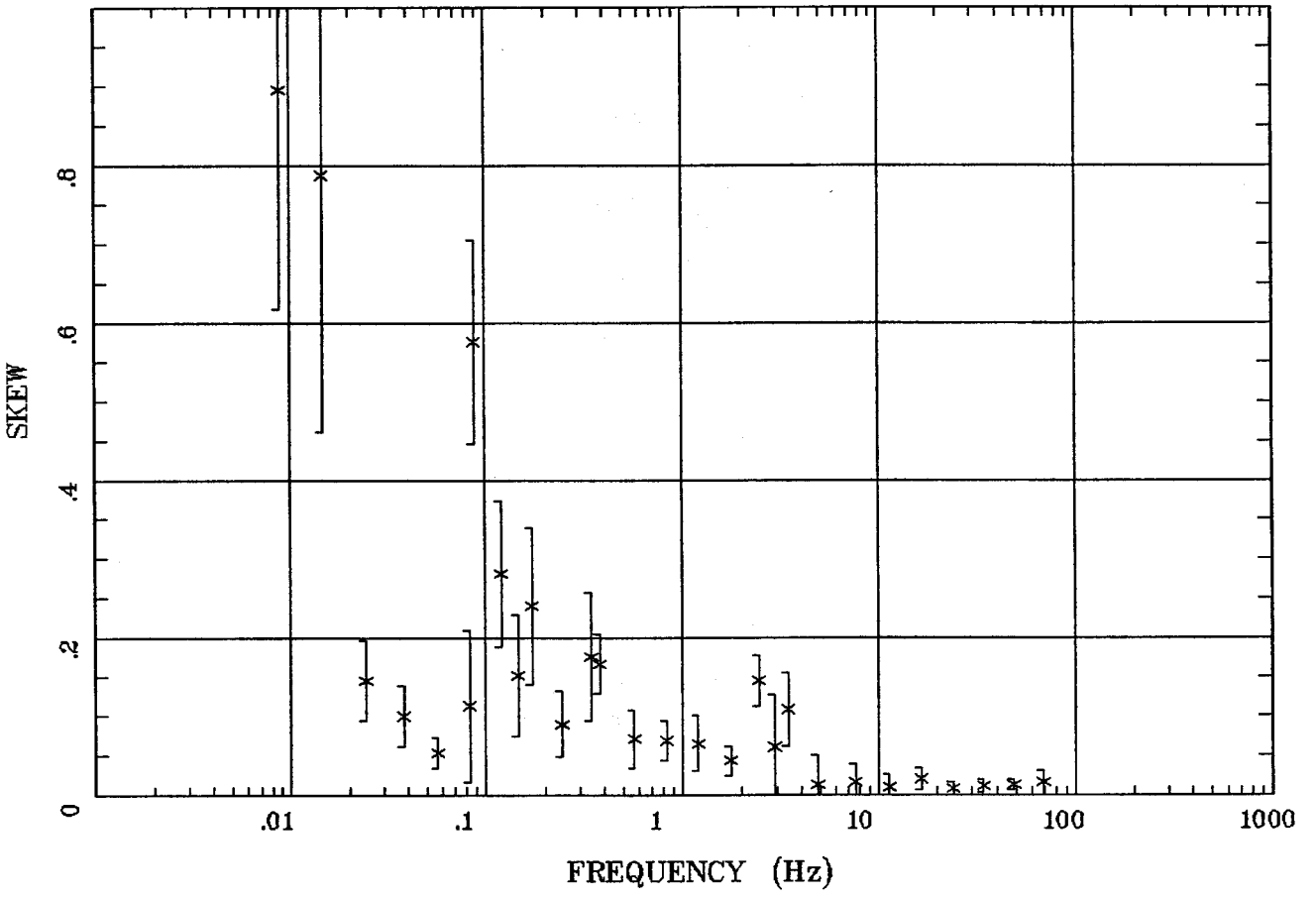
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

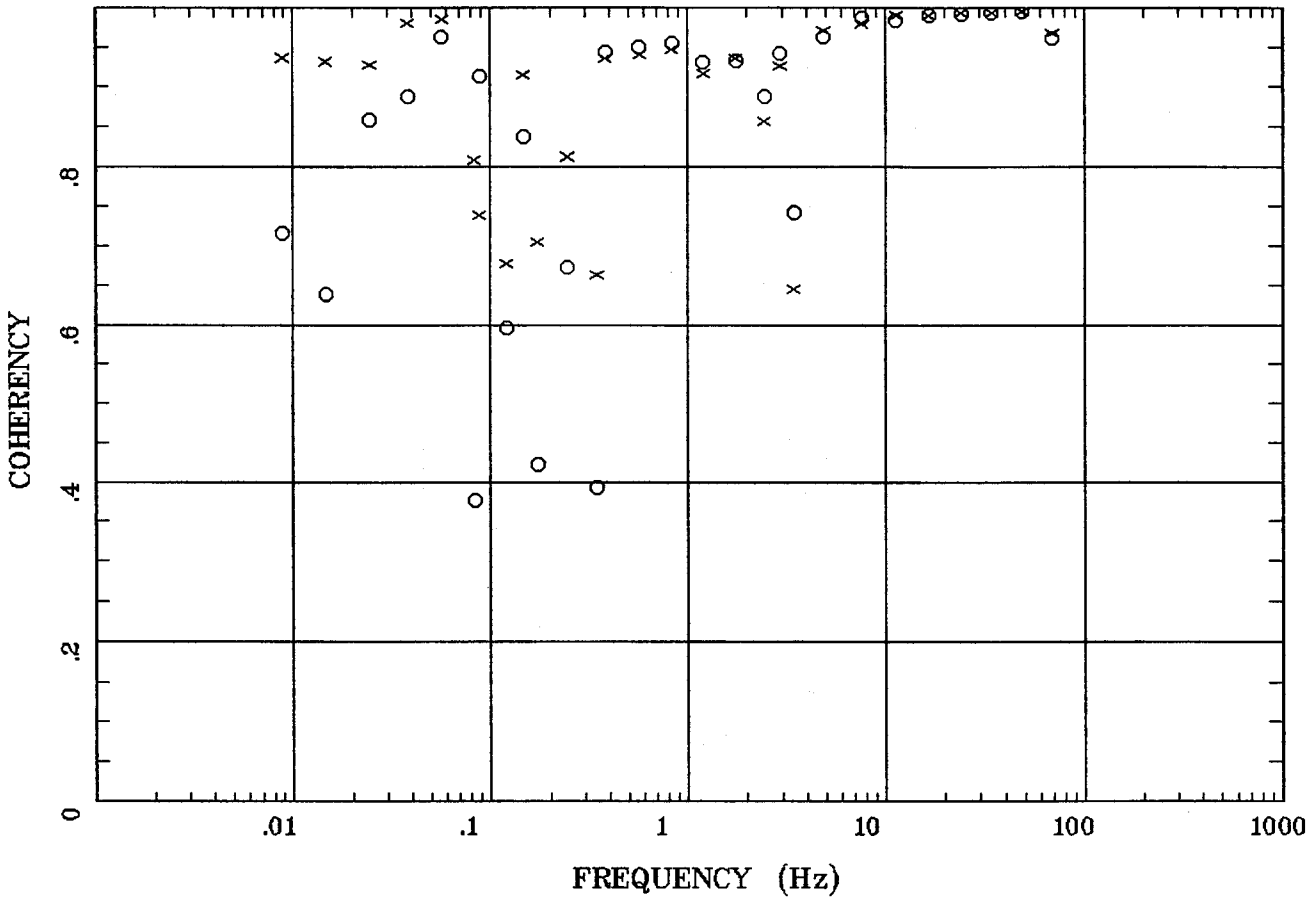
IMPEDANCE SKEW Alamosa Quad, 100k



Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI – ElectroMagnetic Instruments >

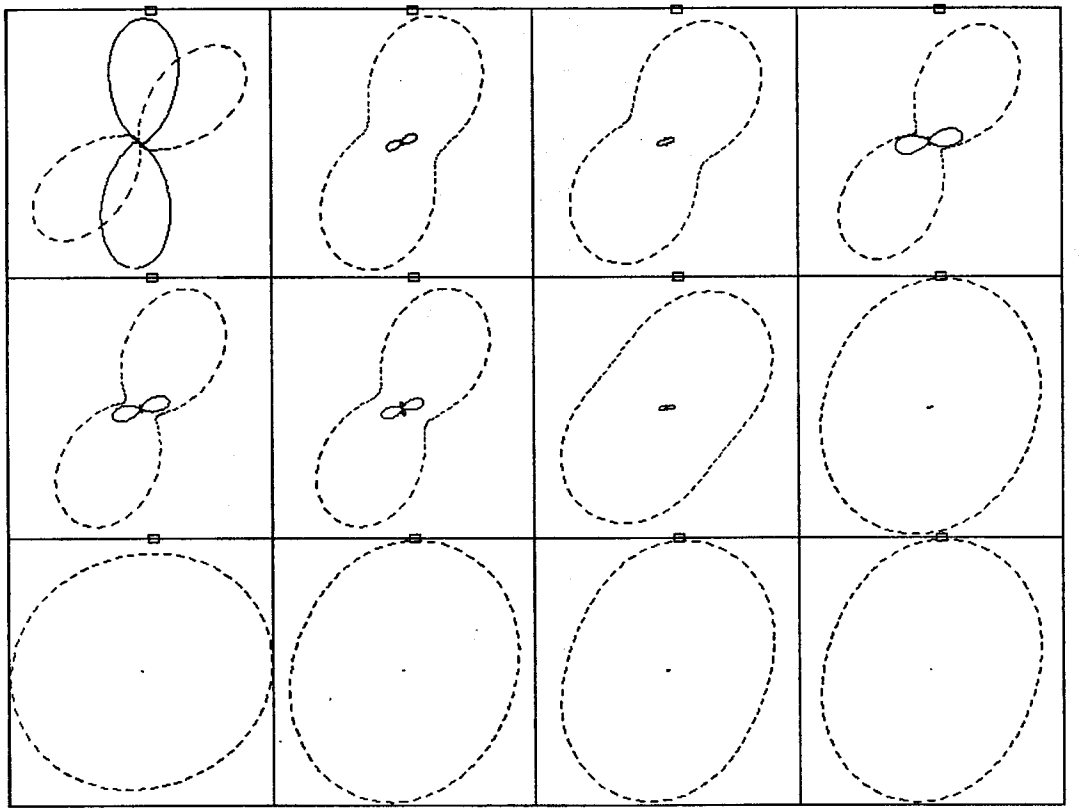
E MULT Coh. Alamosa Quad, 100k



Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k

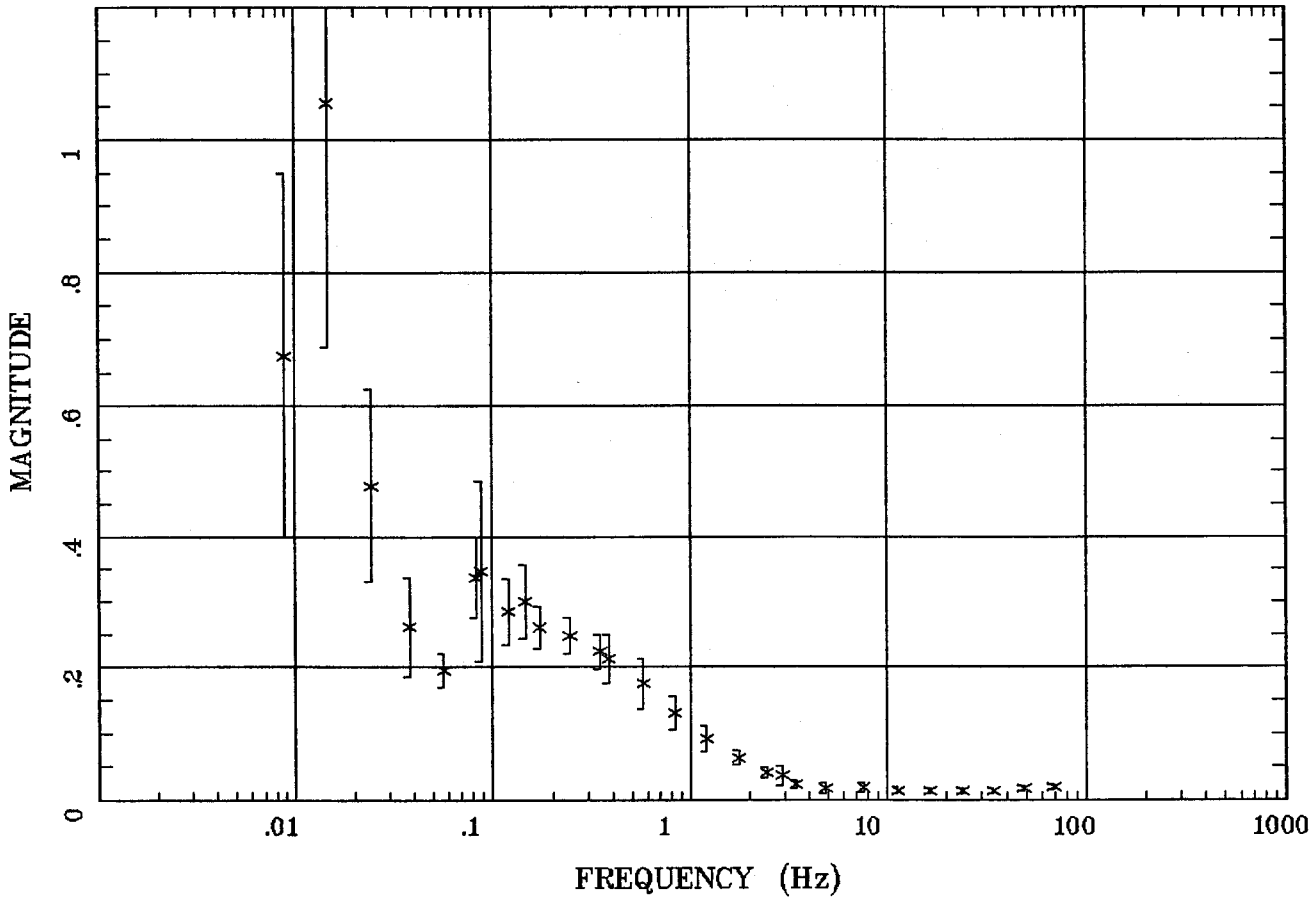


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k

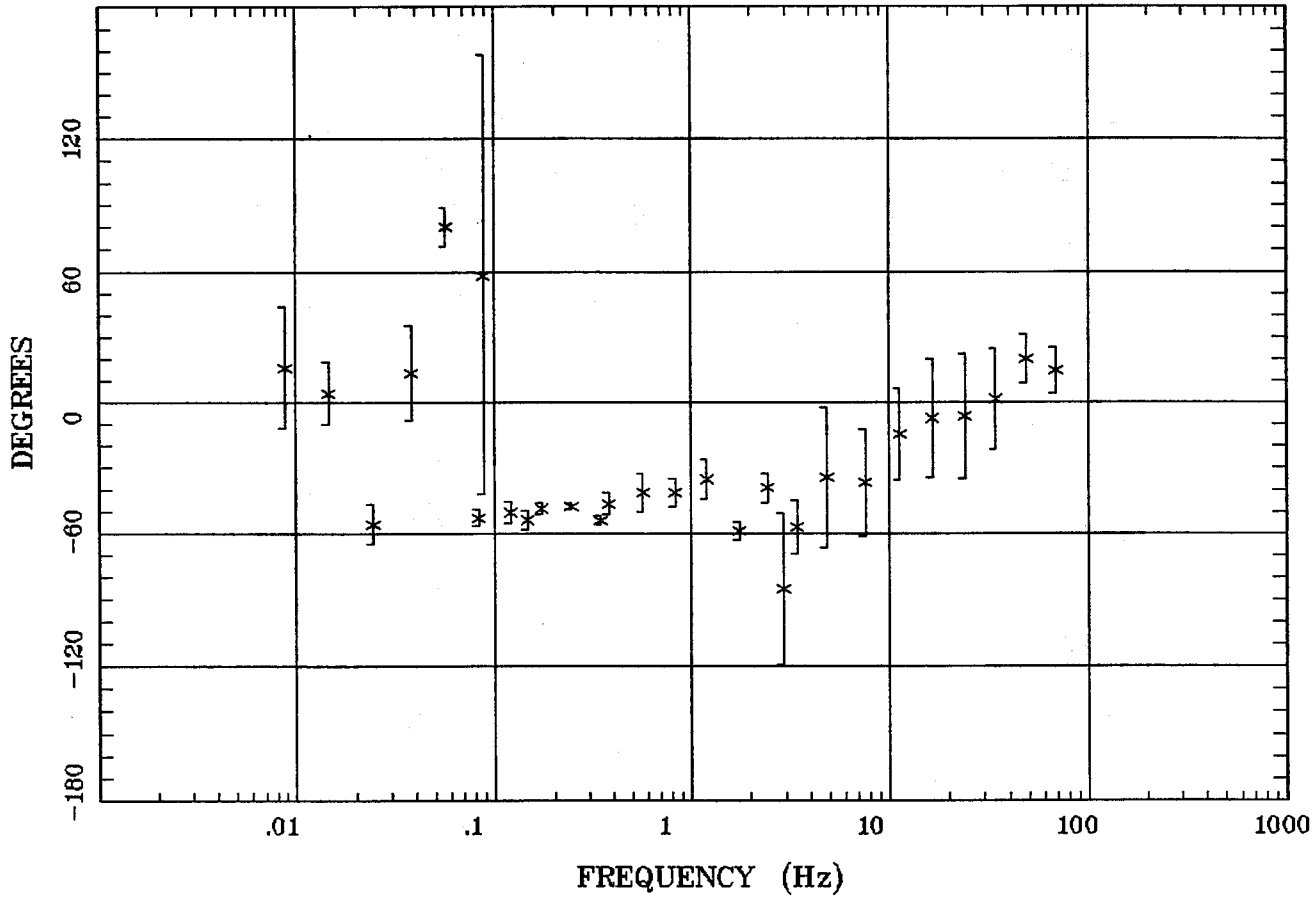


Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

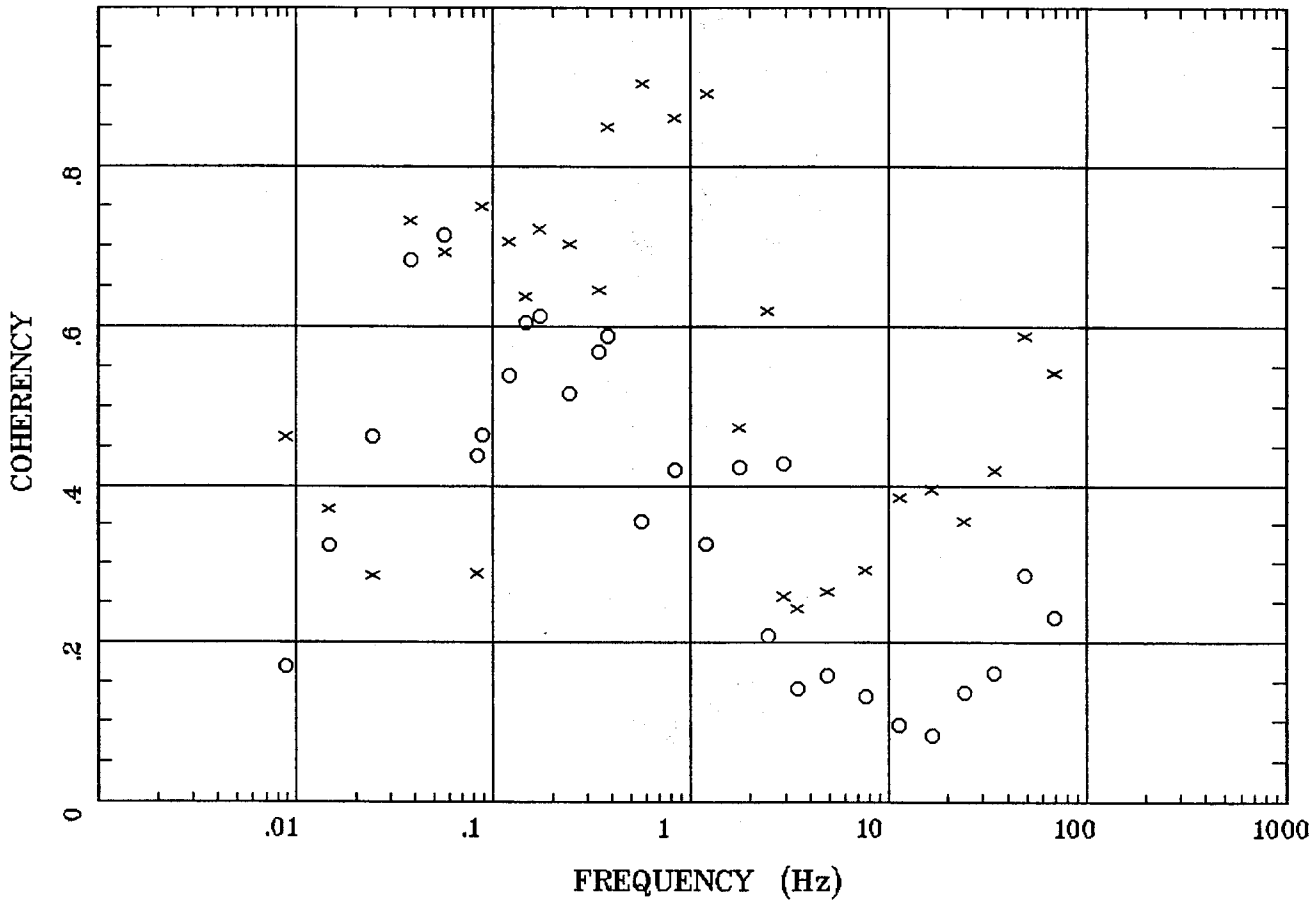


Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

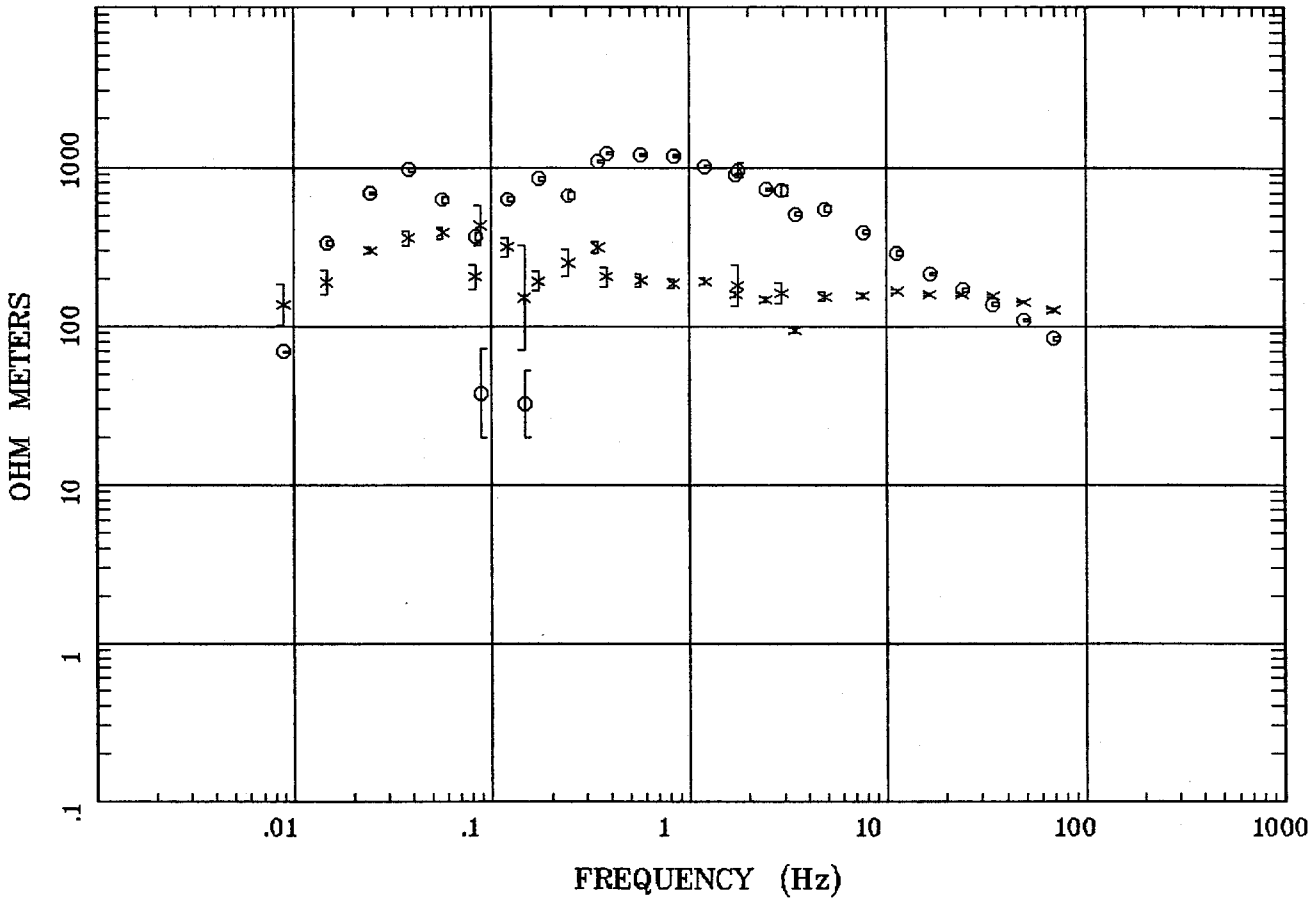


Client:
Remote: none
Acquired: 14:1 Aug 05, 2006
Survey Co:USGS

Rotation:
Filename: sl09m3.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:51 Mar 21, 2007
< EMI – ElectroMagnetic Instruments >

Station 10

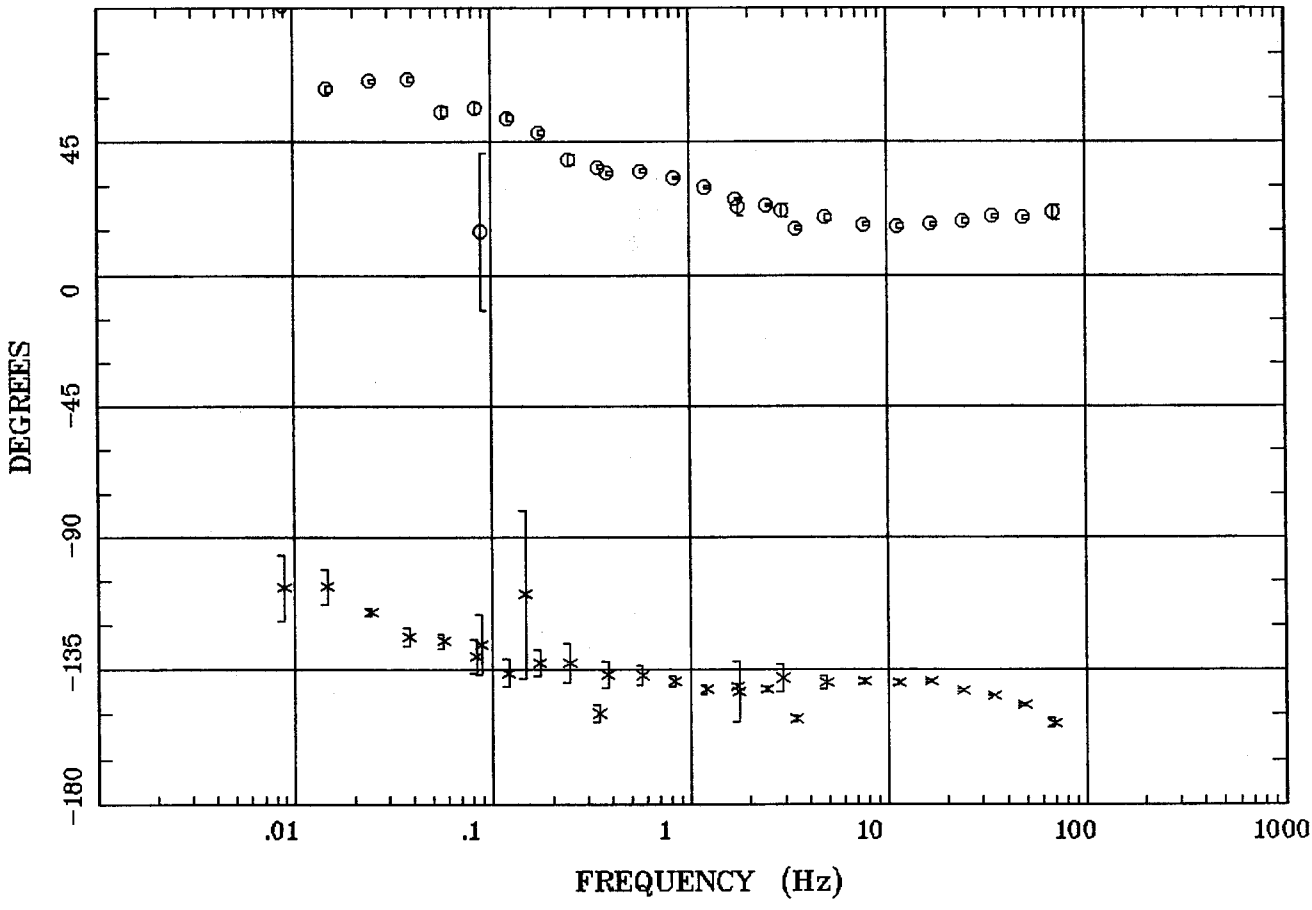
APPARENT RESISTIVITY Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE Alamosa Quad, 100k

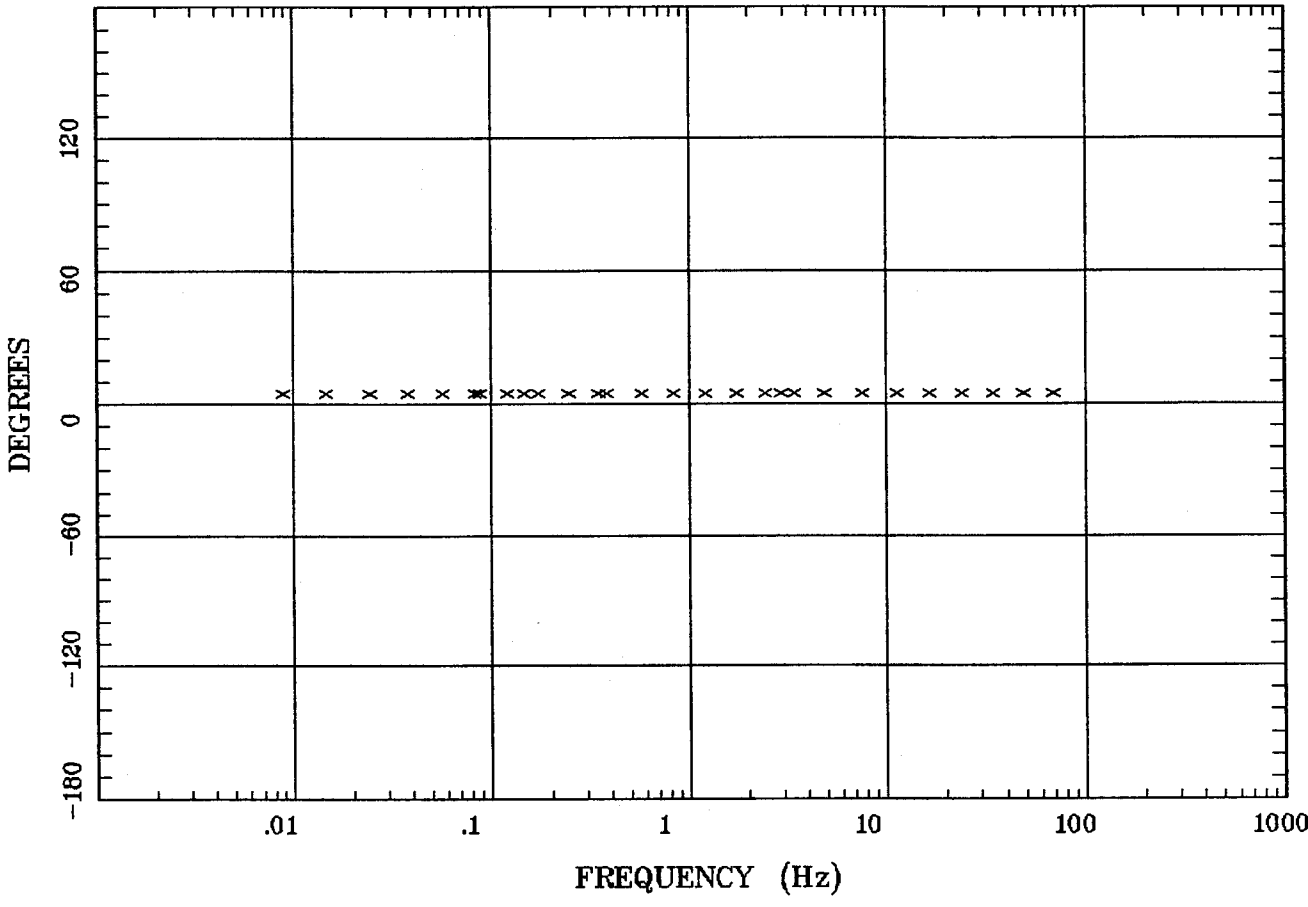


Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI -- ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

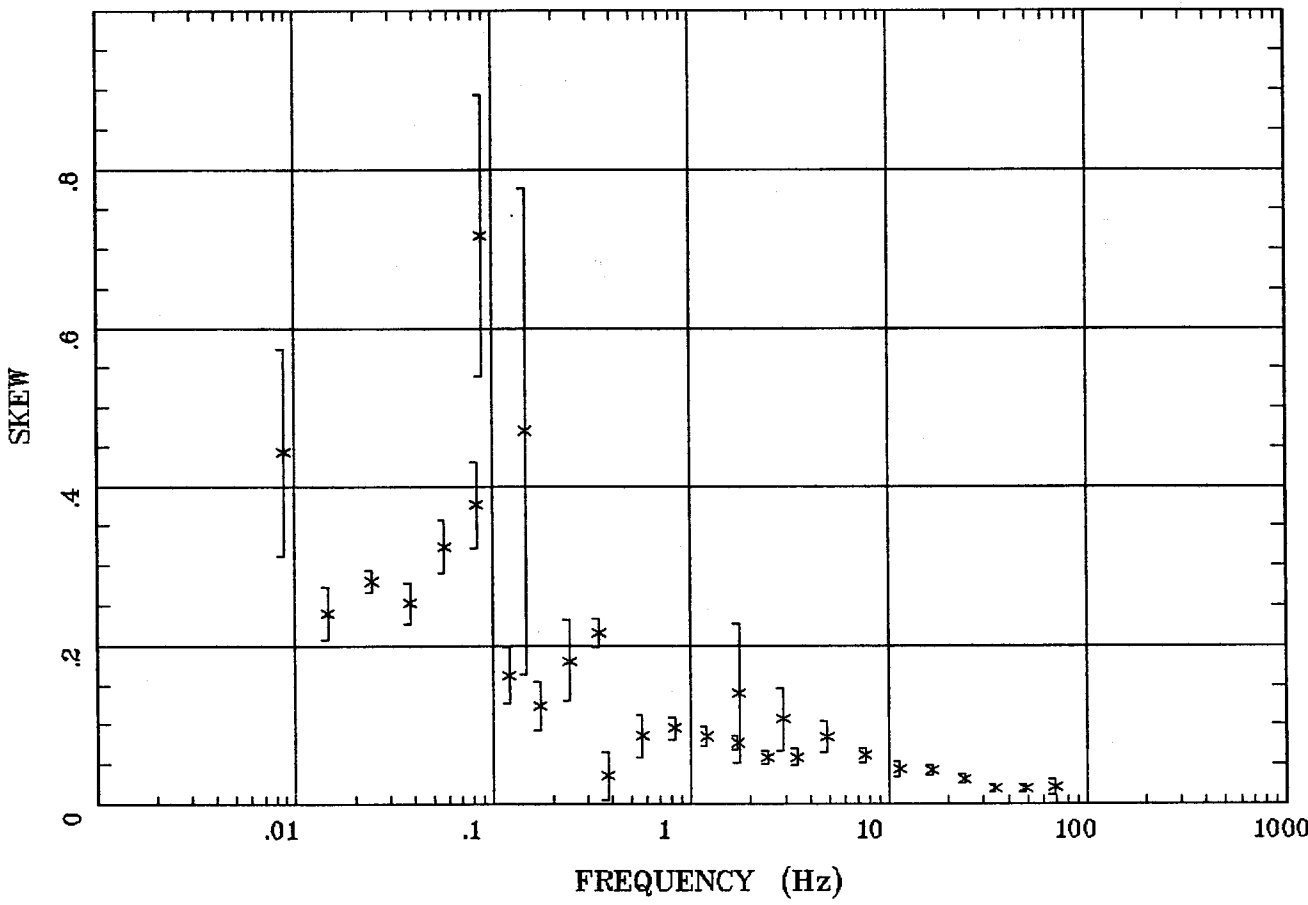


Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 11:08 Sep 24, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

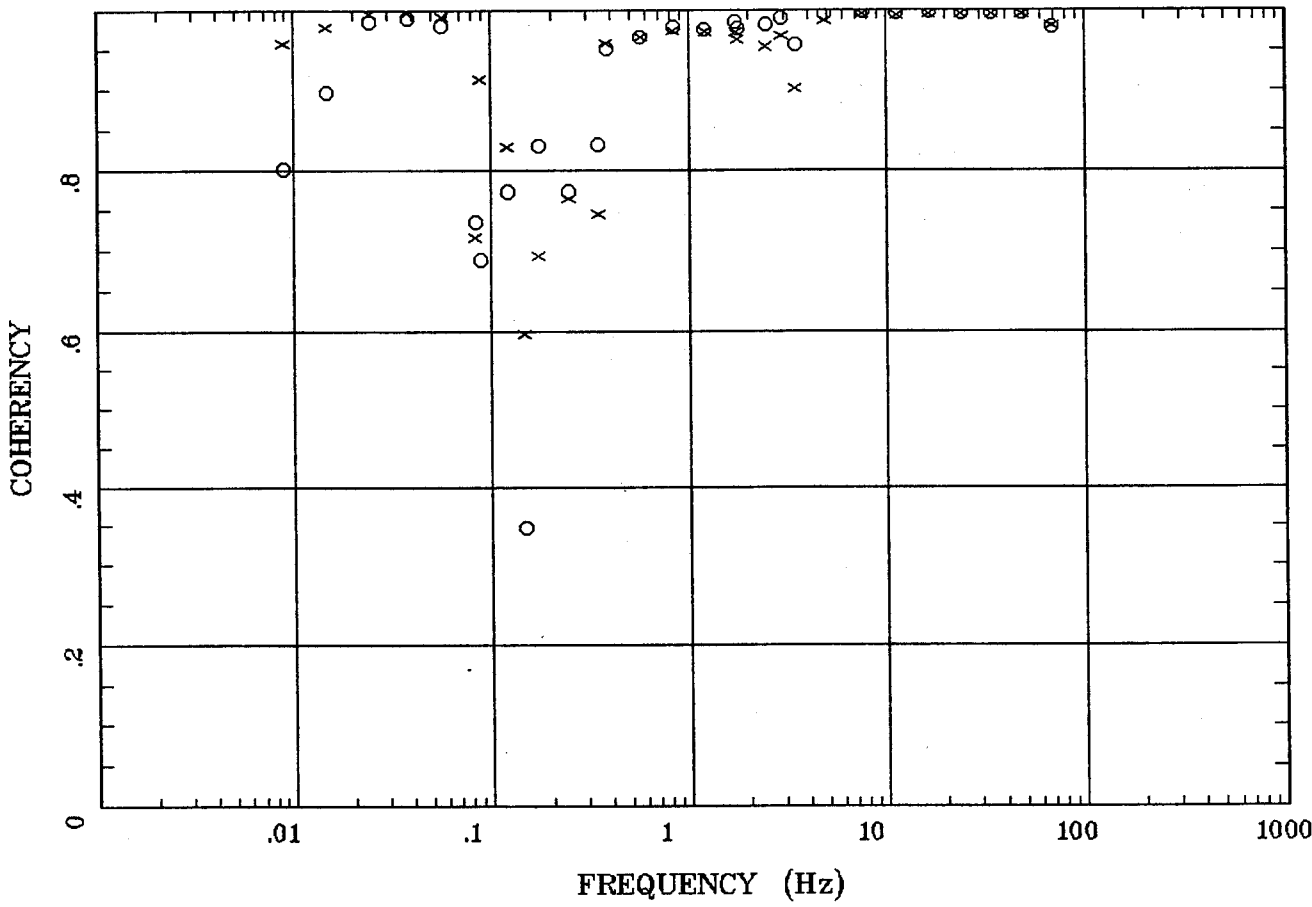
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k

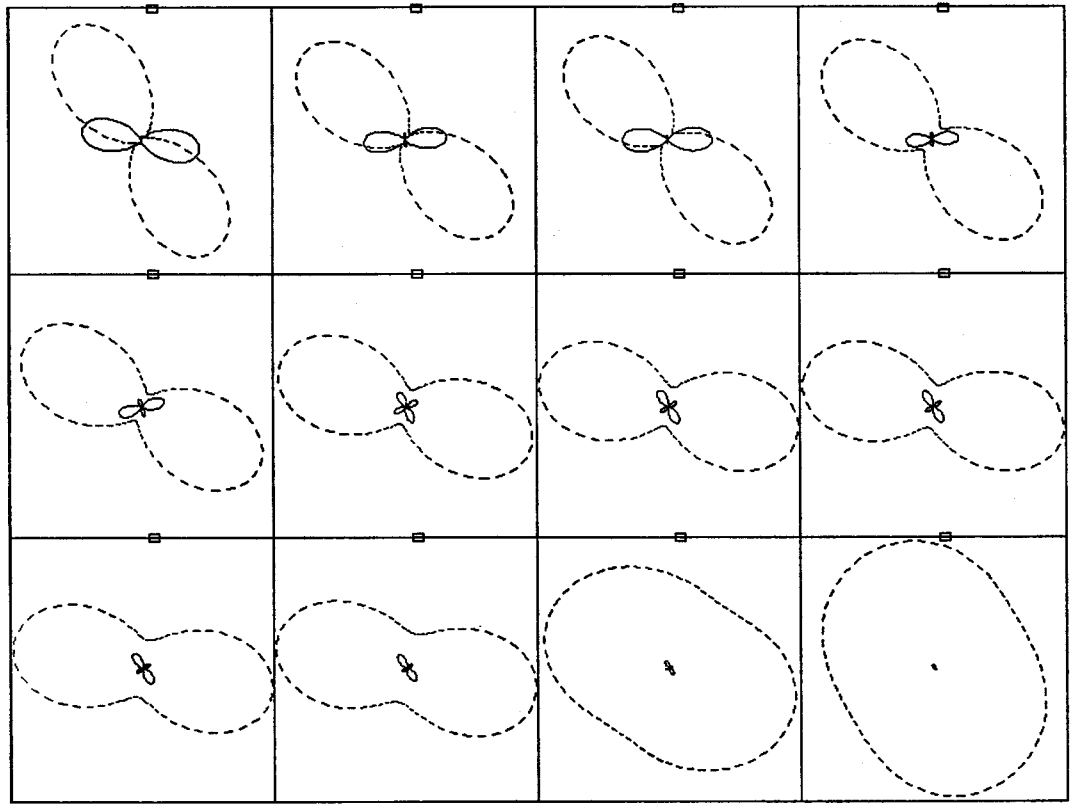


Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k



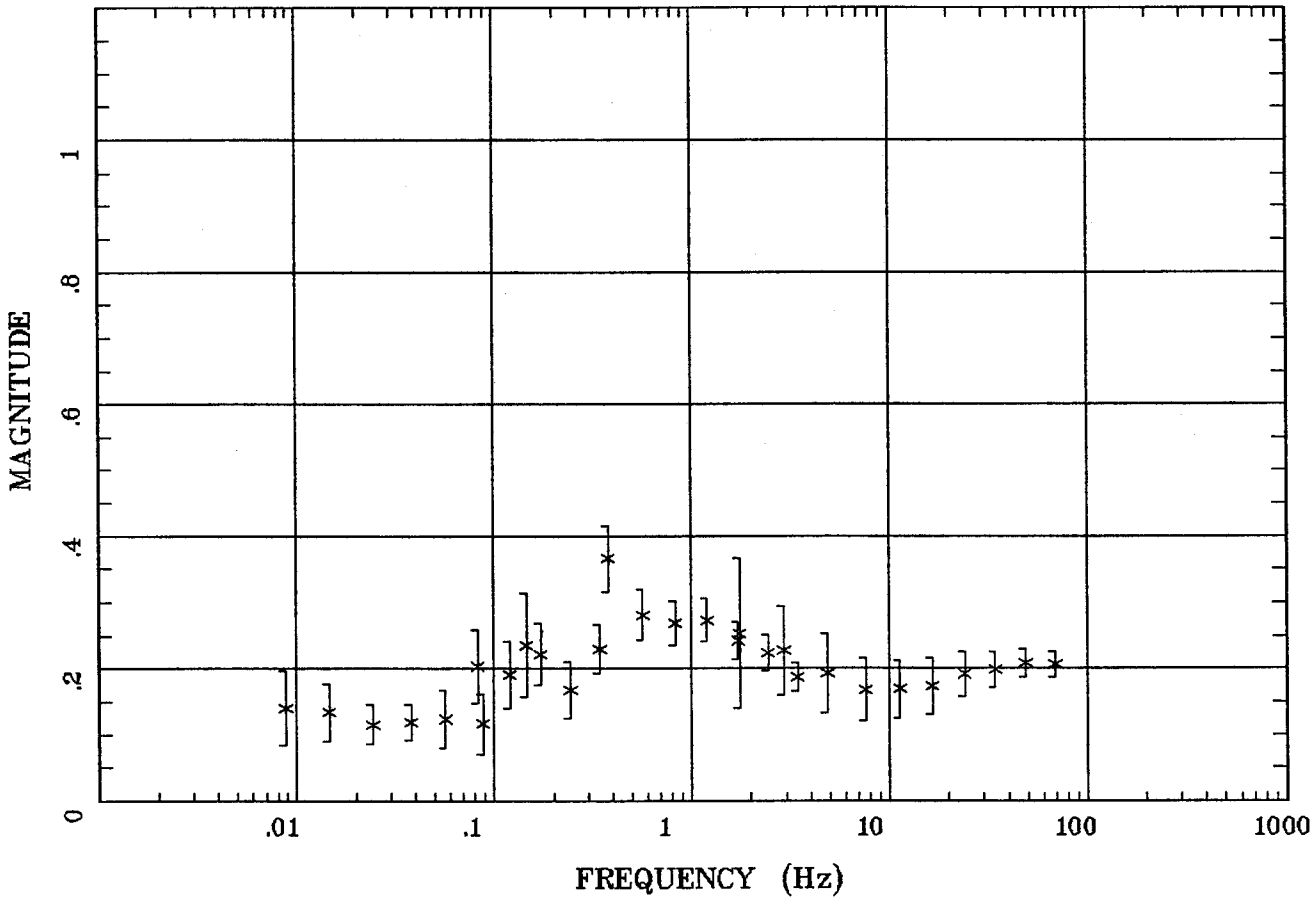
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.381 Hz	.830 Hz	1.719 Hz
2.930 Hz	4.883 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE

Alamosa Quad, 100k

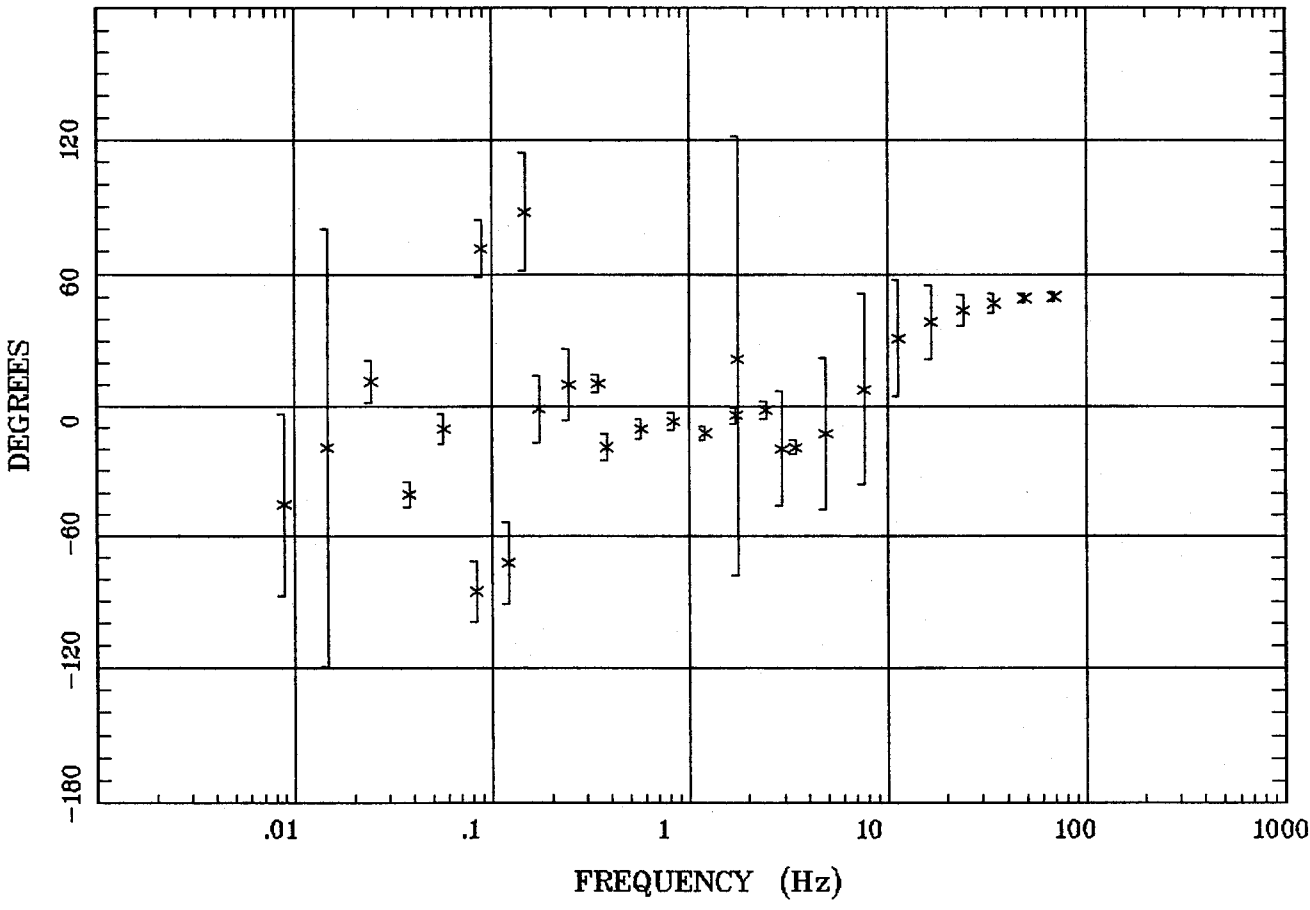


Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

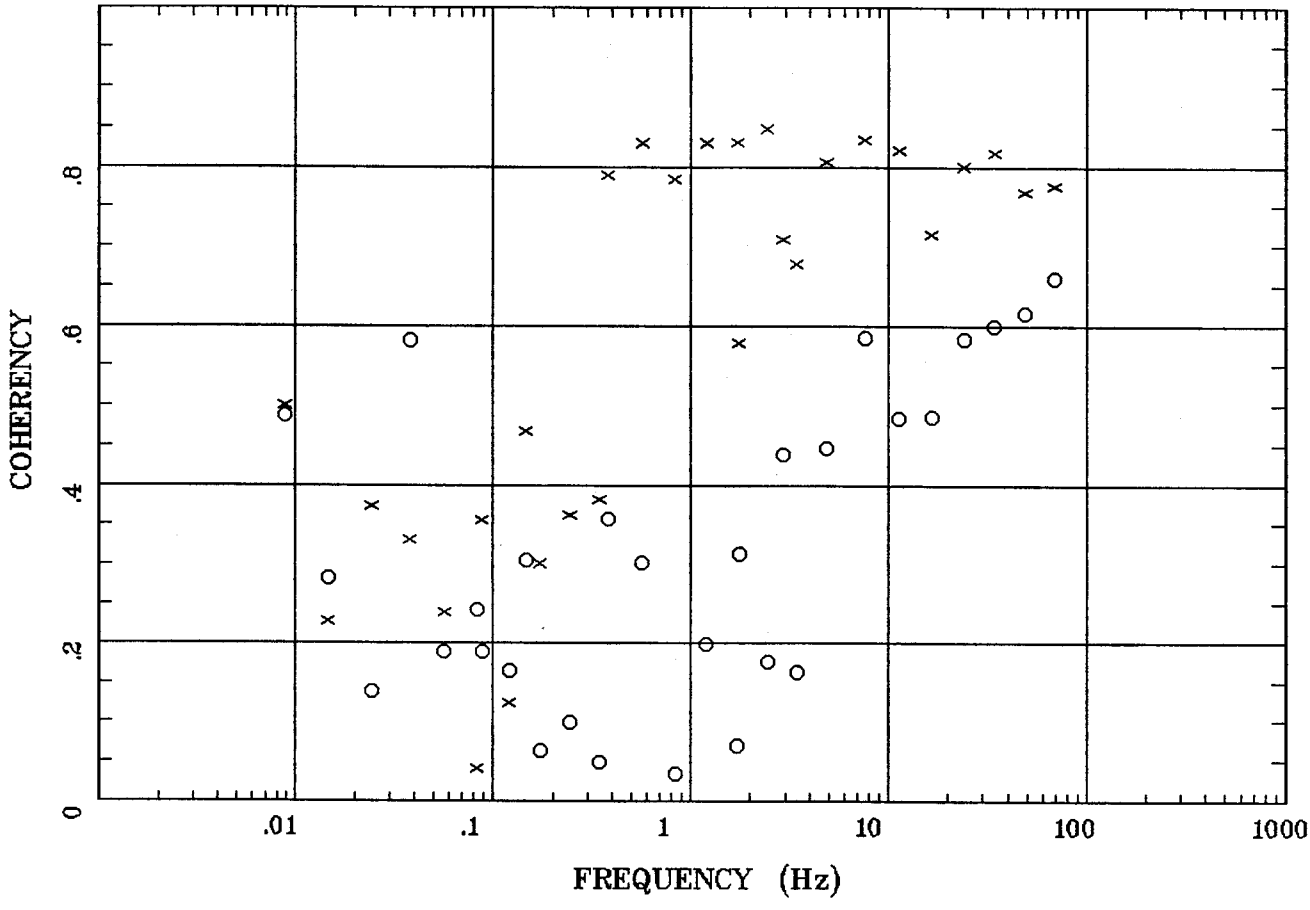


Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

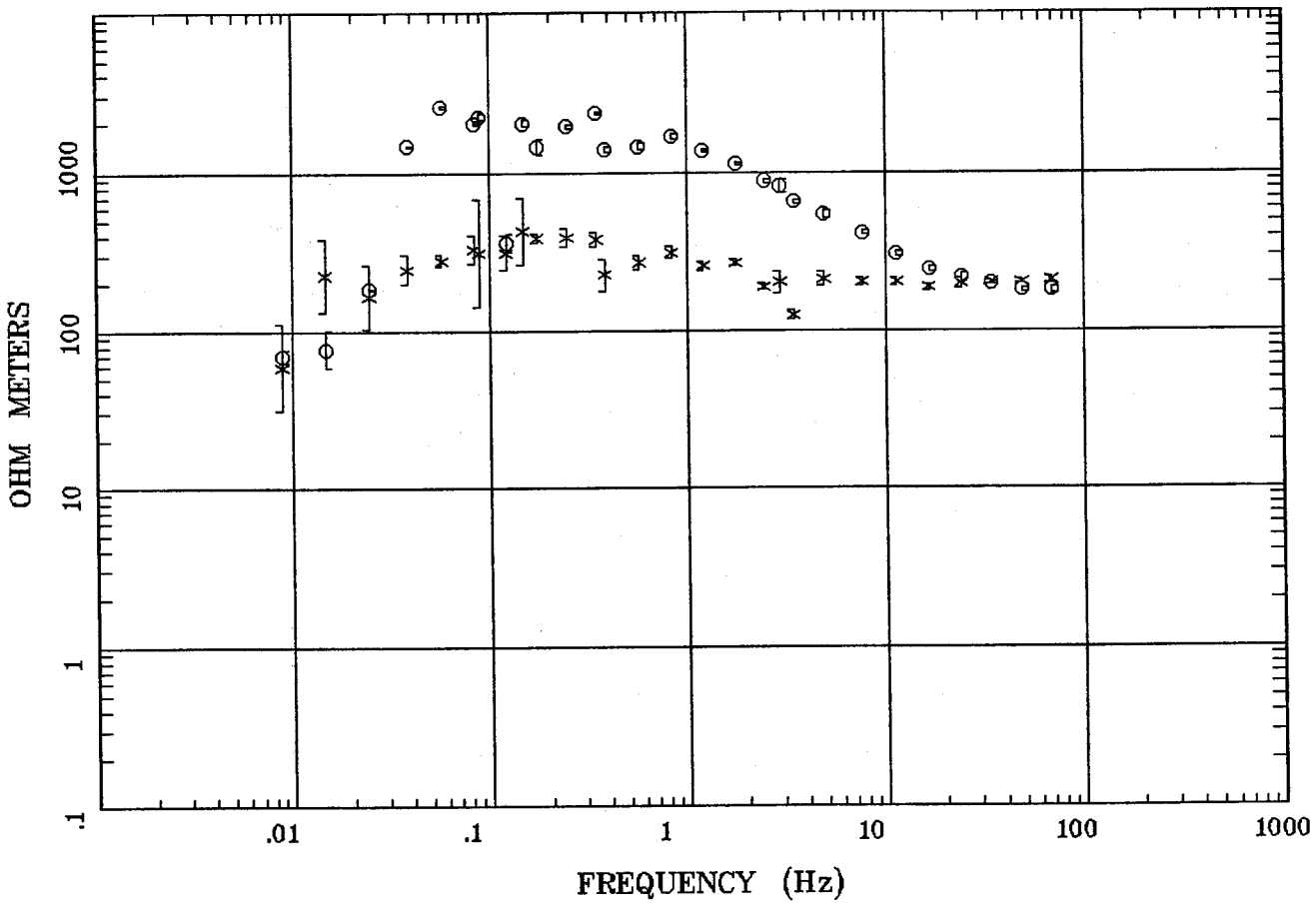


Client:
Remote: none
Acquired: 09:4 Aug 06, 2006
Survey Co:USGS

Rotation:
Filename: sl10mall.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:14 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

Station 11

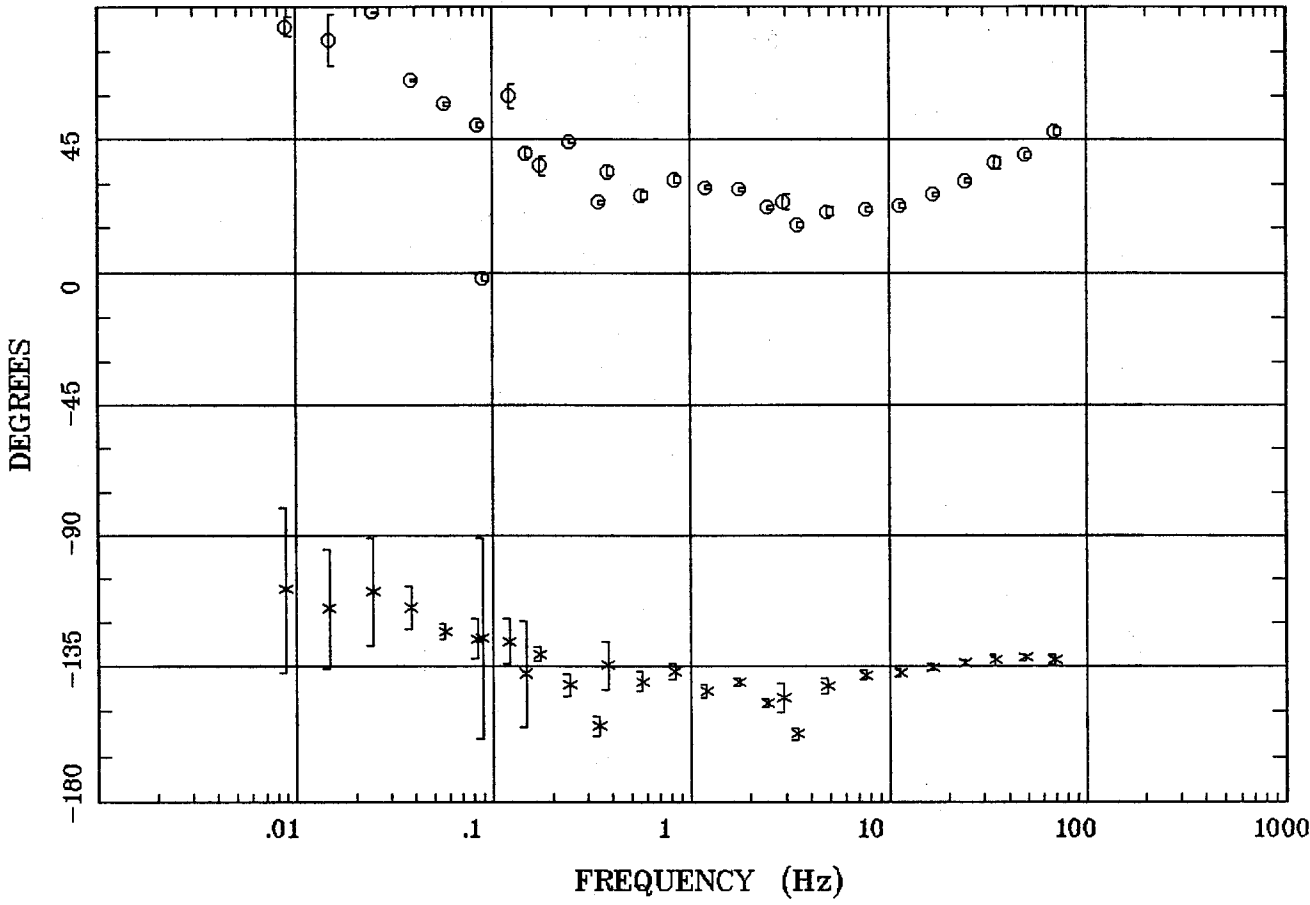
APPARENT RESISTIVITY Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI - ElectroMagnetic Instruments >

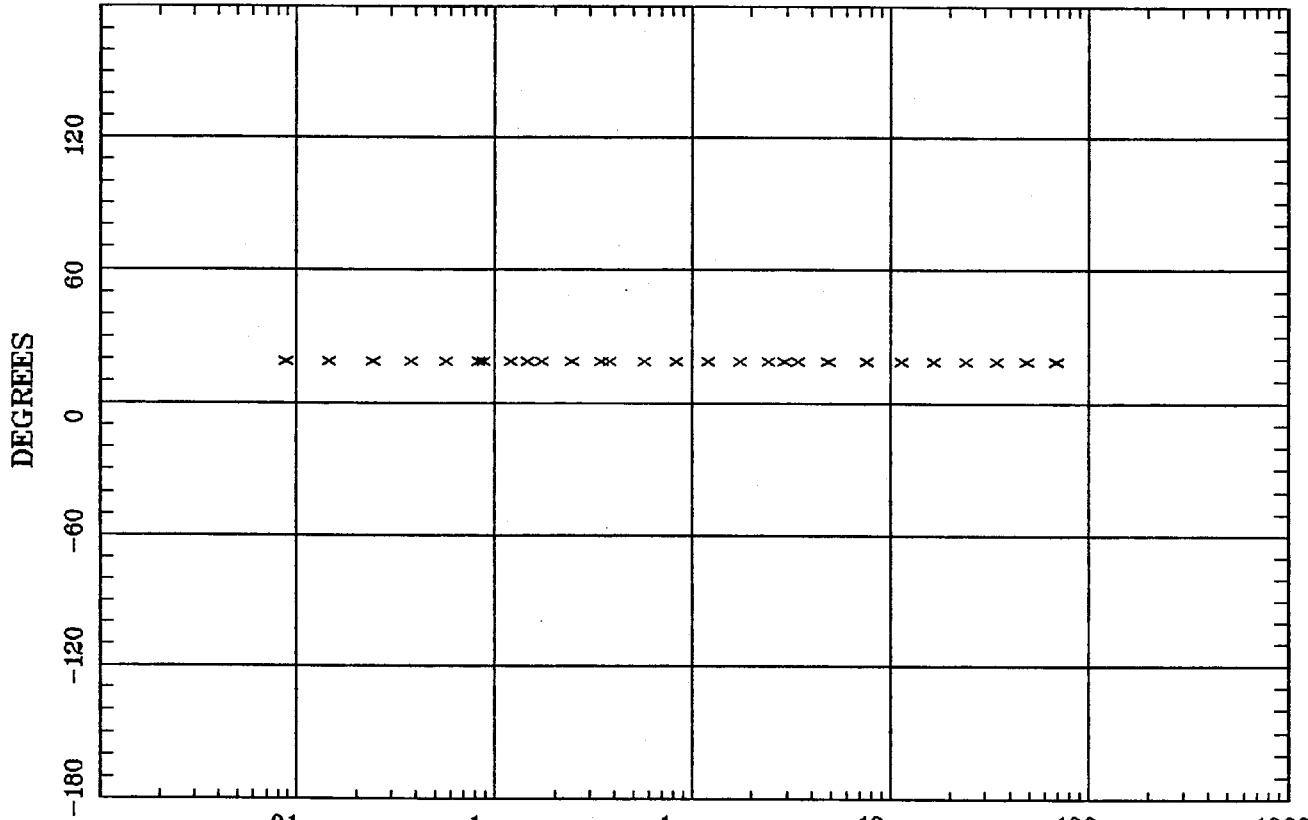
IMPEDANCE PHASE Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE Alamosa Quad, 100k **Station 11**

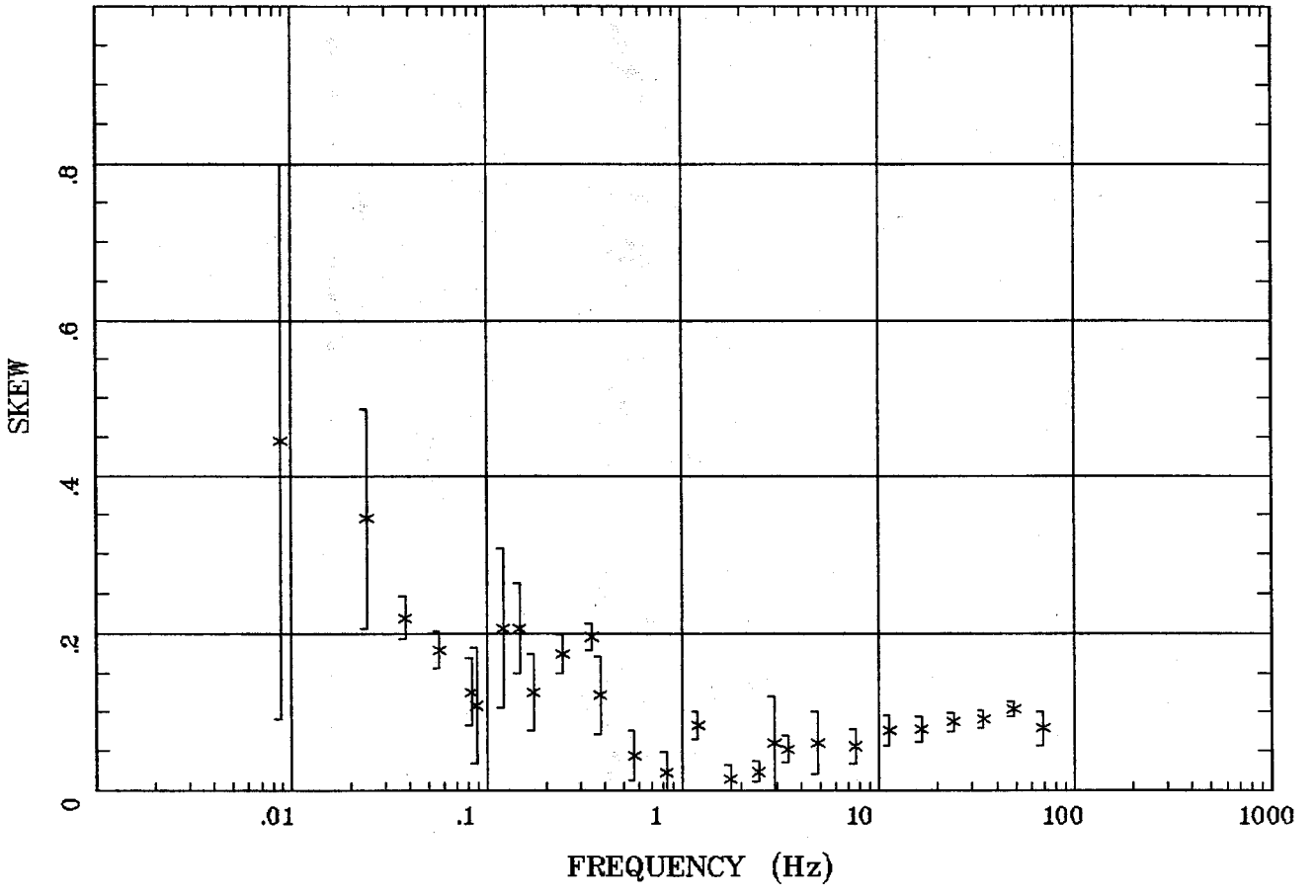


Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI – ElectroMagnetic Instruments >

Station 11

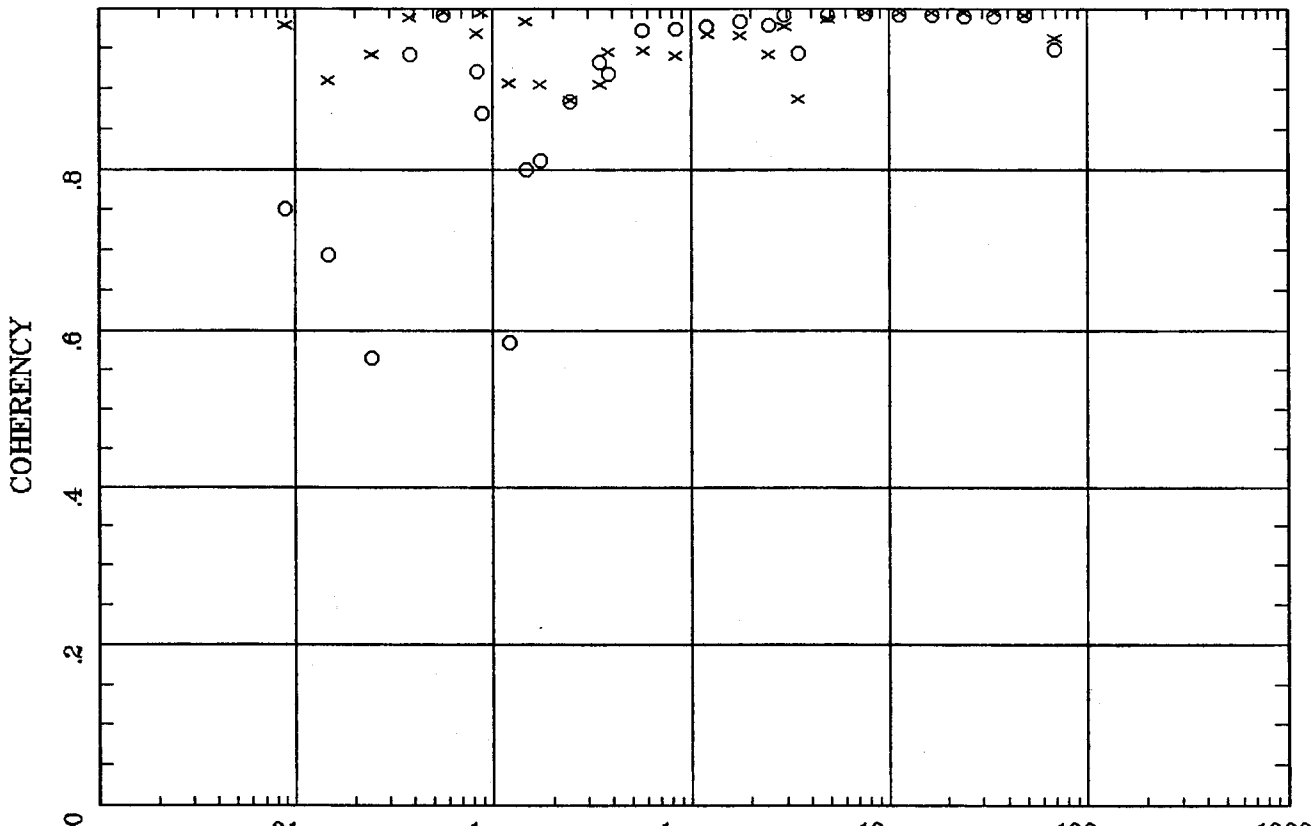
IMPEDANCE SKEW Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl1im2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI - ElectroMagnetic Instruments >

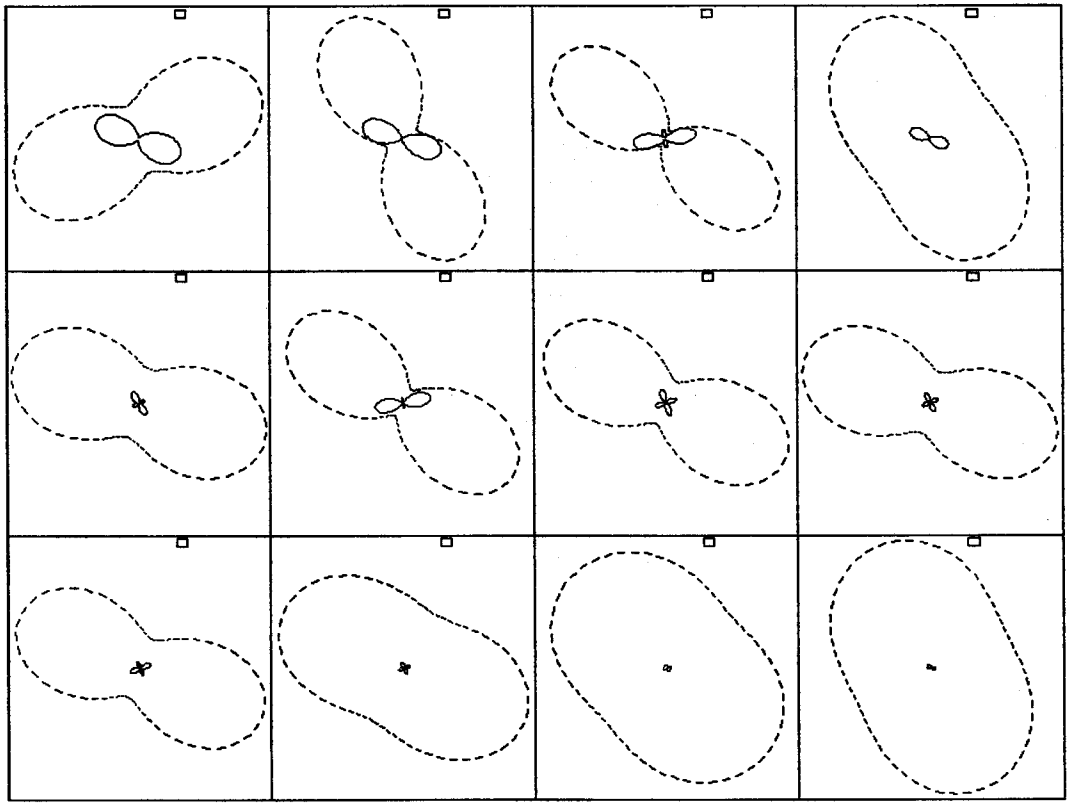
E MULT Coh. Alamosa Quad, 100k **Station 11**



Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k

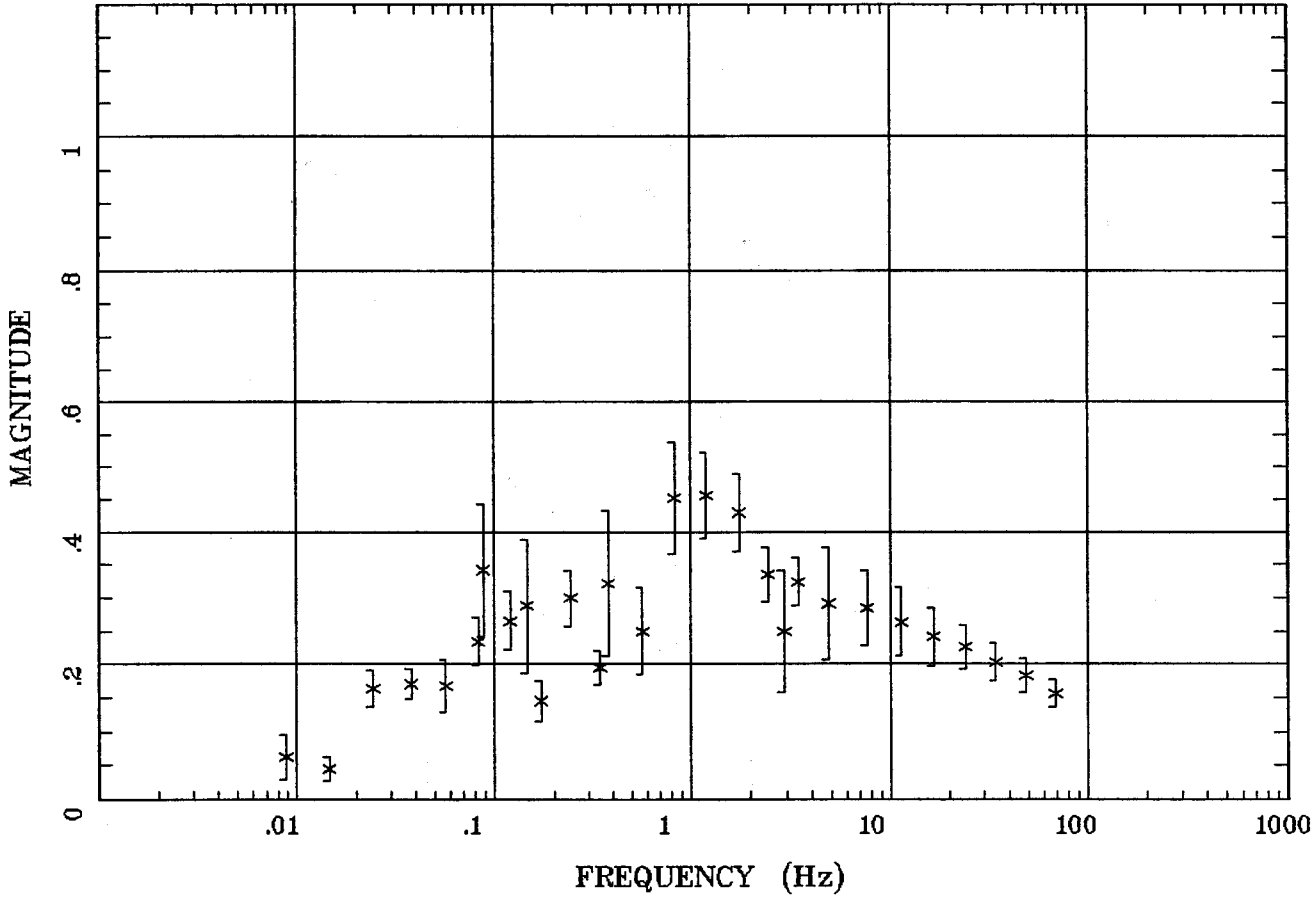


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k

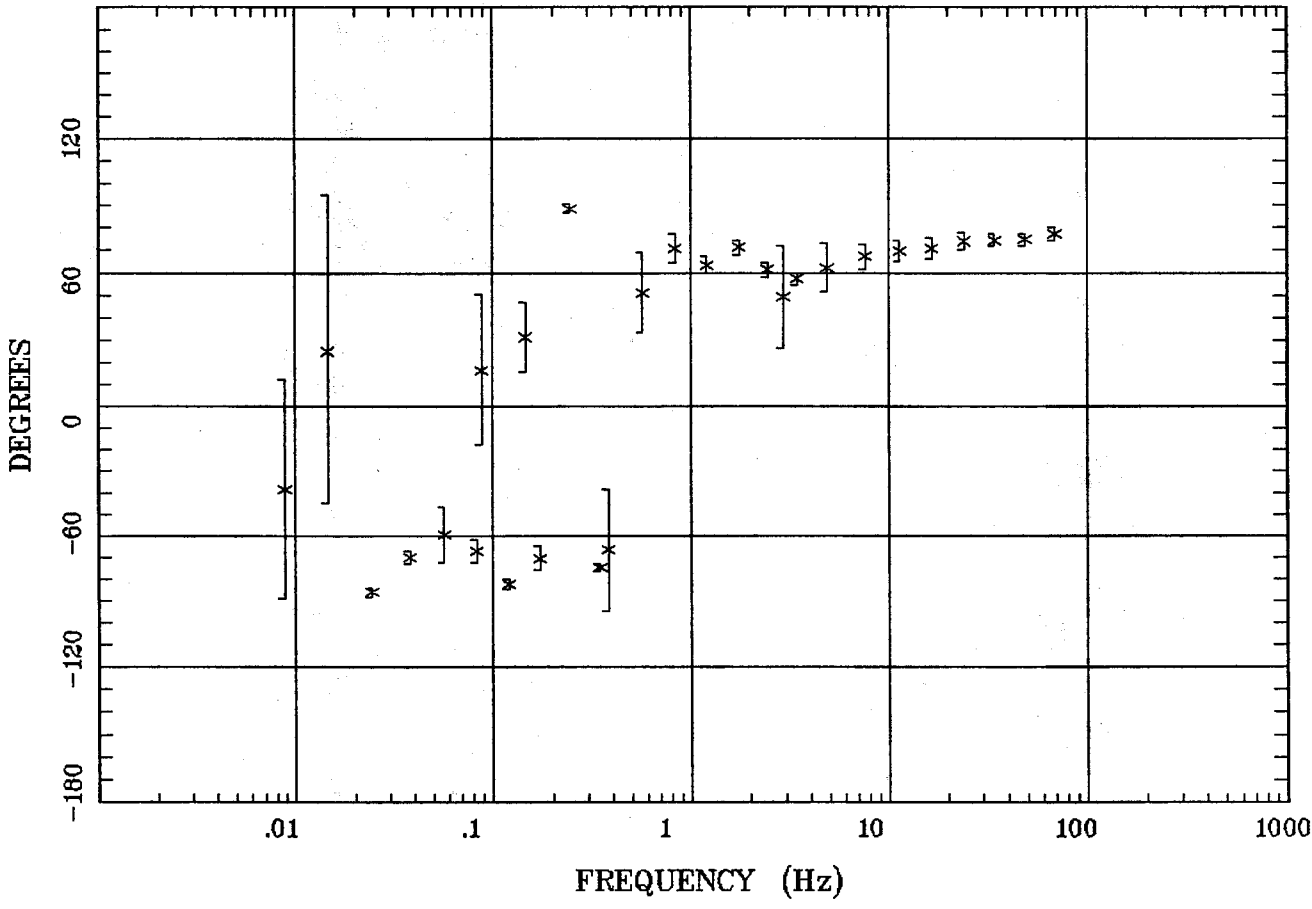


Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

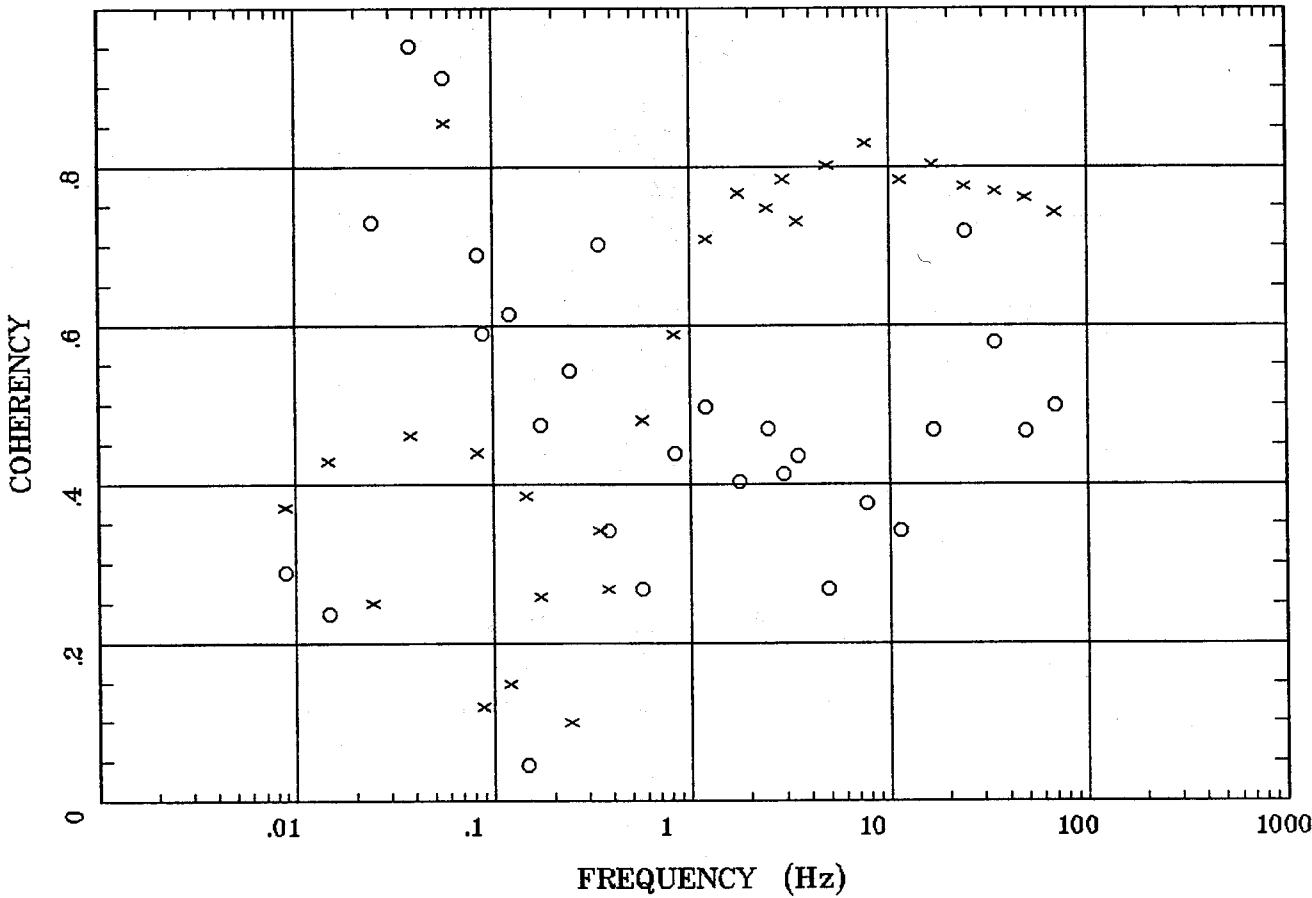


Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

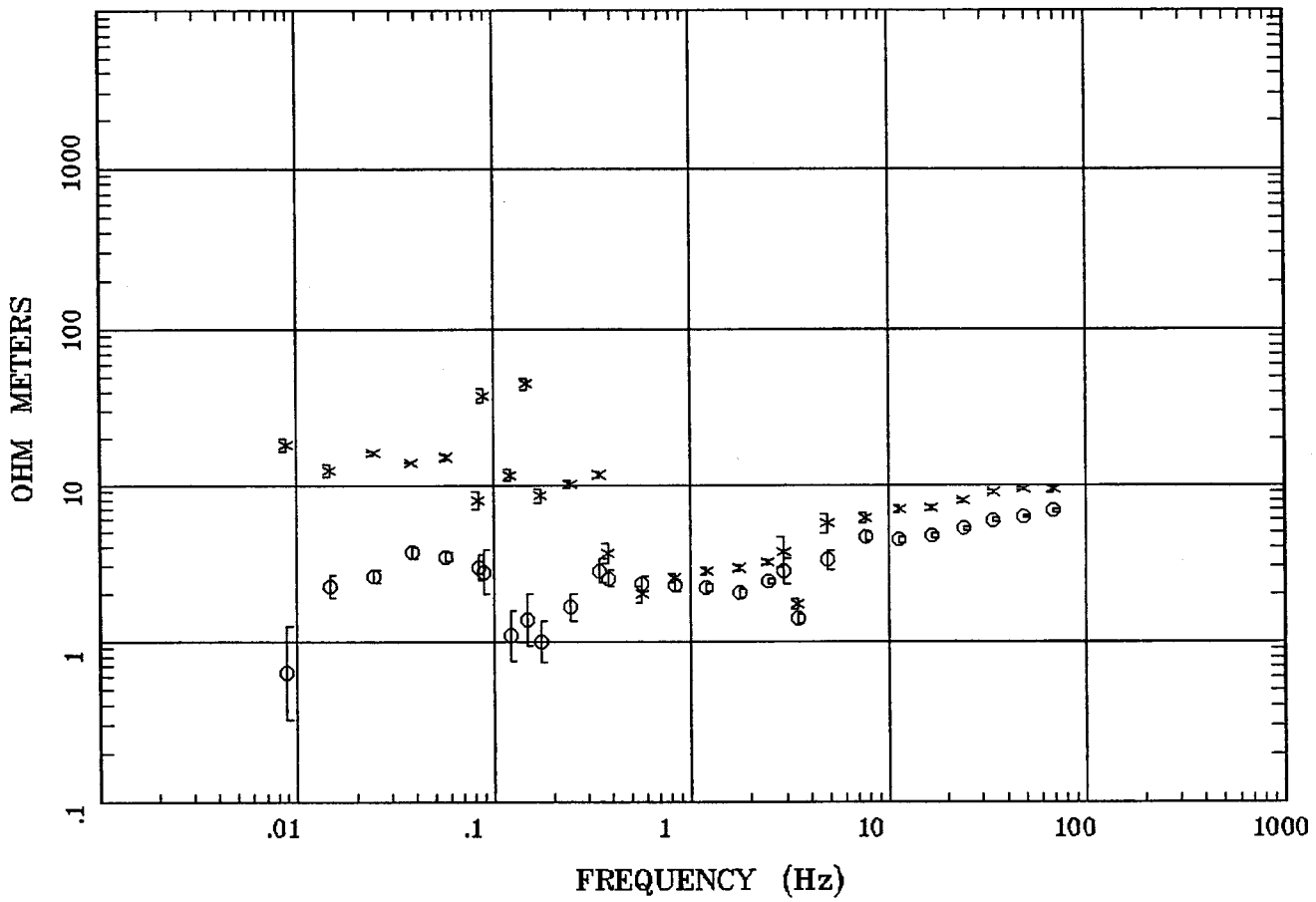


Client:
Remote: none
Acquired: 10:0 Aug 07, 2006
Survey Co:USGS

Rotation:
Filename: sl11m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:16 Mar 12, 2007
< EMI – ElectroMagnetic Instruments >

Station 12

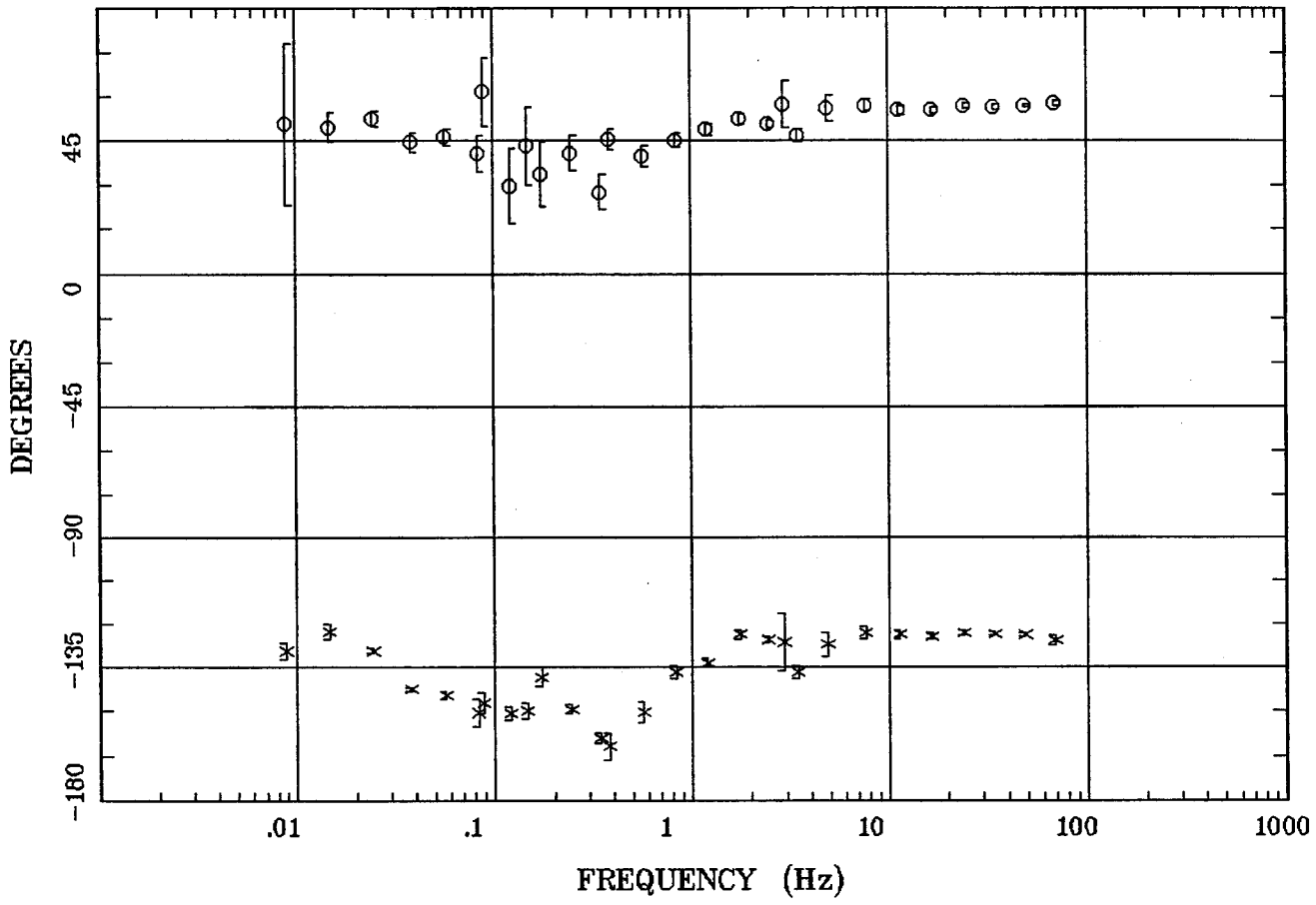
APPARENT RESISTIVITY Alamosa Quad, 100k



Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

IMPEDANCE PHASE Alamosa Quad, 100k

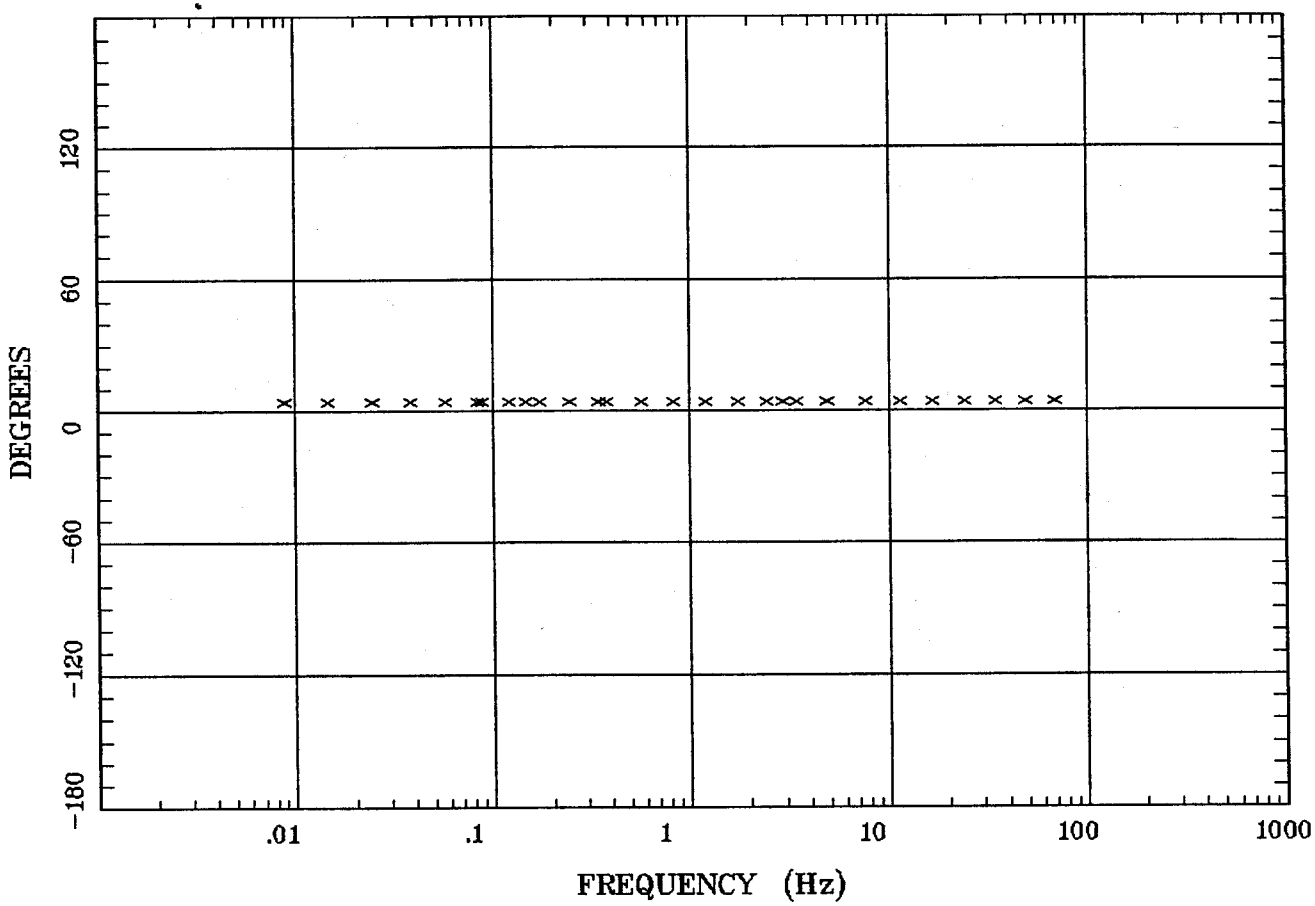


Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

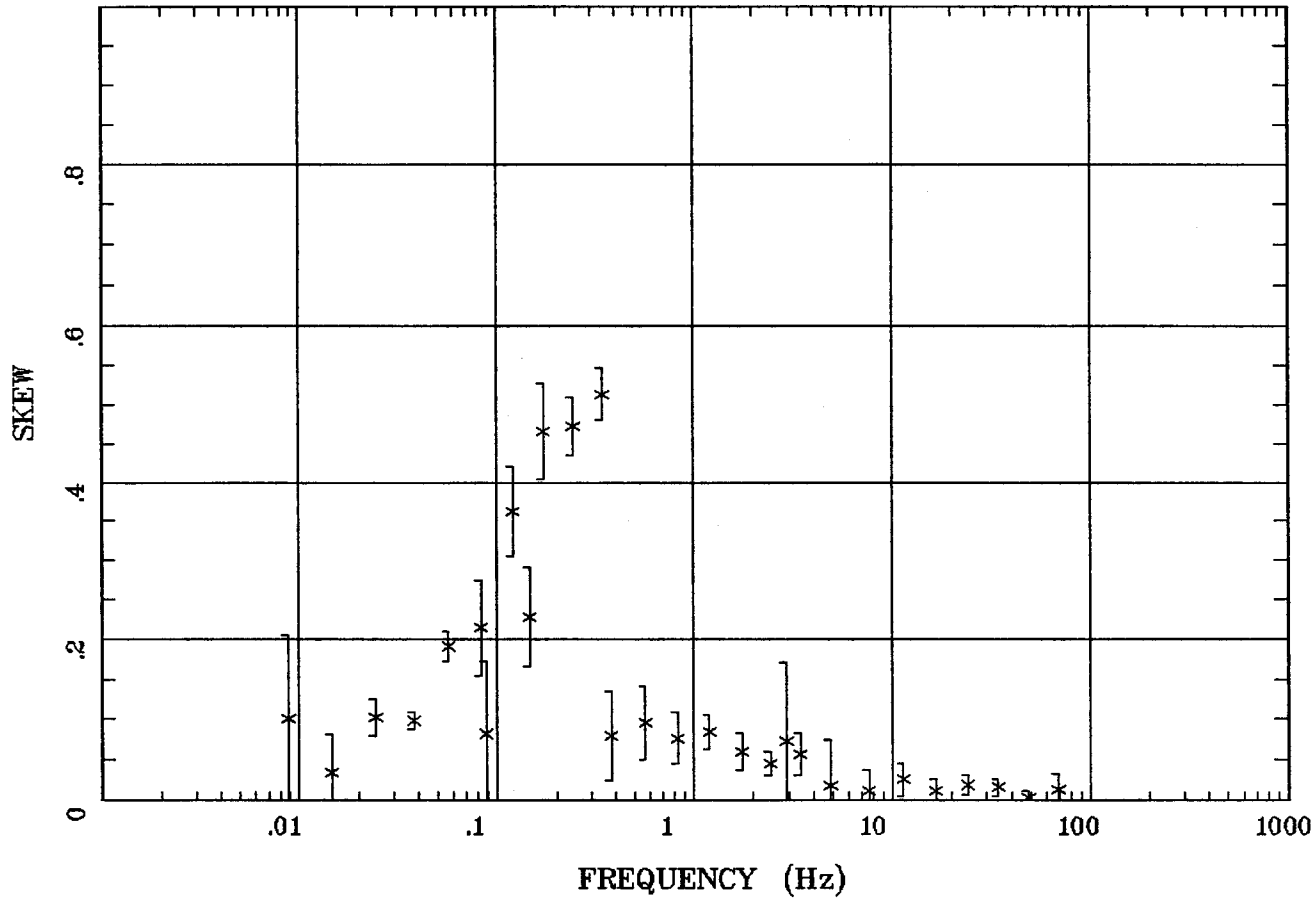
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 11:09 Sep 24, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE SKEW Alamosa Quad, 100k

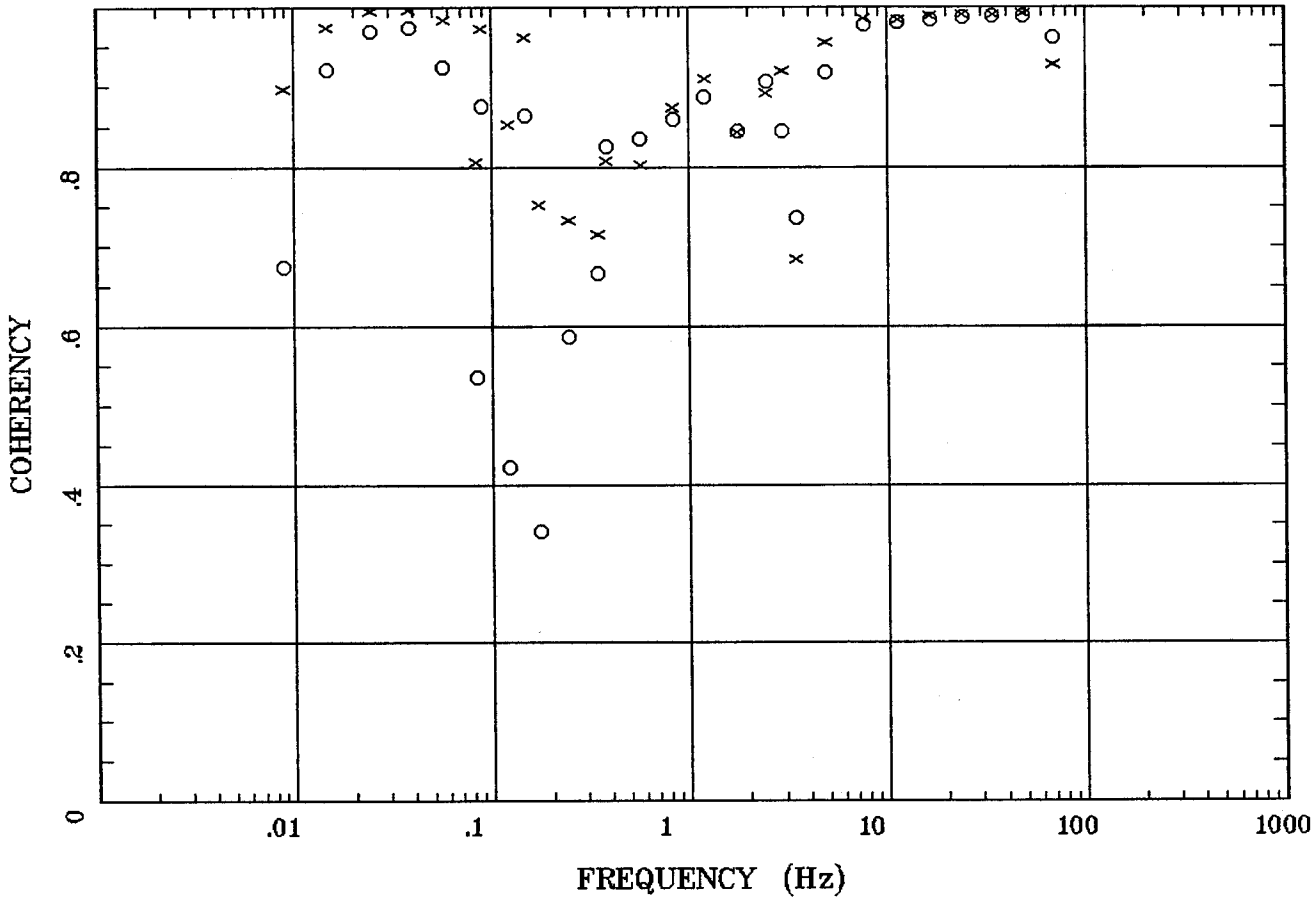


Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

E MULT Coh.

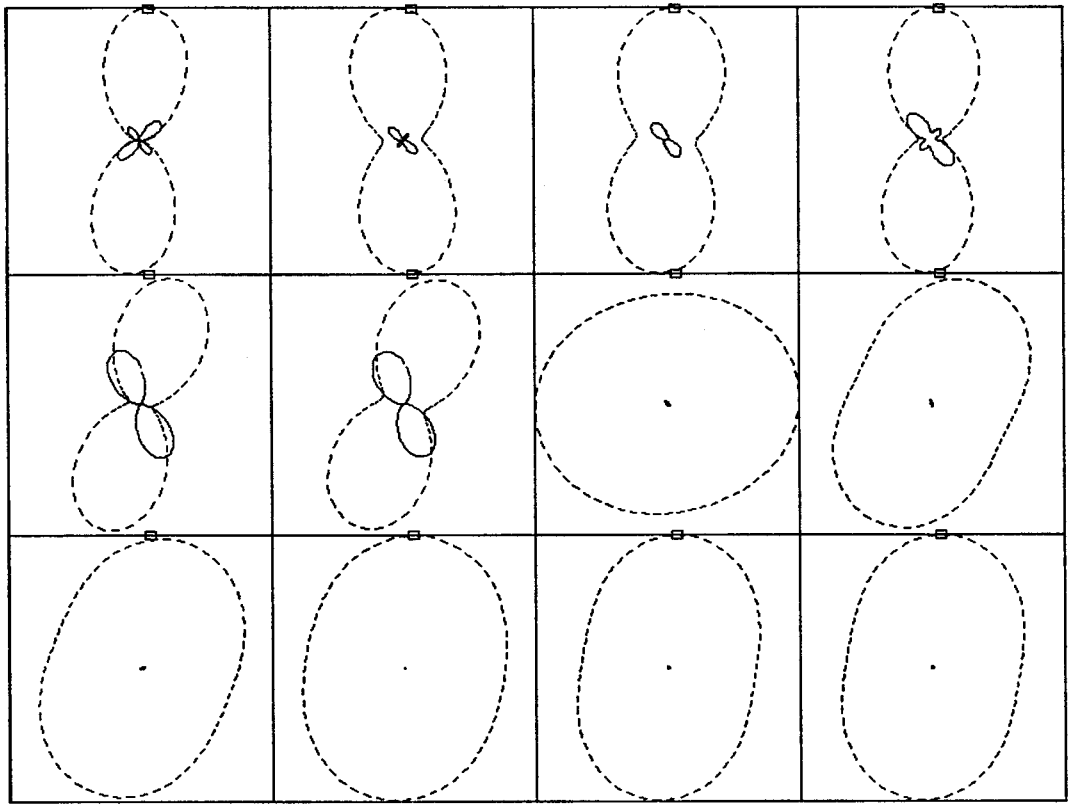
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k



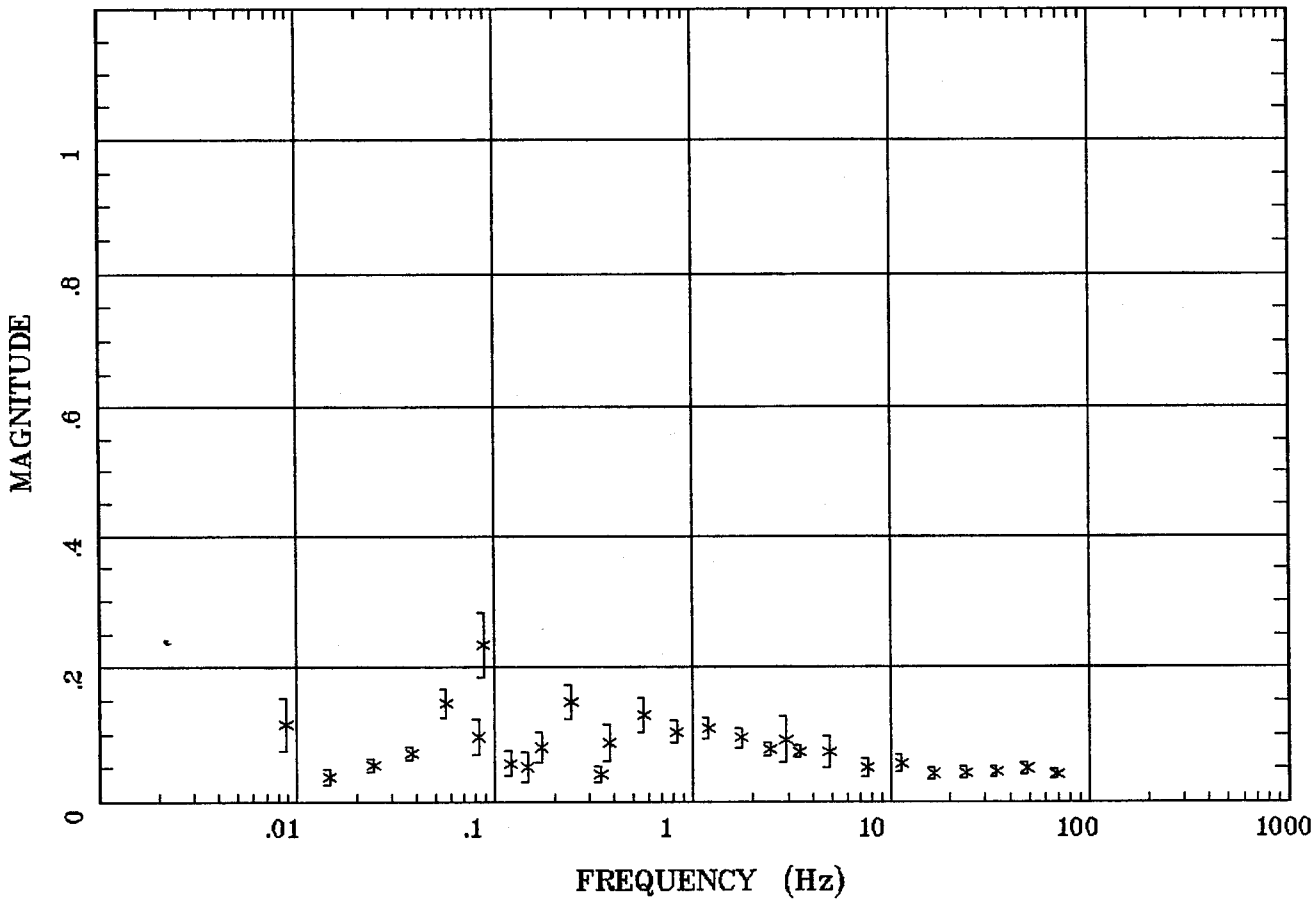
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE

Alamosa Quad, 100k

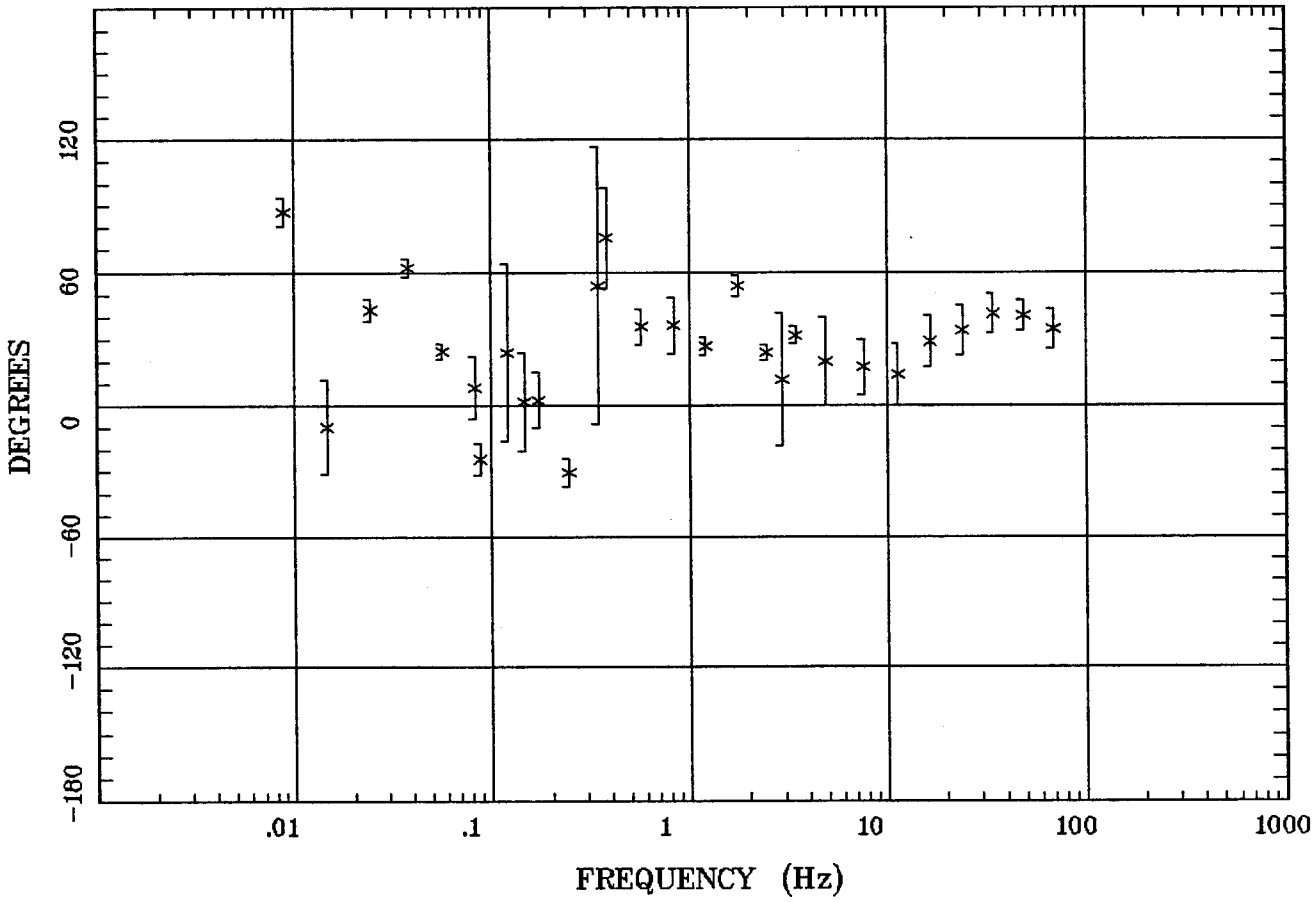


Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

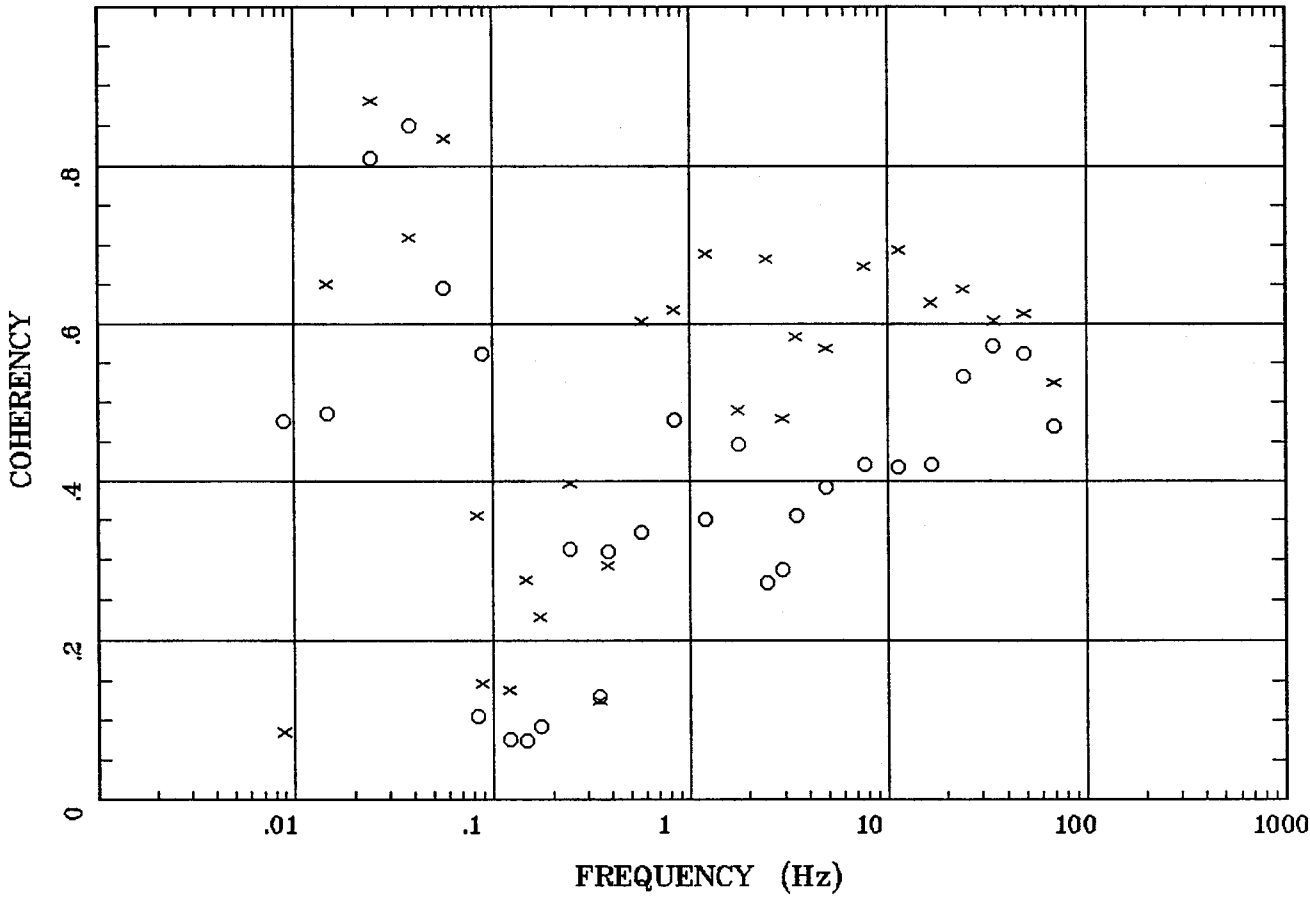


Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

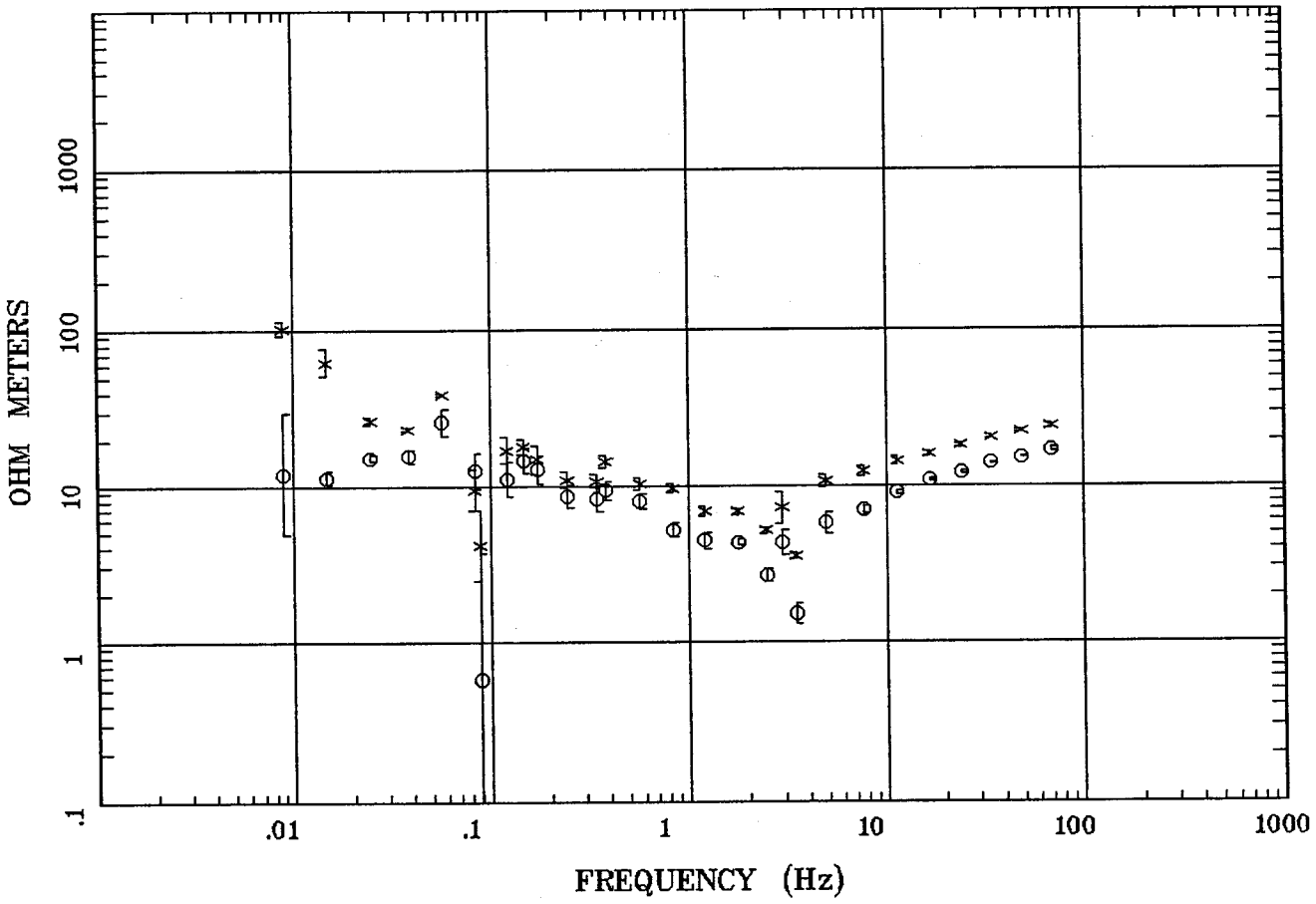
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 11:1 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl12m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 15:34 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k **Station 13**

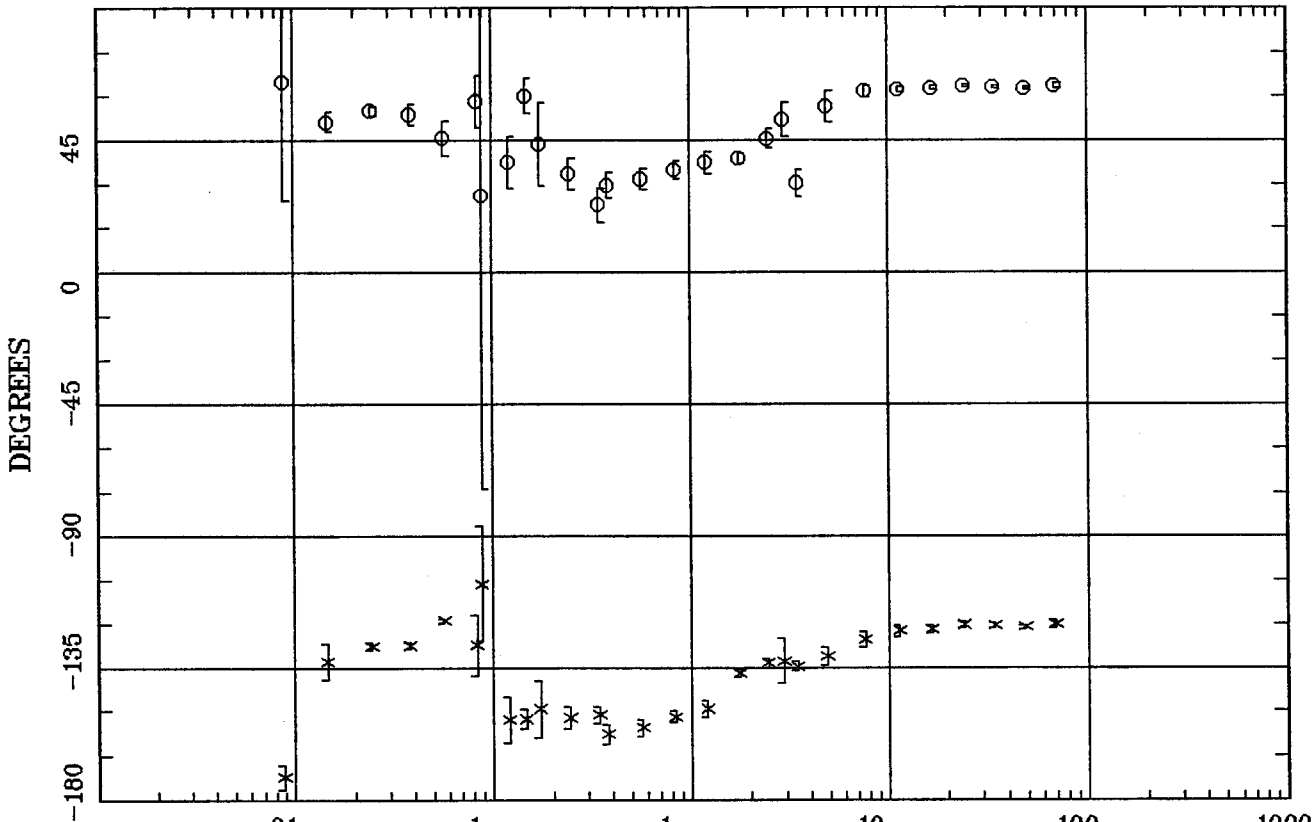


Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

Station 13

IMPEDANCE PHASE Alamosa Quad, 100k

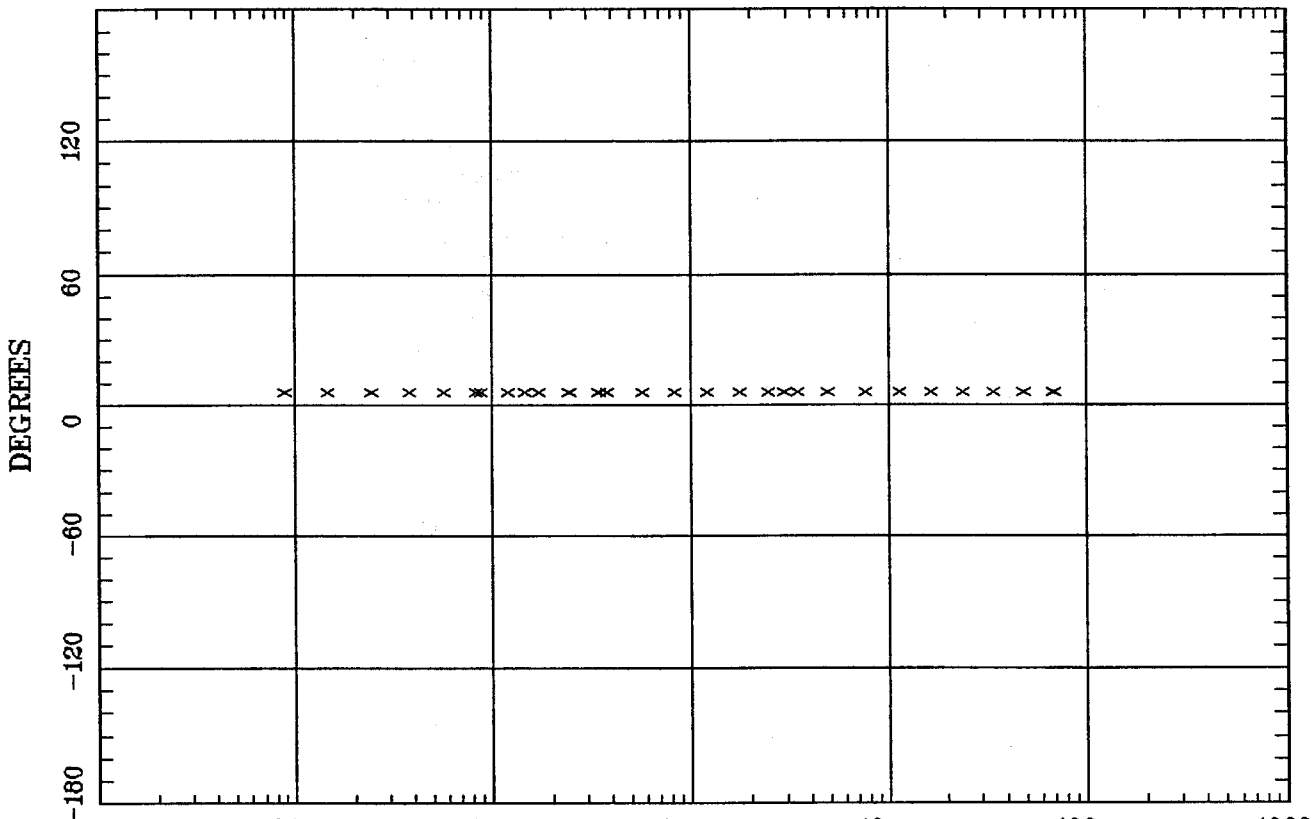


Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

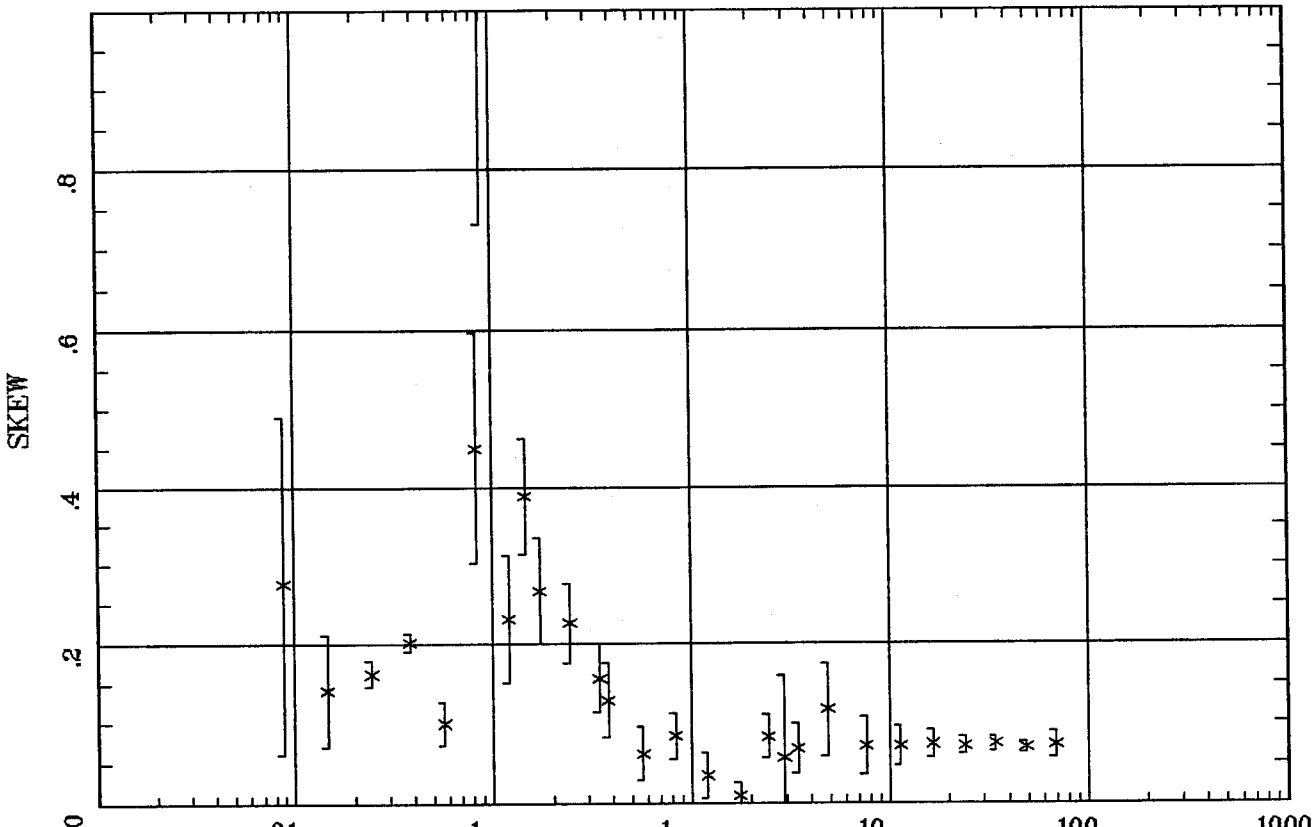


Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 11:09 Sep 24, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

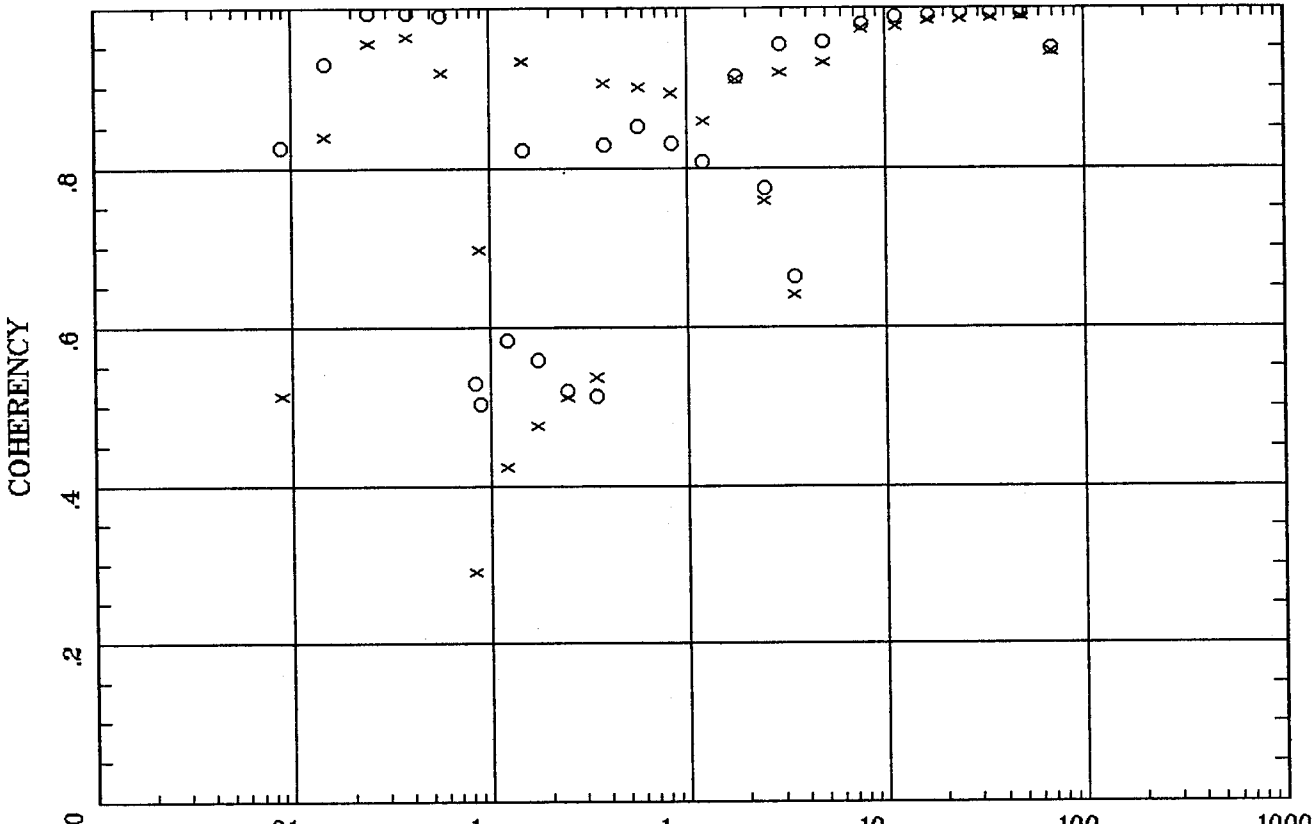
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

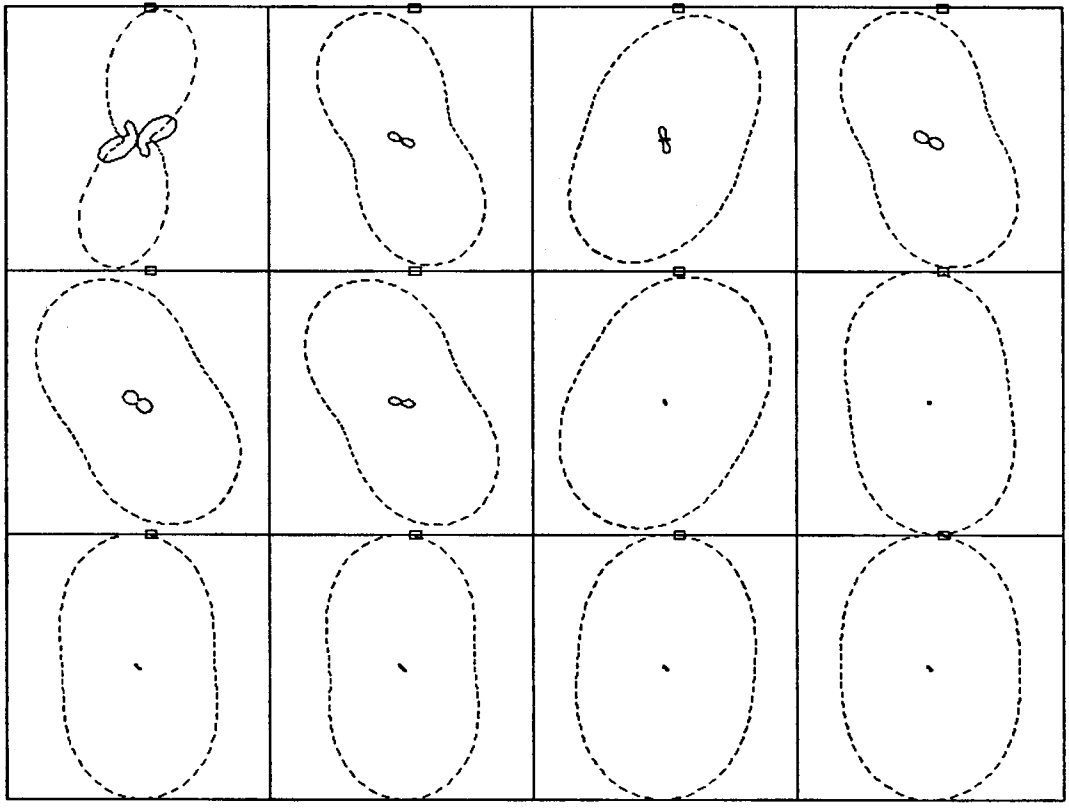
E MULT Coh. Alamosa Quad, 100k



Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k



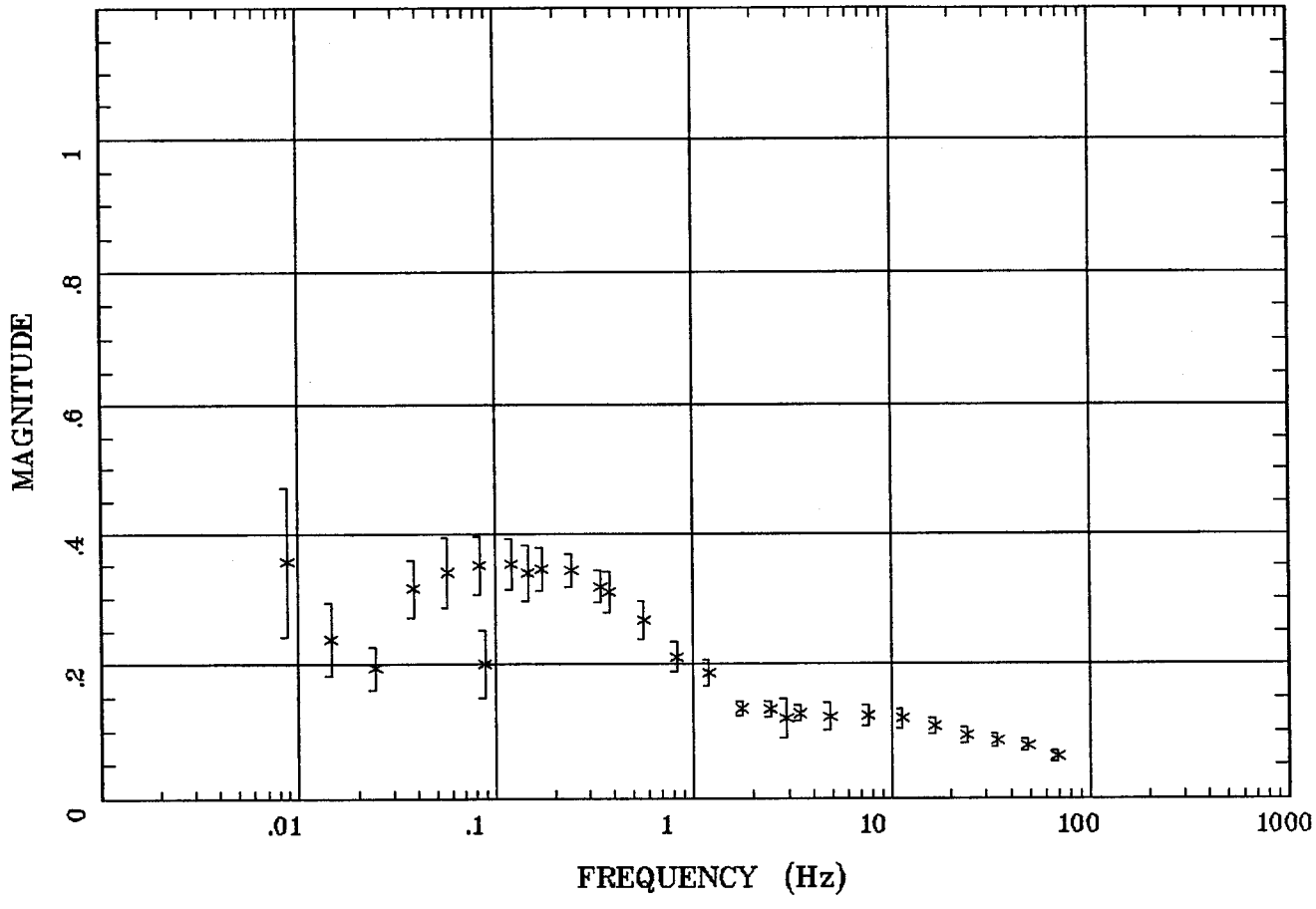
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

Station 13

TIPPER MAGNITUDE Alamosa Quad, 100k

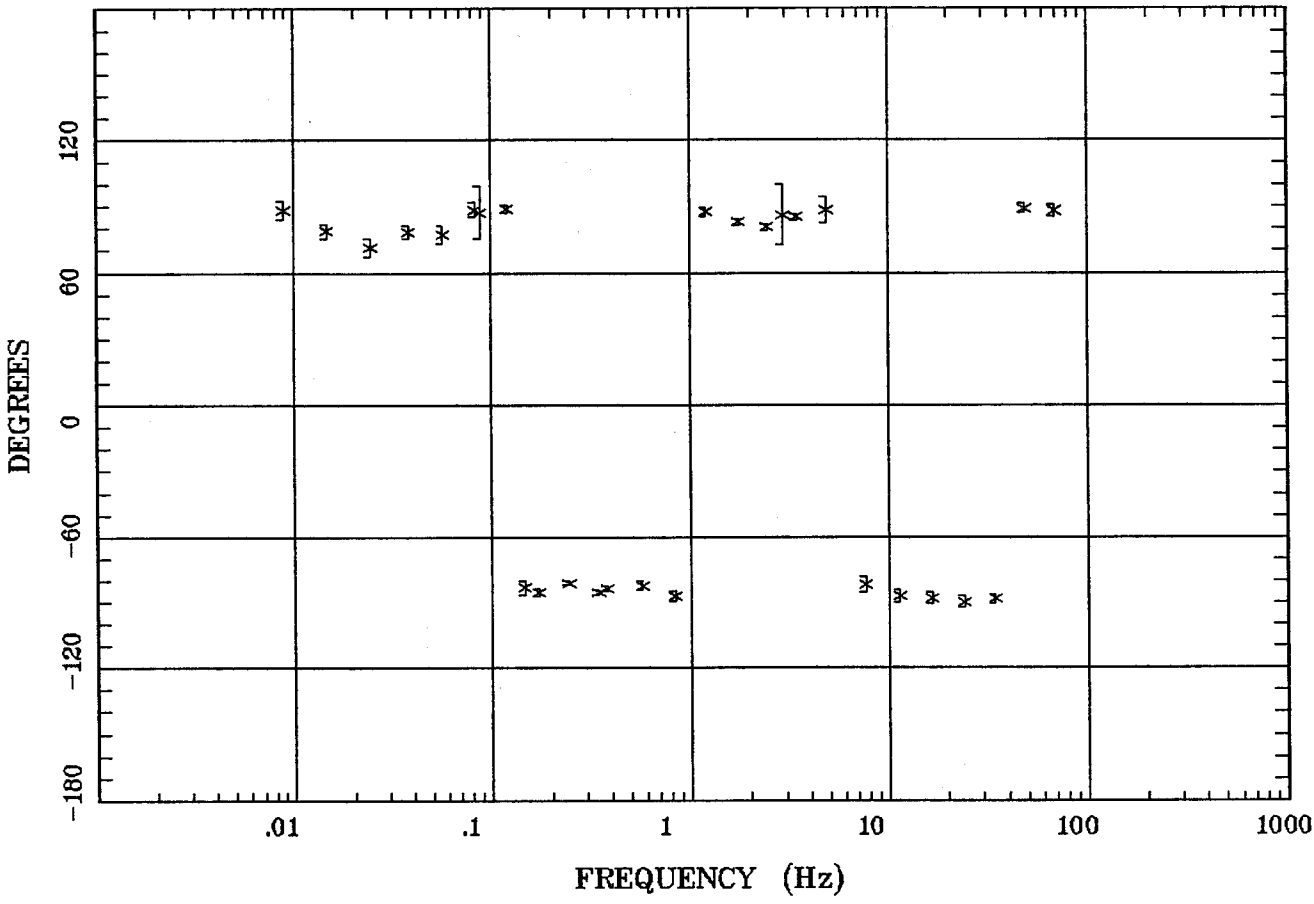


Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

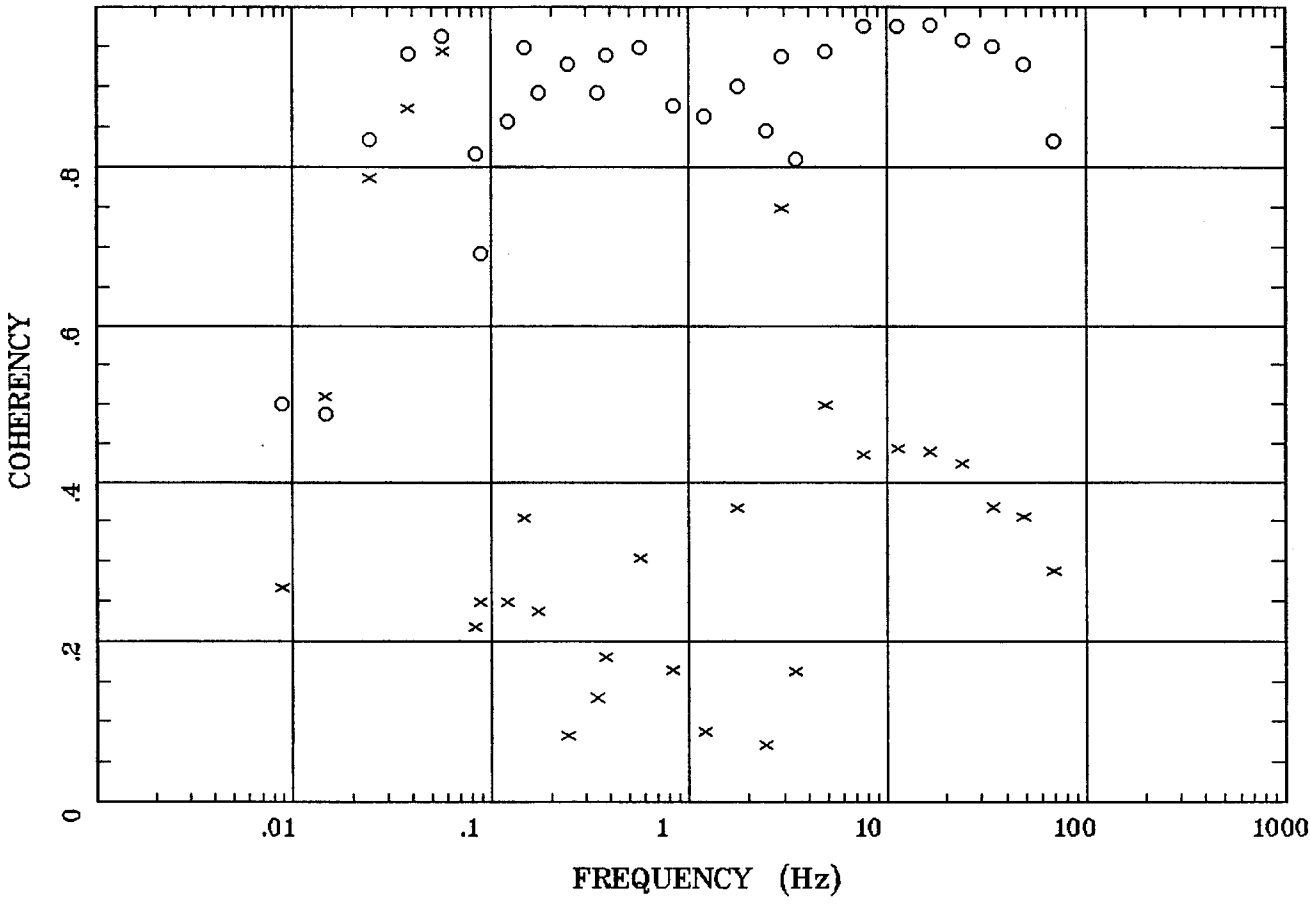


Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

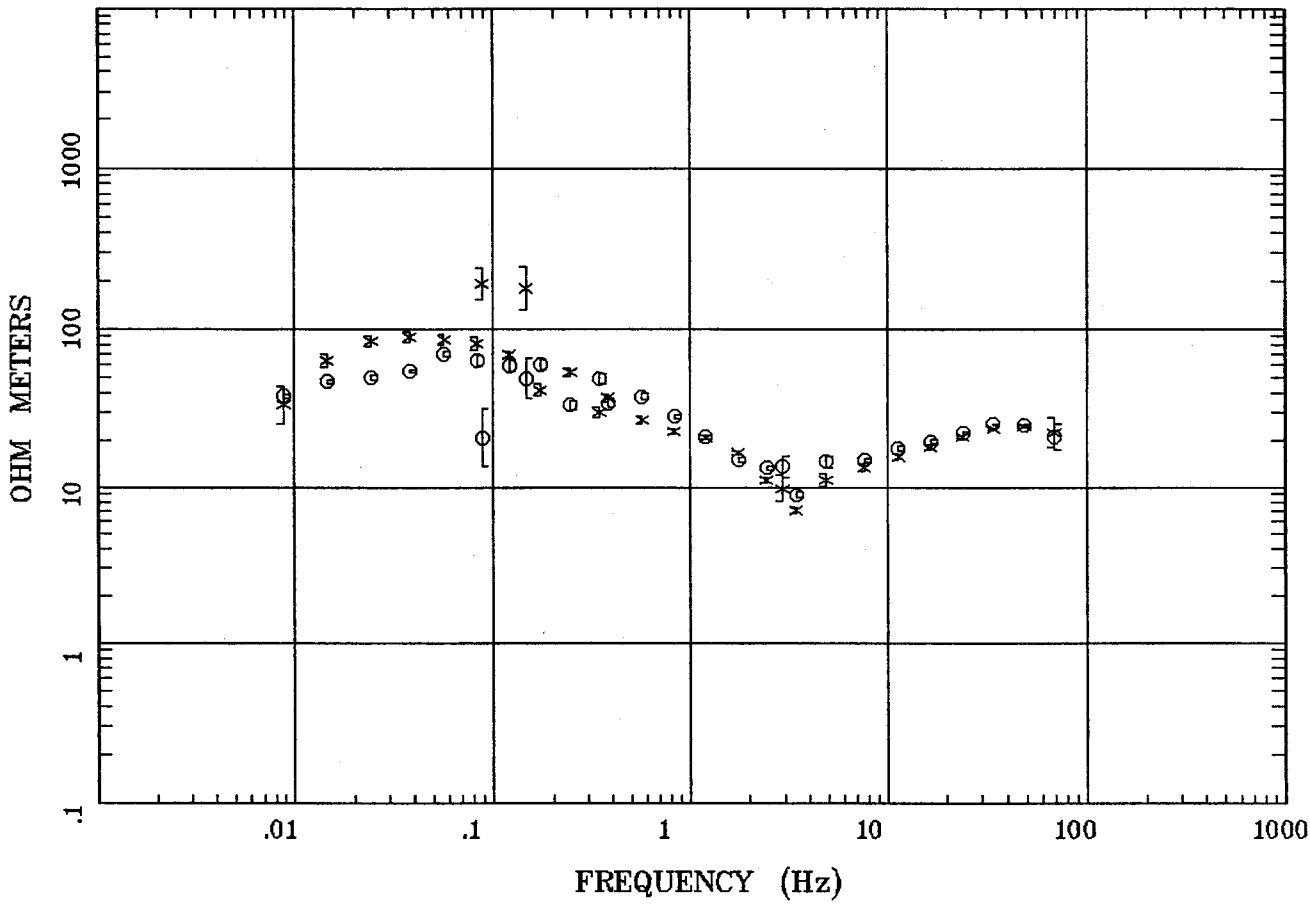


Client:
Remote: none
Acquired: 16:2 Aug 08, 2006
Survey Co:USGS

Rotation:
Filename: sl13ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

Station 14

APPARENT RESISTIVITY Alamosa Quad, 100k

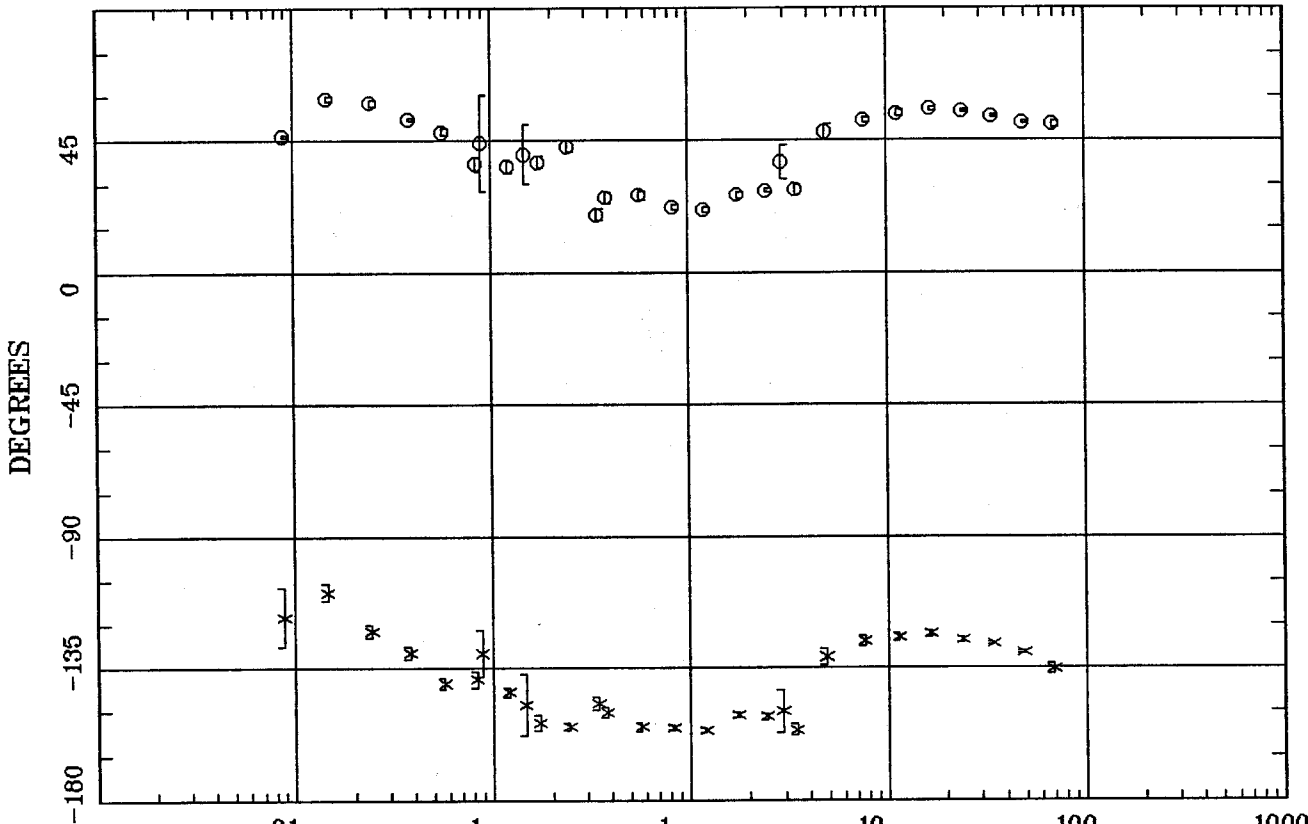


Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE PHASE

Alamosa Quad, 100k



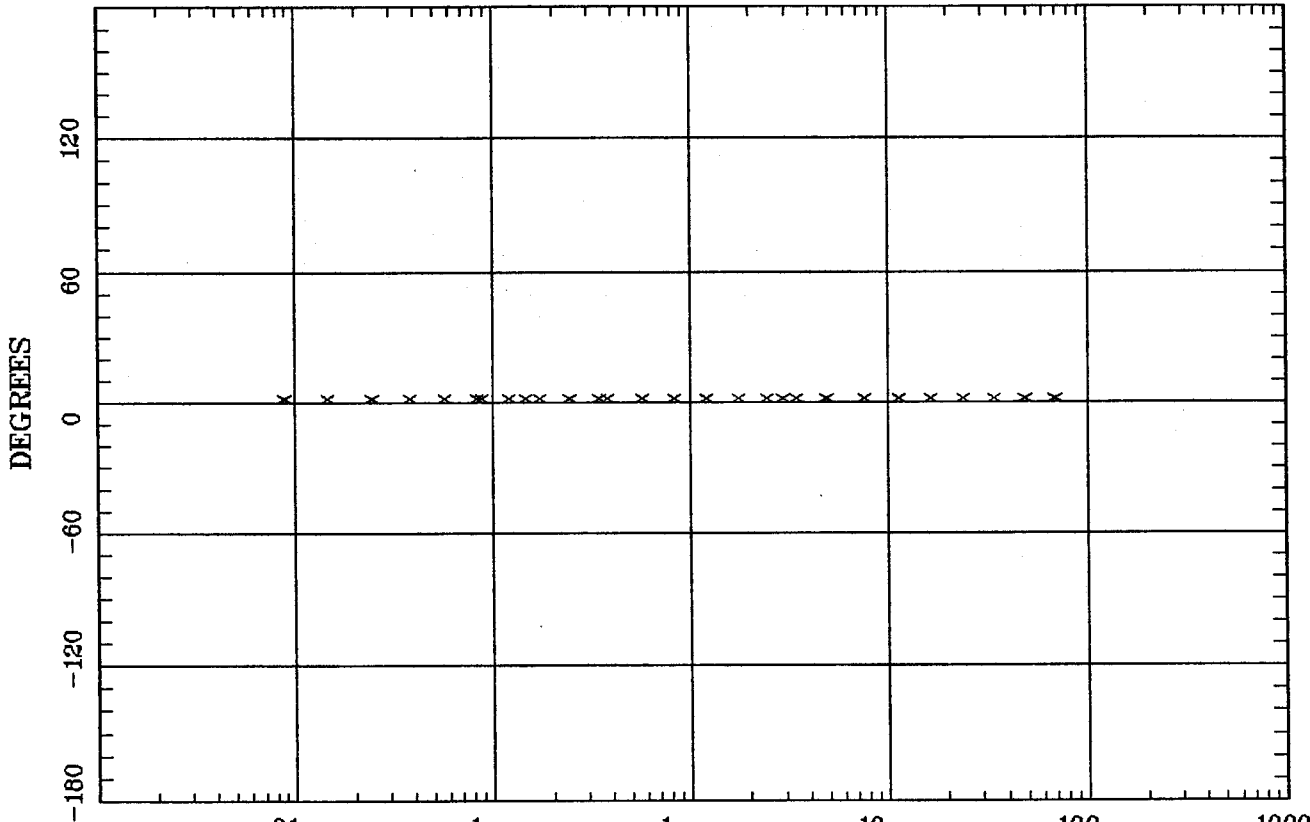
Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

Station 14

ROTATION ANGLE

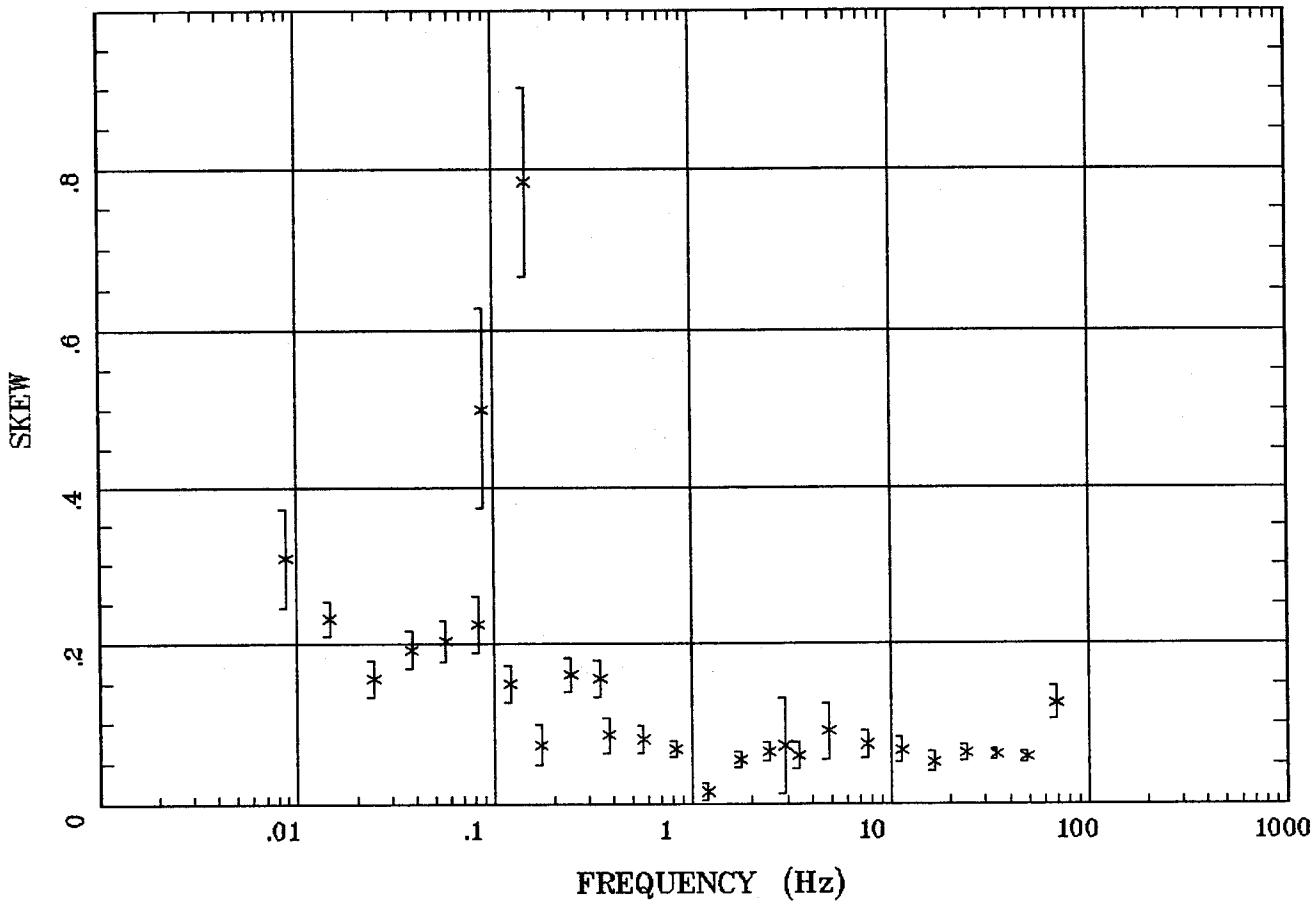
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

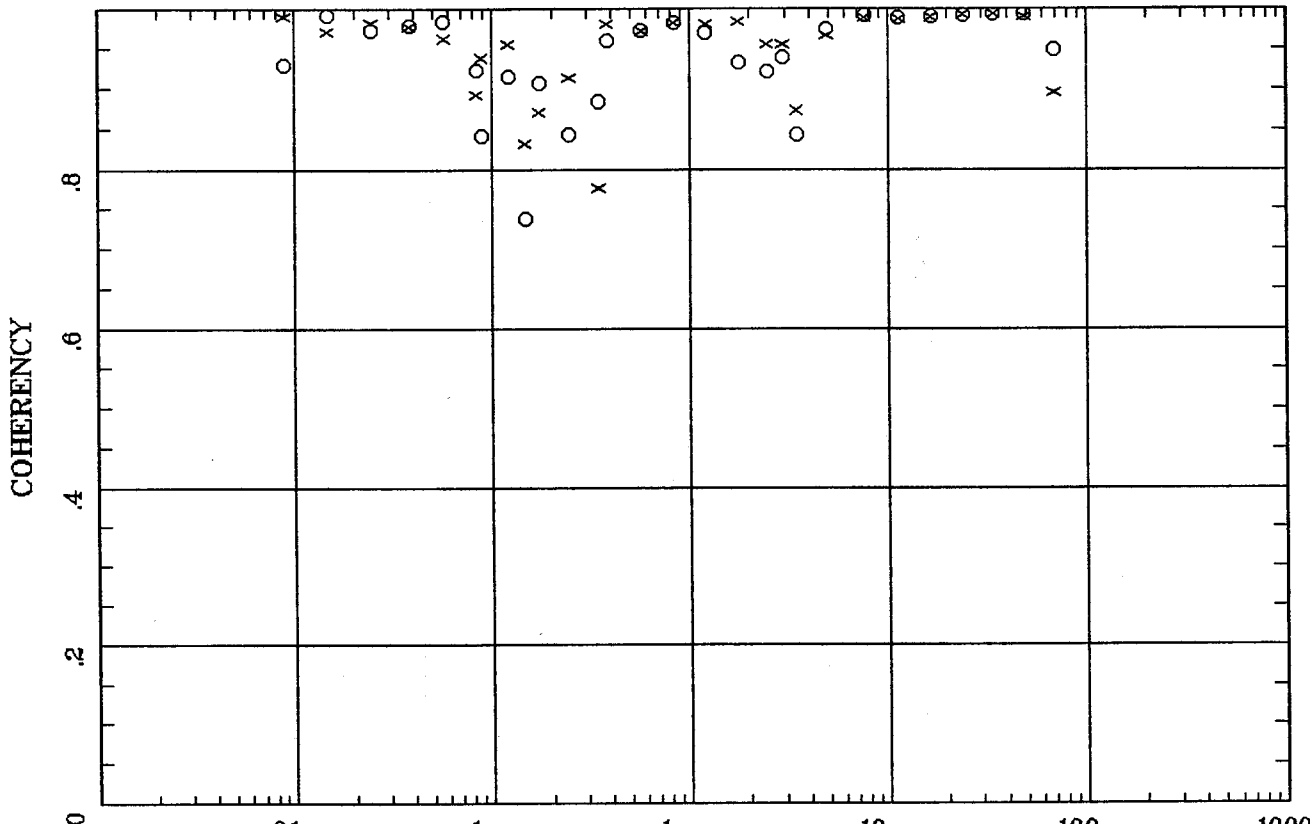
IMPEDANCE SKEW Alamosa Quad, 100k **Station 14**



Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

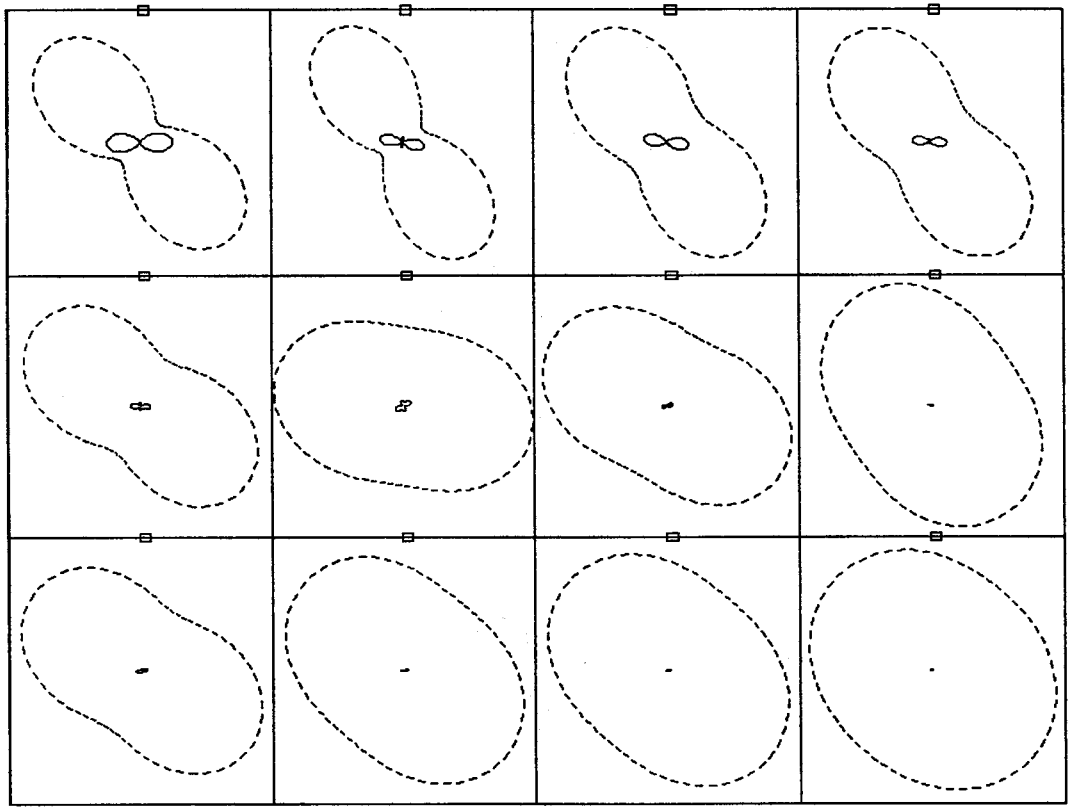
E MULT Coh. Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k

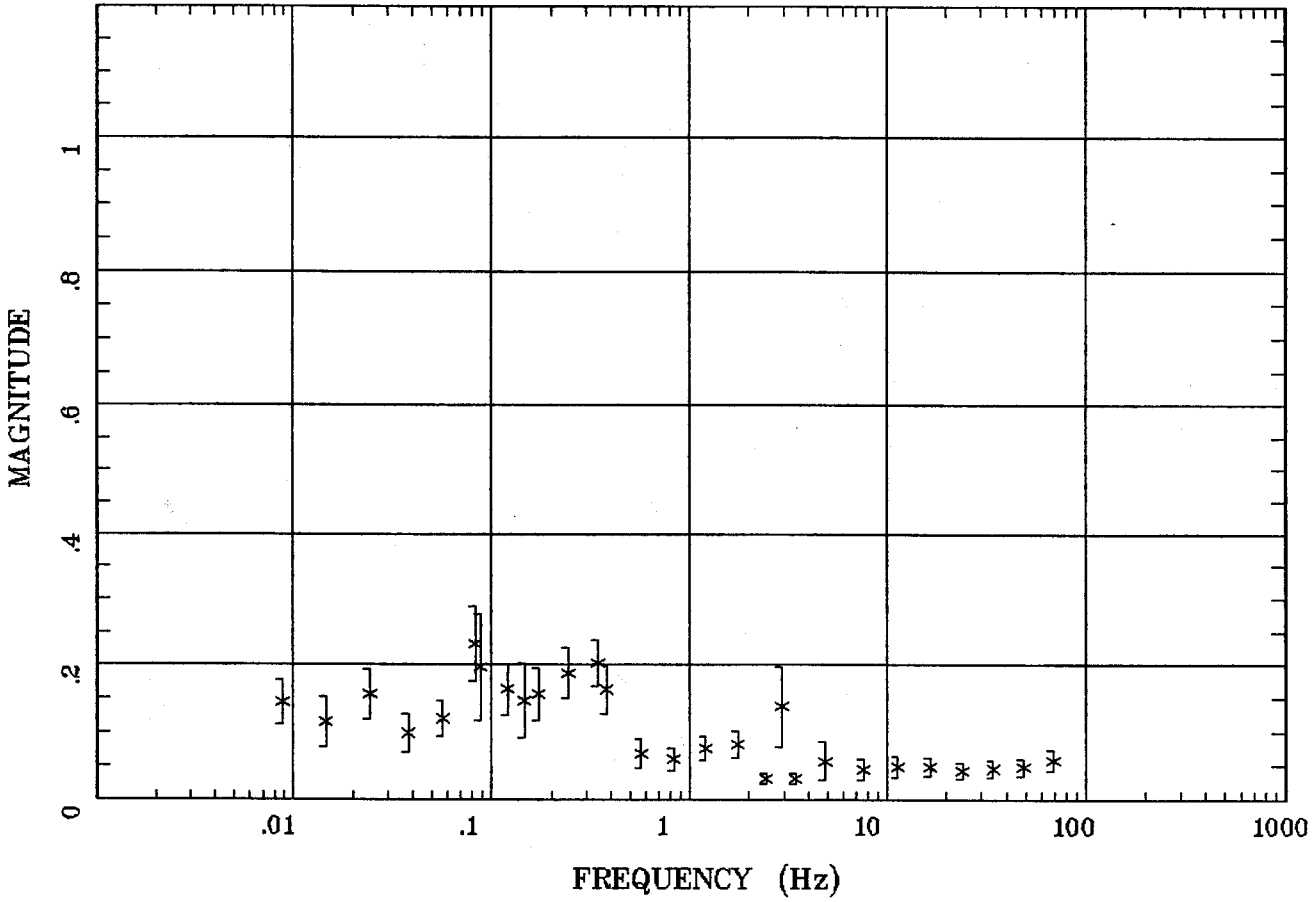


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k



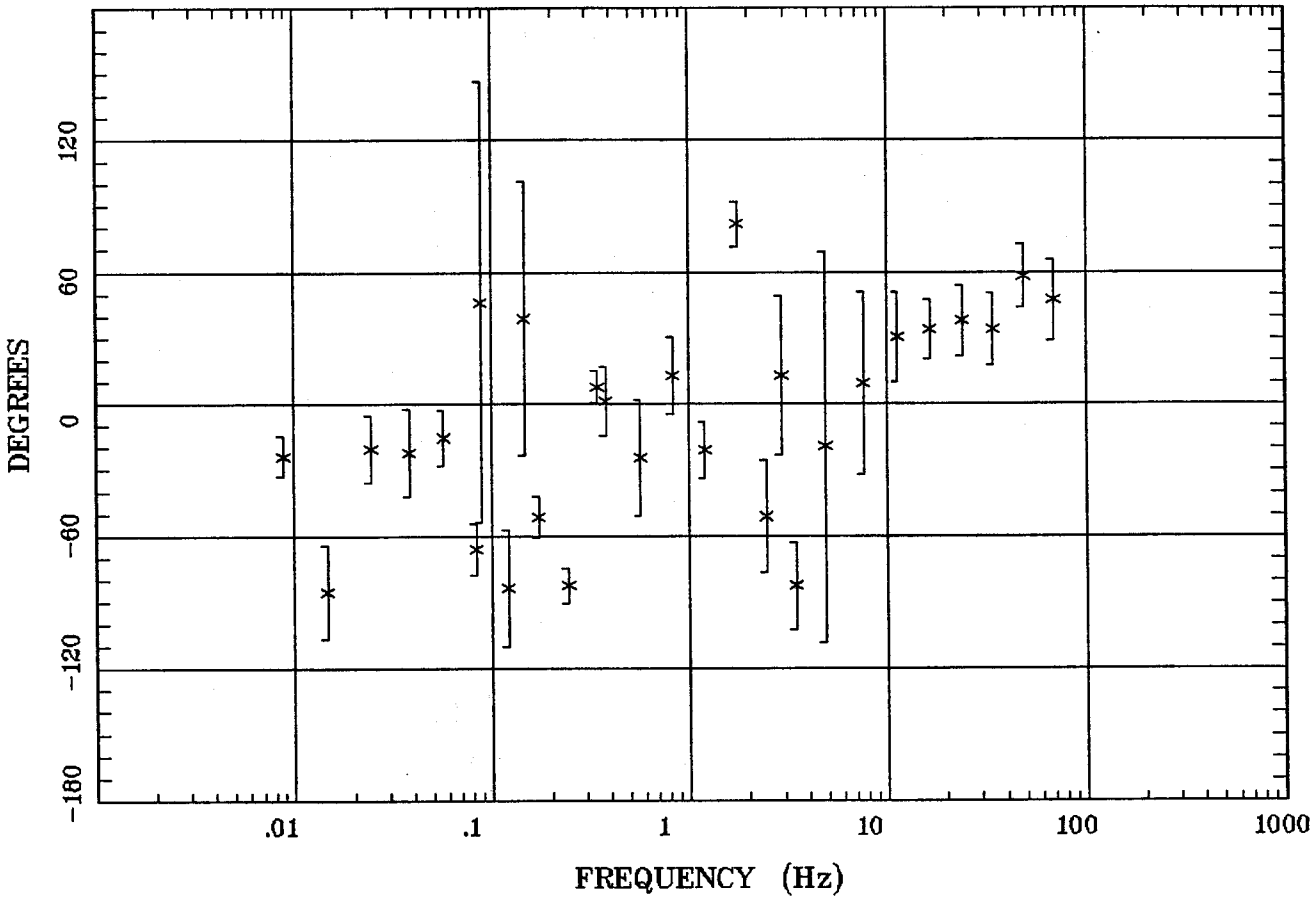
Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

Station 14

TIPPER STRIKE

Alamosa Quad, 100k

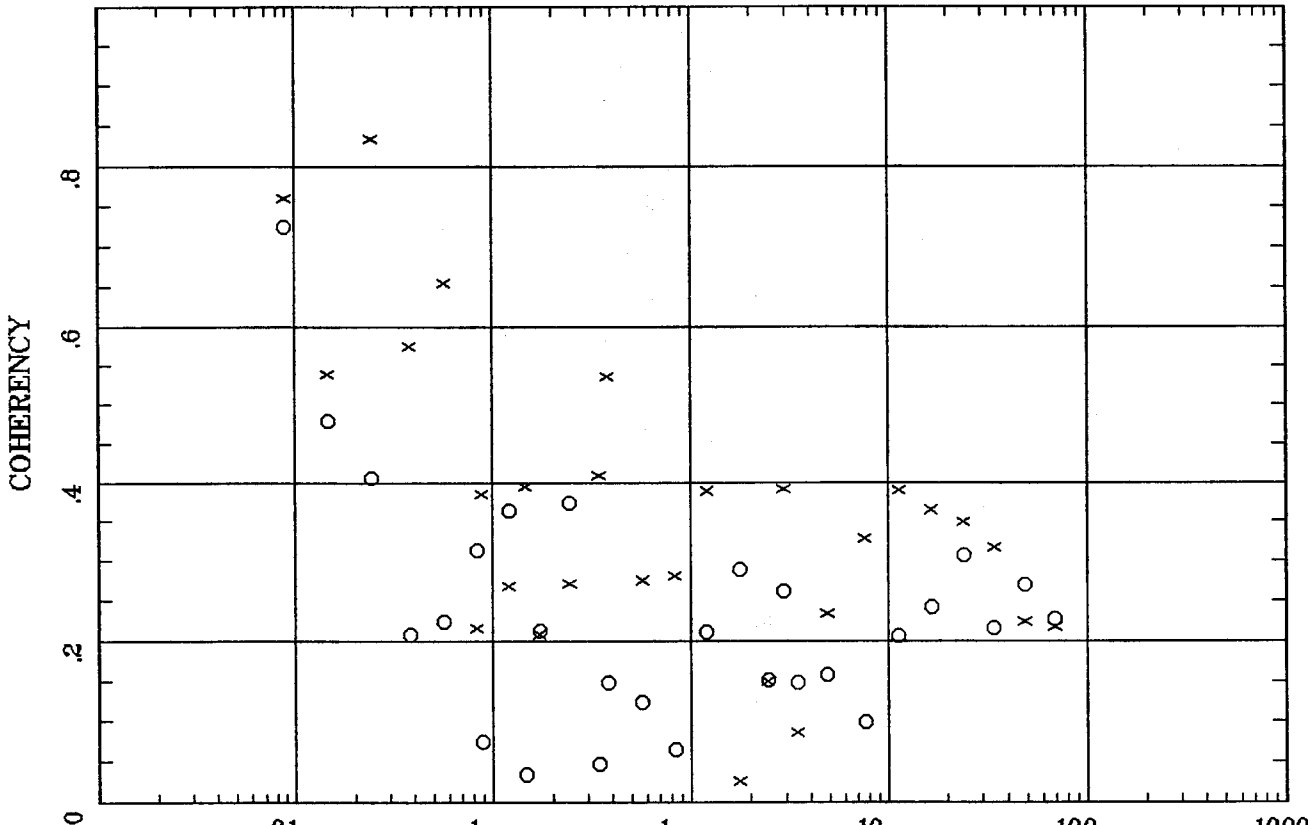


Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

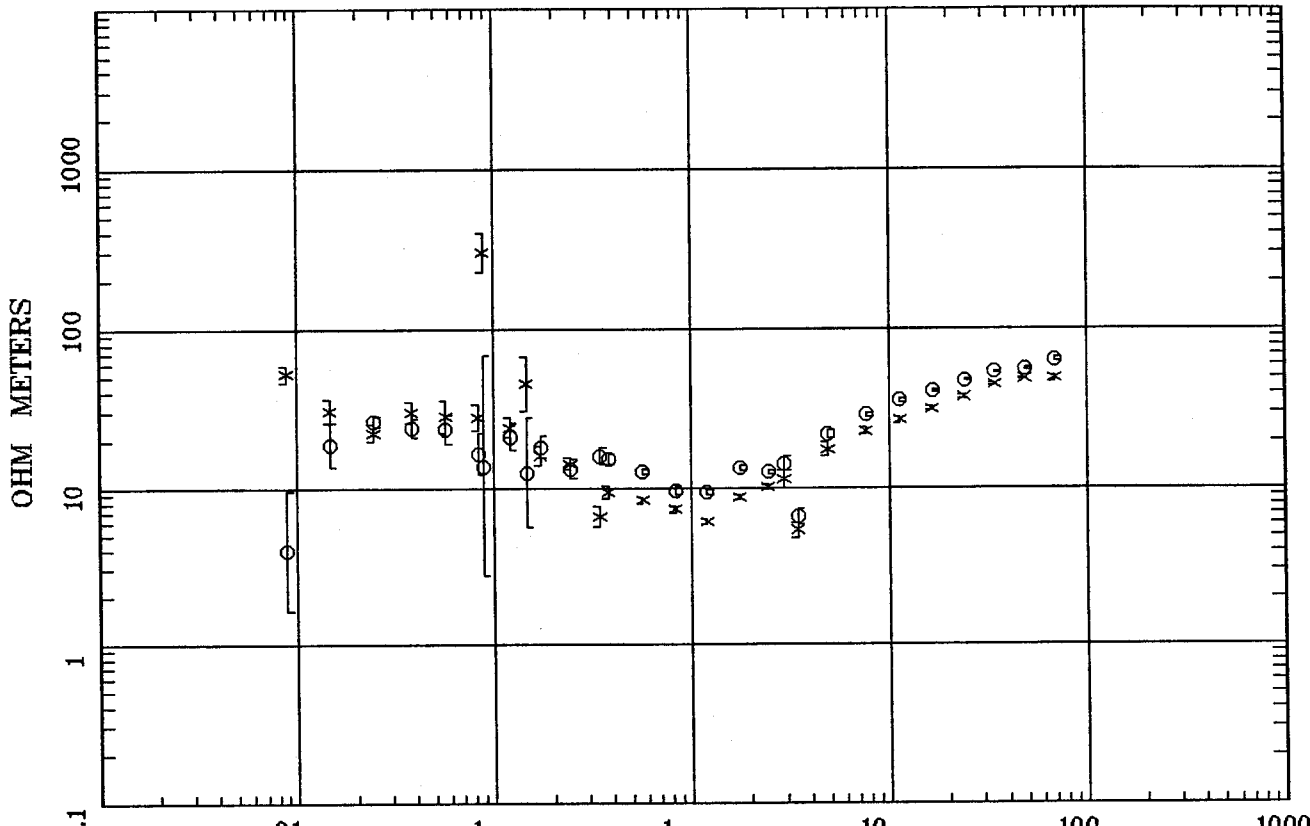


Client:
Remote: none
Acquired: 09:4 Aug 09, 2006
Survey Co:USGS

Rotation:
Filename: sl14m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:01 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

Station 15

APPARENT RESISTIVITY Alamosa Quad, 100k

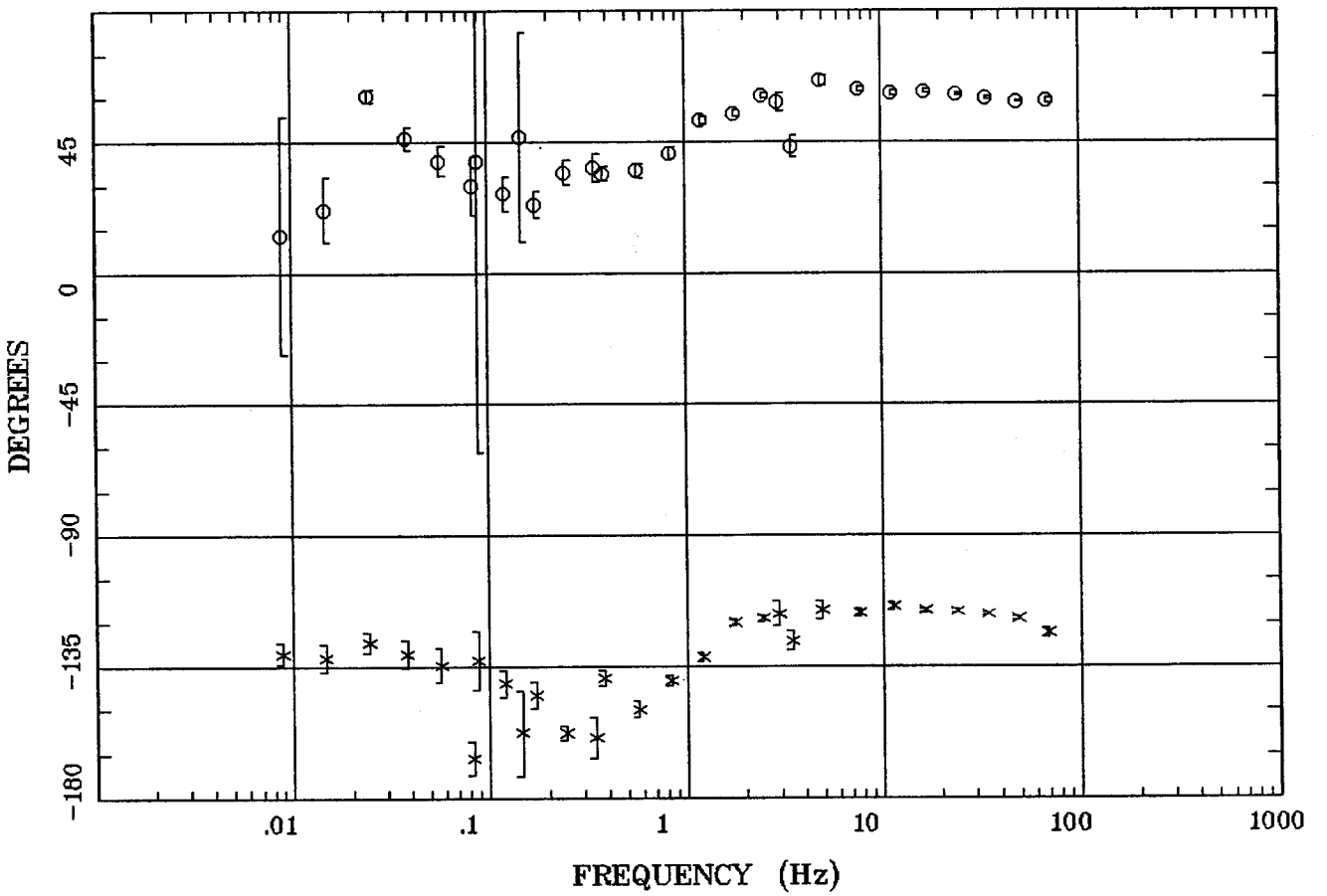


Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

Station 15

IMPEDANCE PHASE Alamosa Quad, 100k

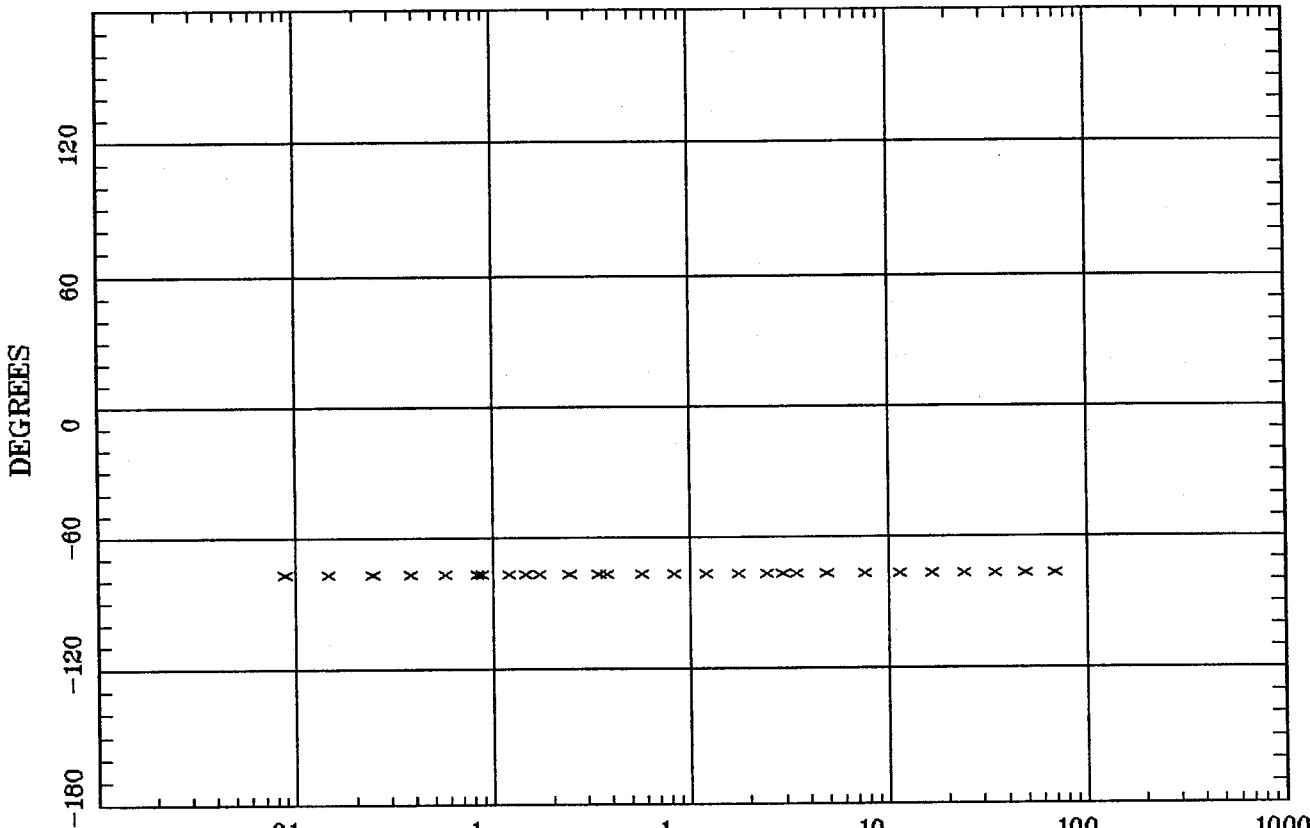


Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

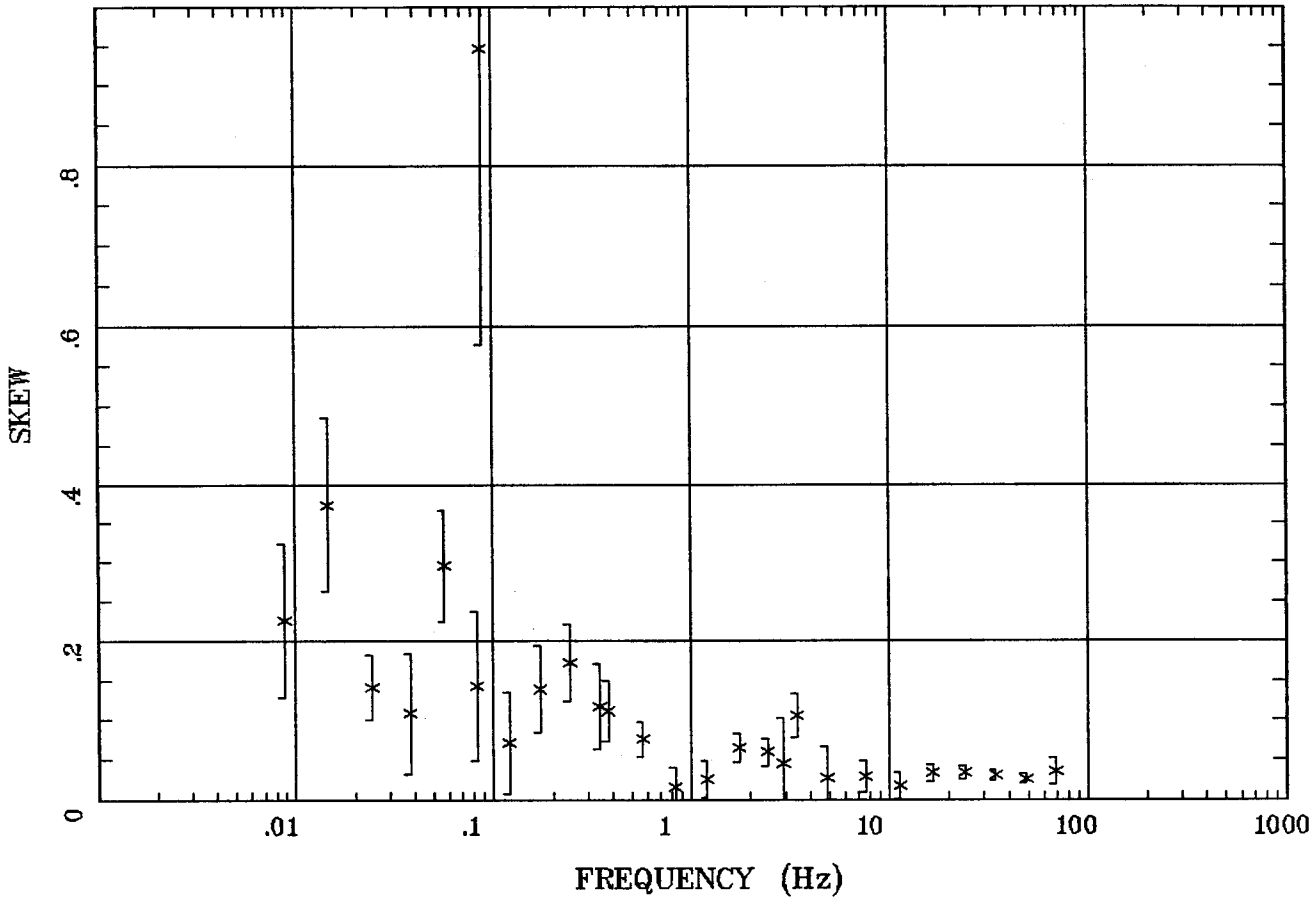


Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:44 Sep 24, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE SKEW

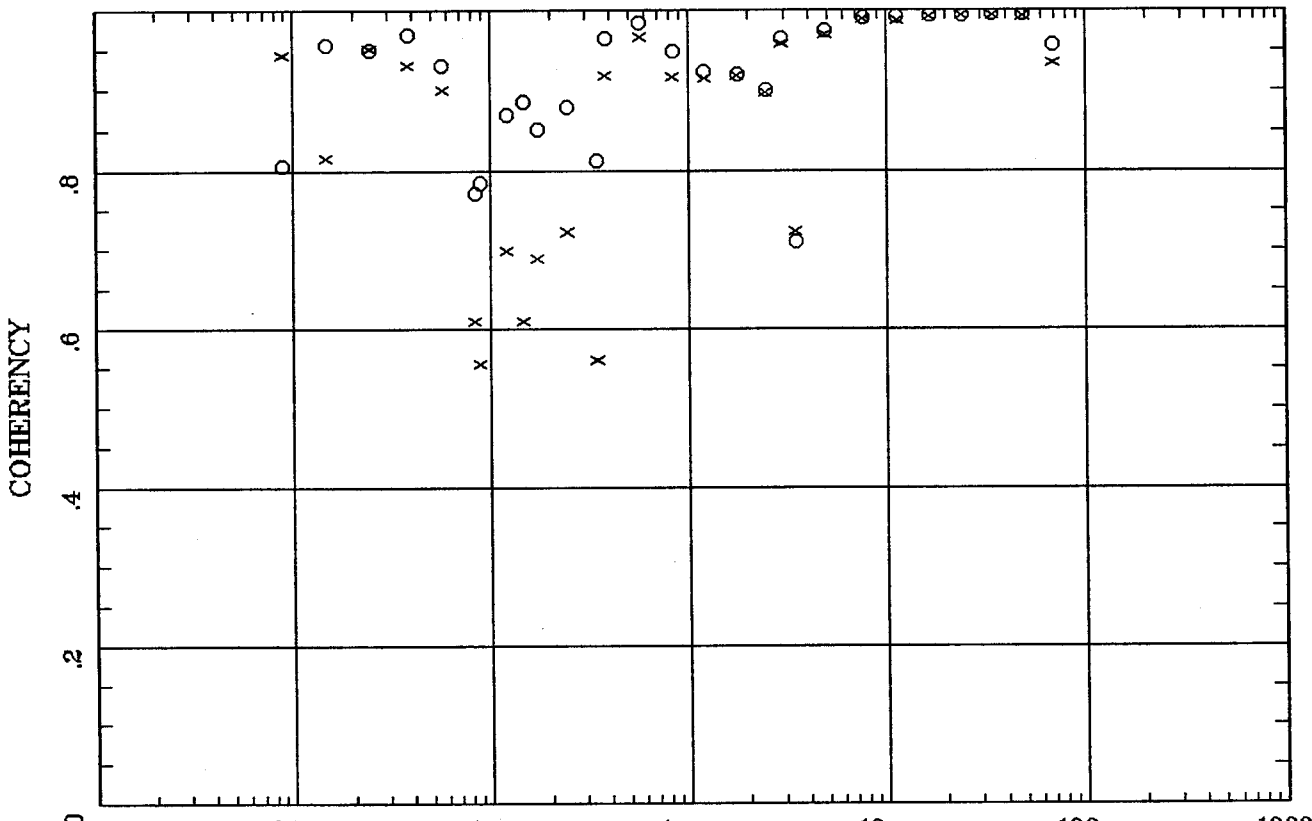
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k

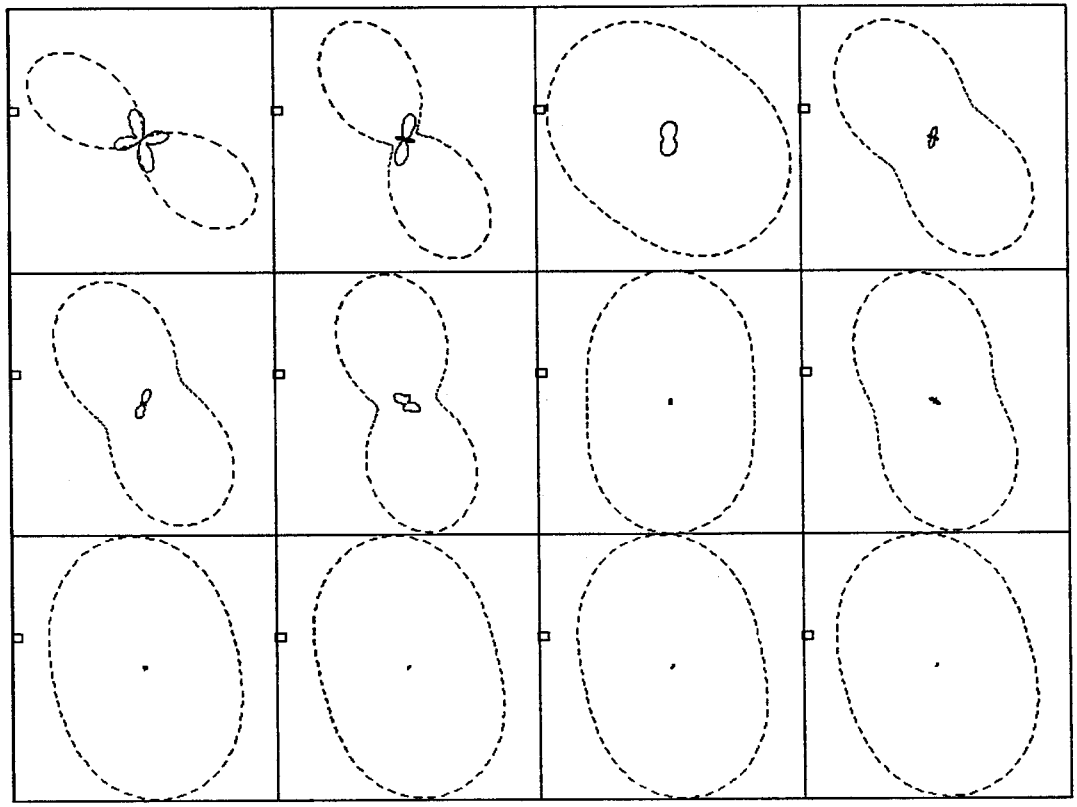


Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k

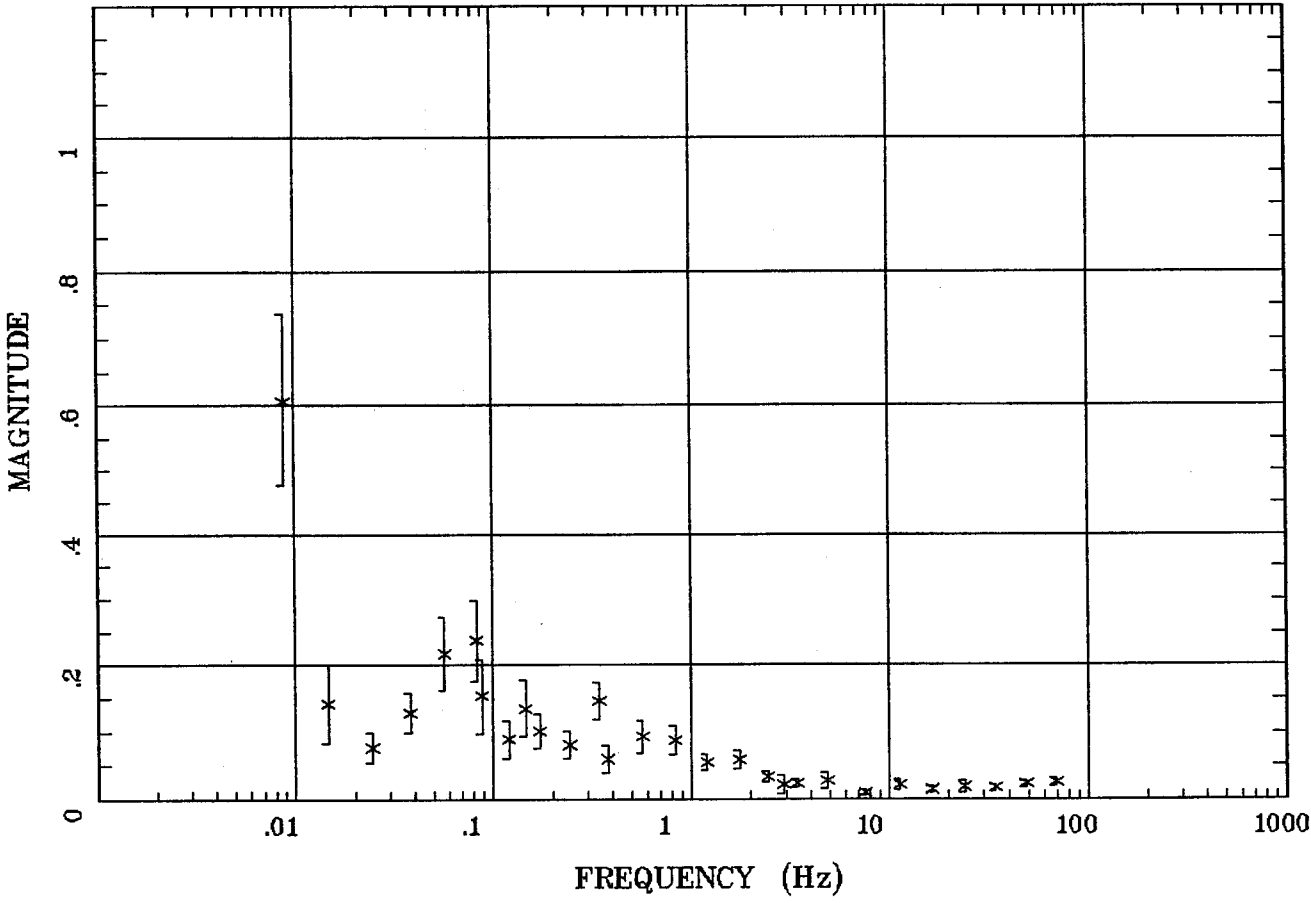


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k **Station 15**



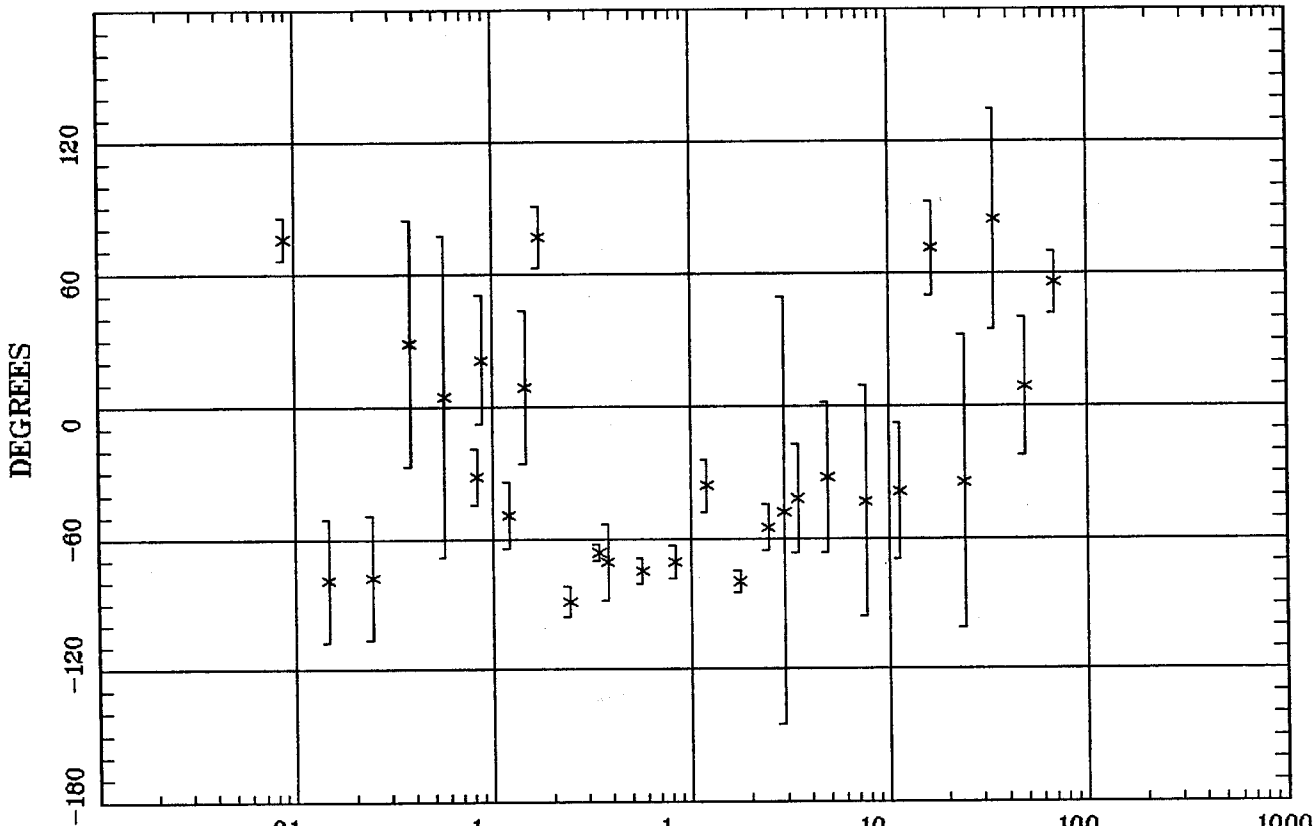
Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

Station 15

TIPPER STRIKE

Alamosa Quad, 100k

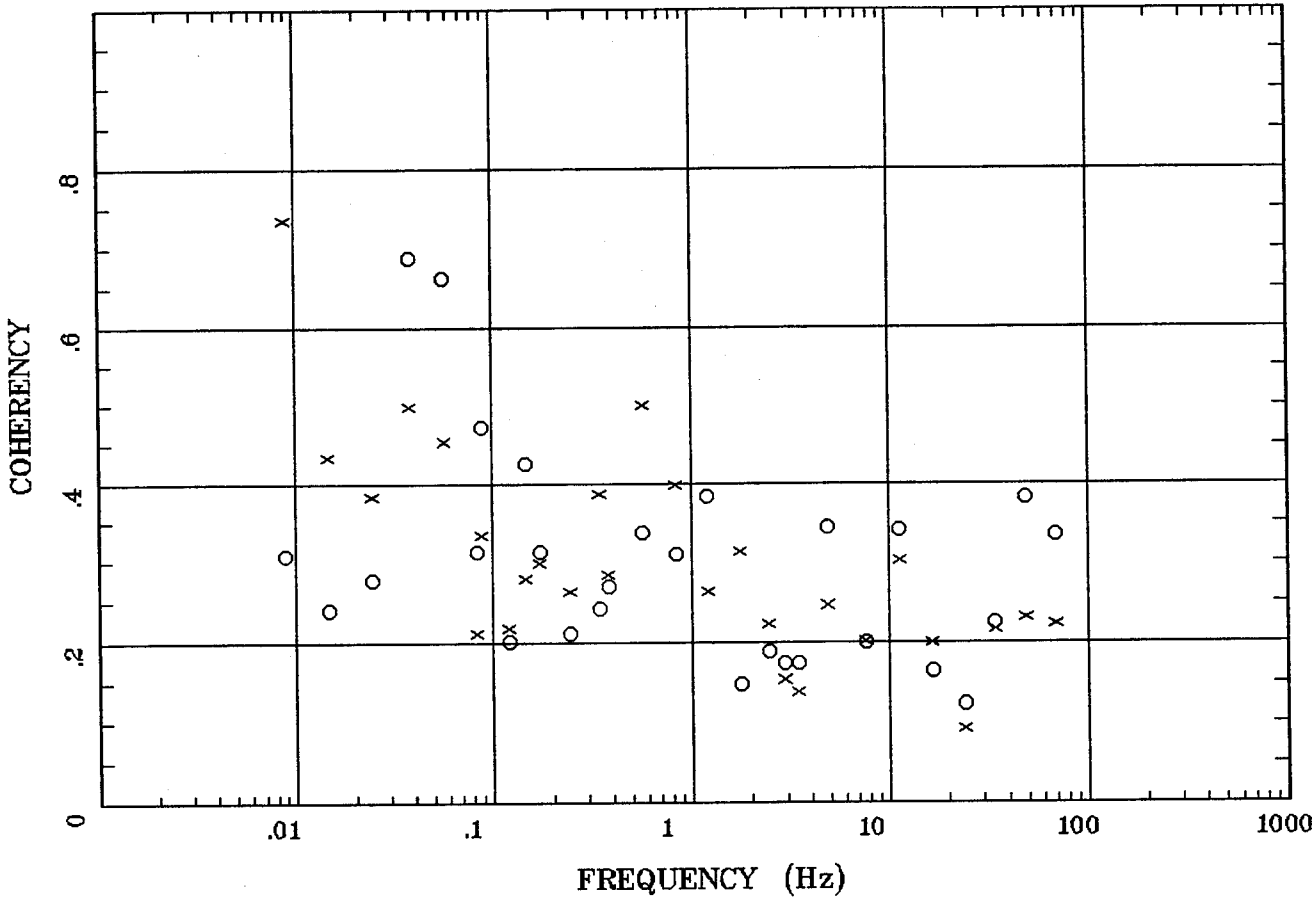


Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

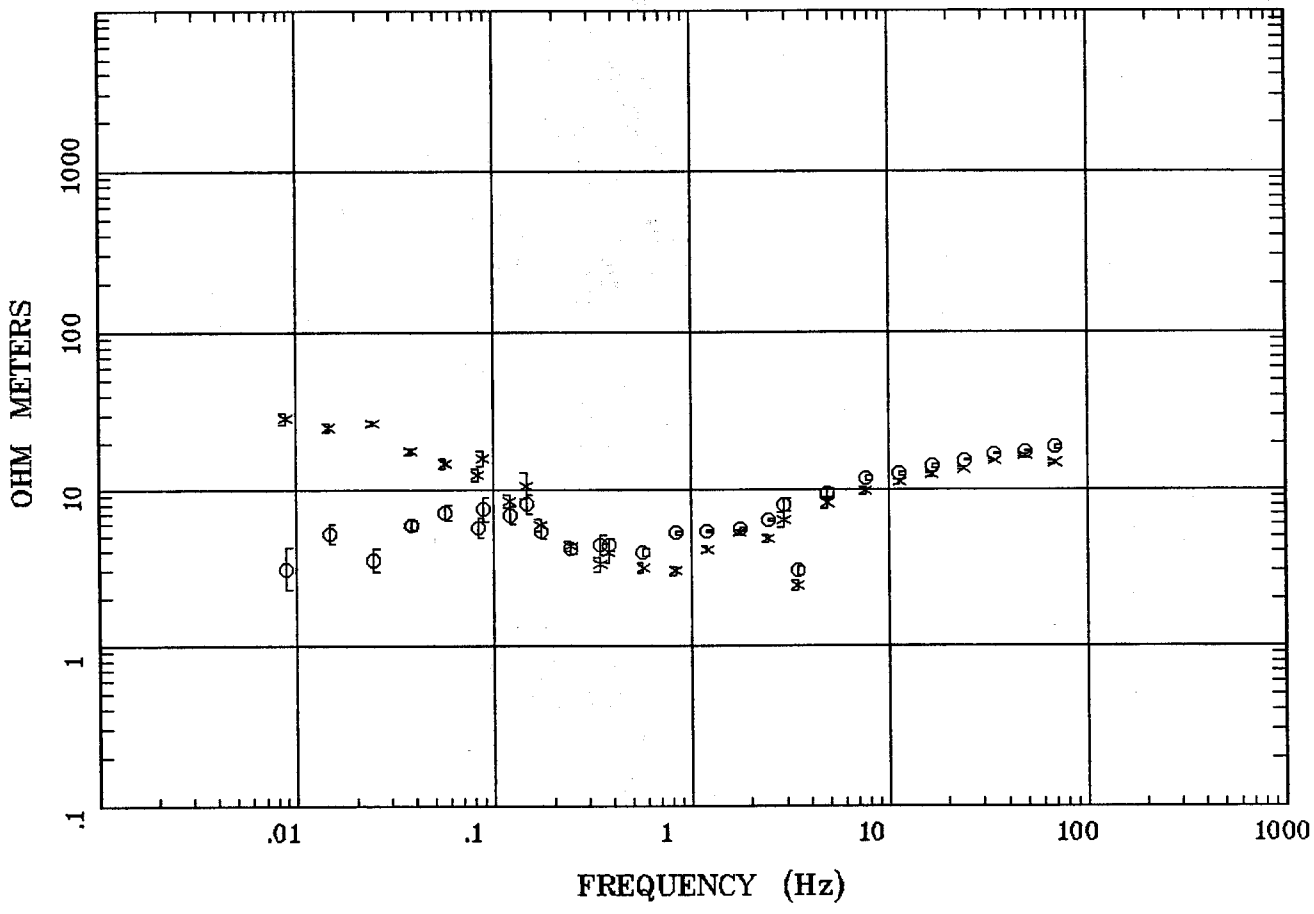


Client:
Remote: none
Acquired: 11:2 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl15ma.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 14:28 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

Station 16

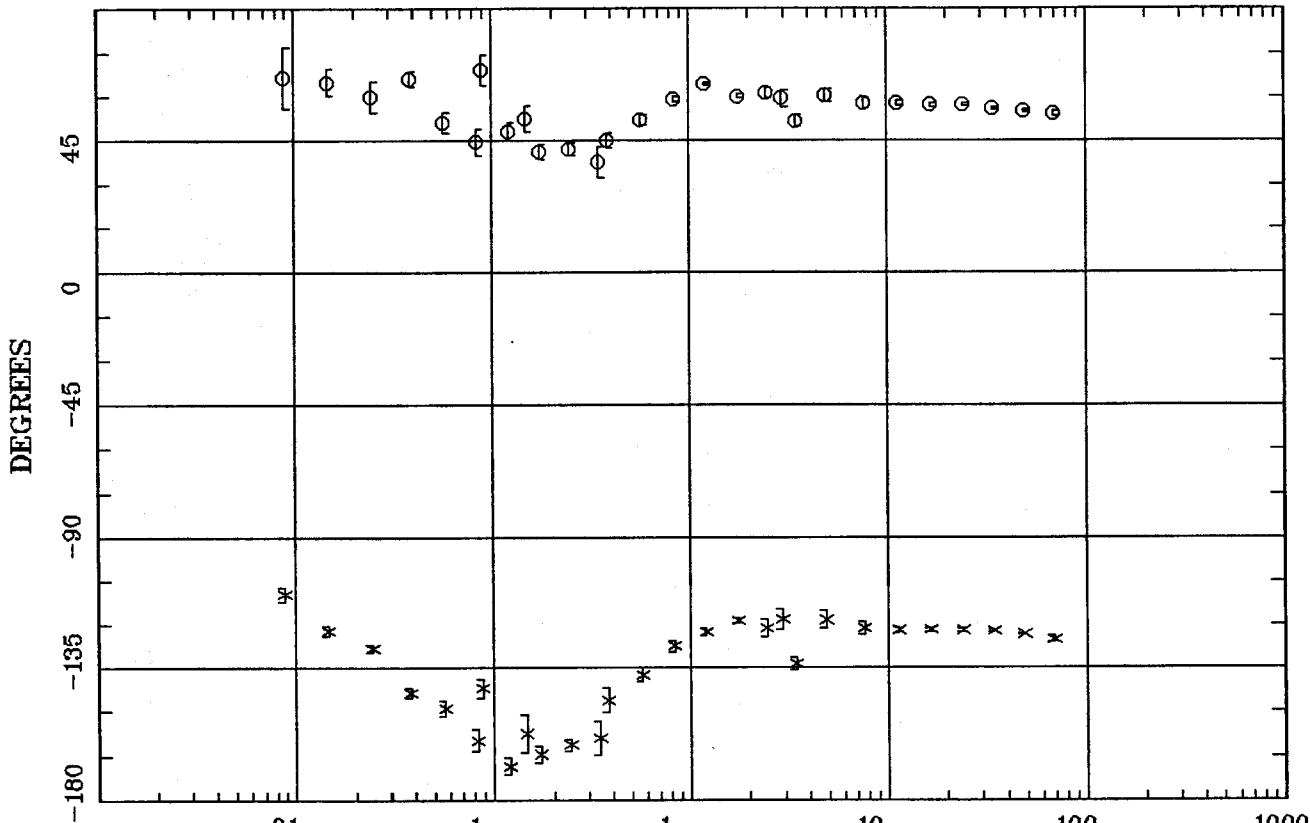
APPARENT RESISTIVITY Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

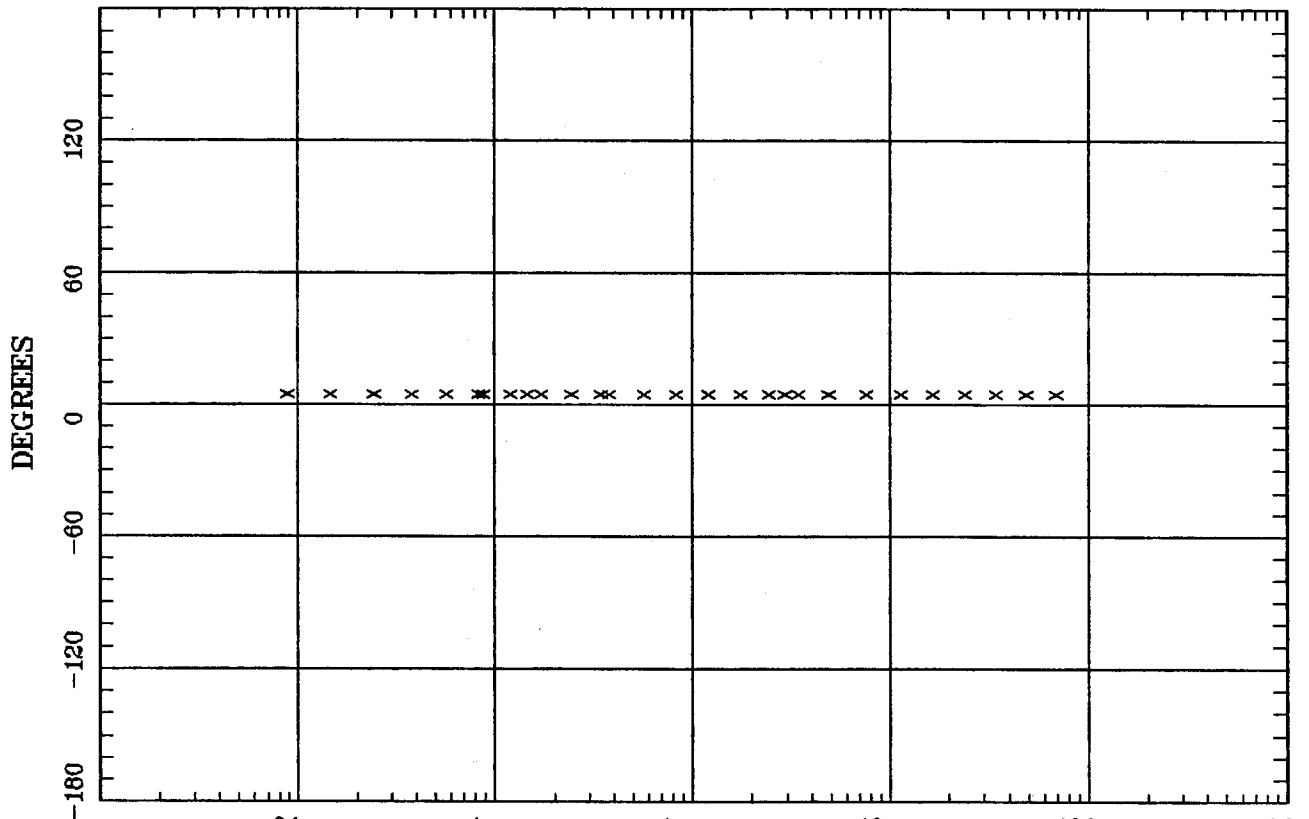
IMPEDANCE PHASE Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

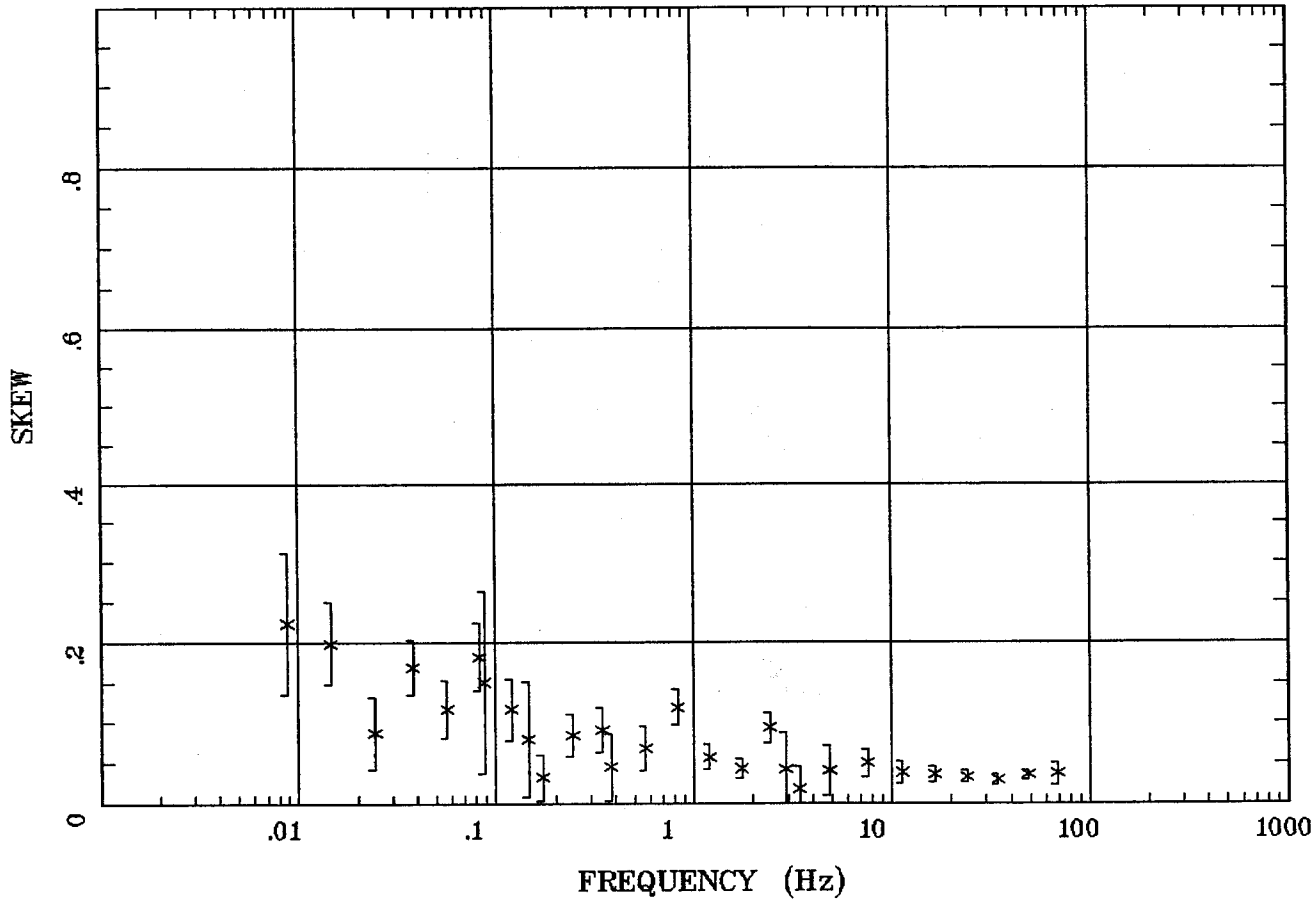
ROTATION ANGLE Alamosa Quad, 100k **Station 16**



Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

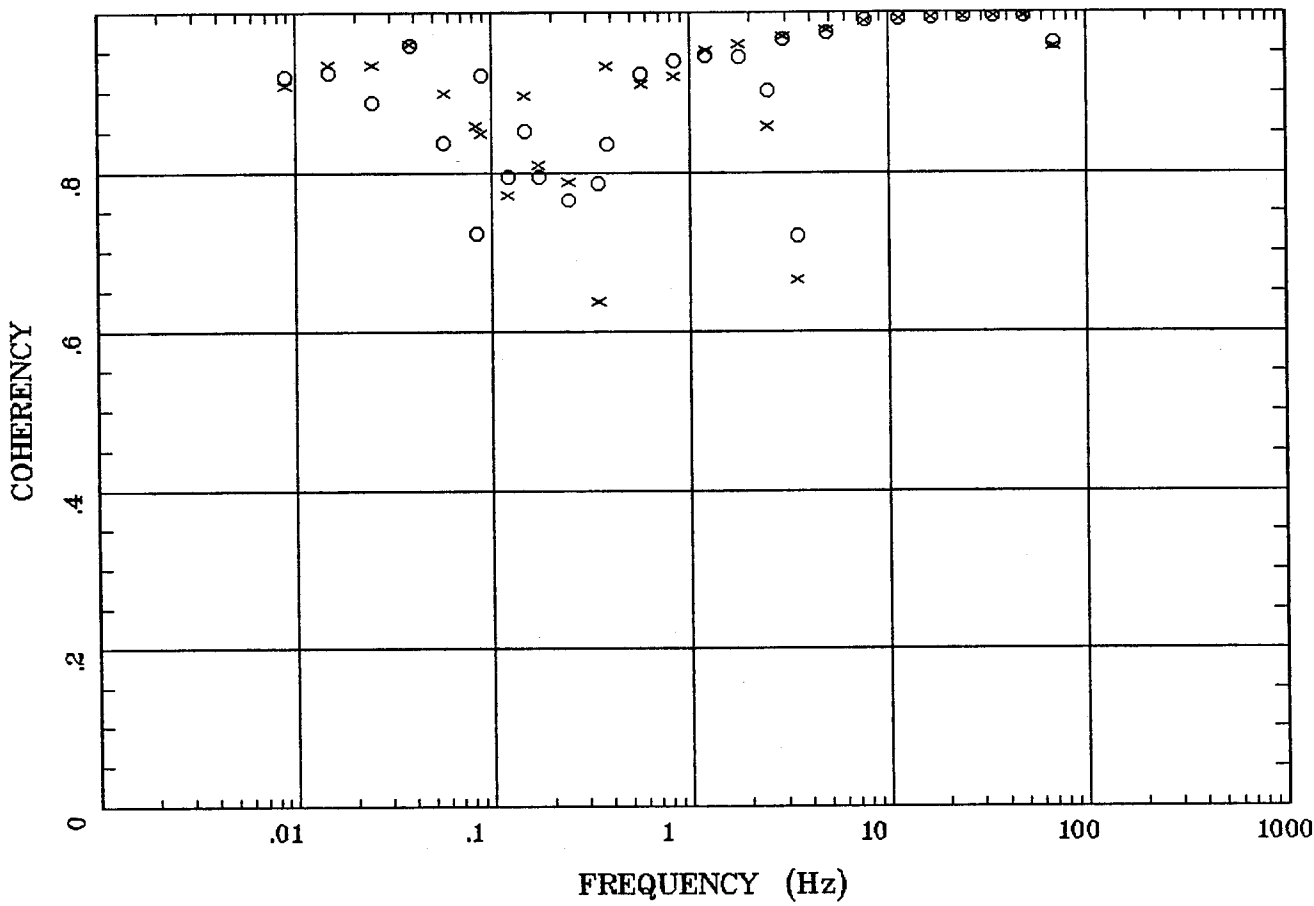
IMPEDANCE SKEW Alamosa Quad, 100k **Station 16**



Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k **Station 16**



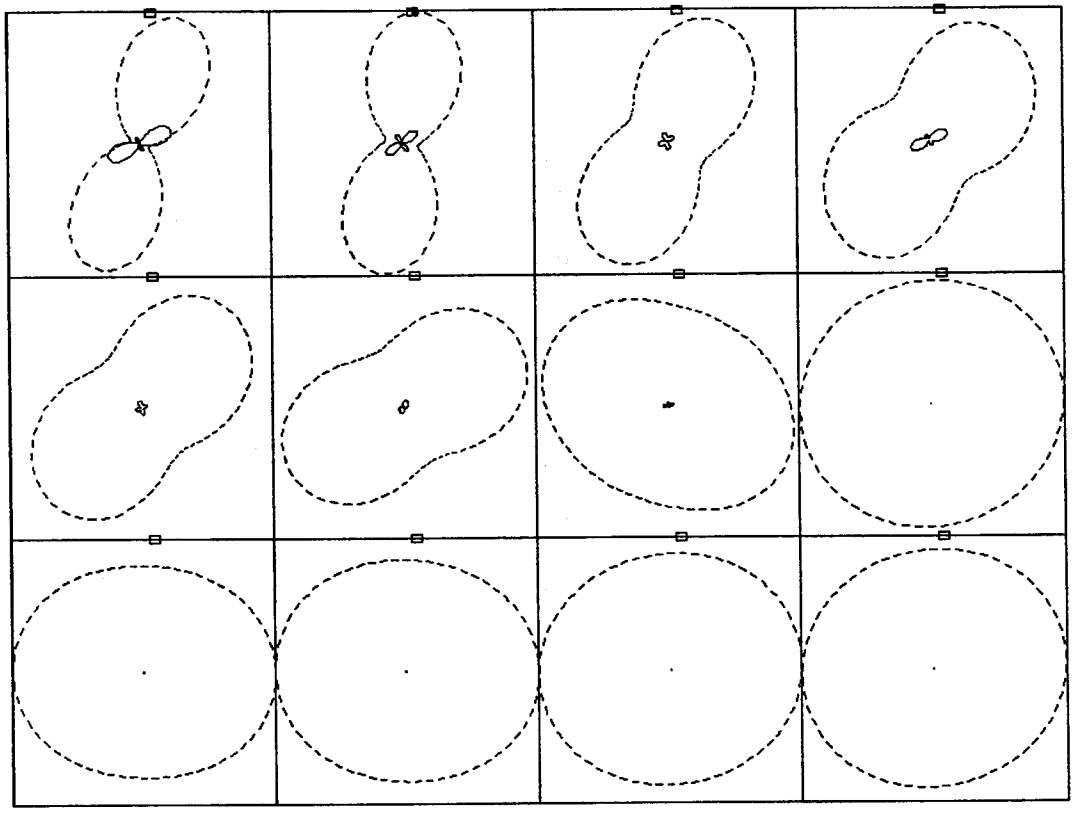
Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k

Station 16

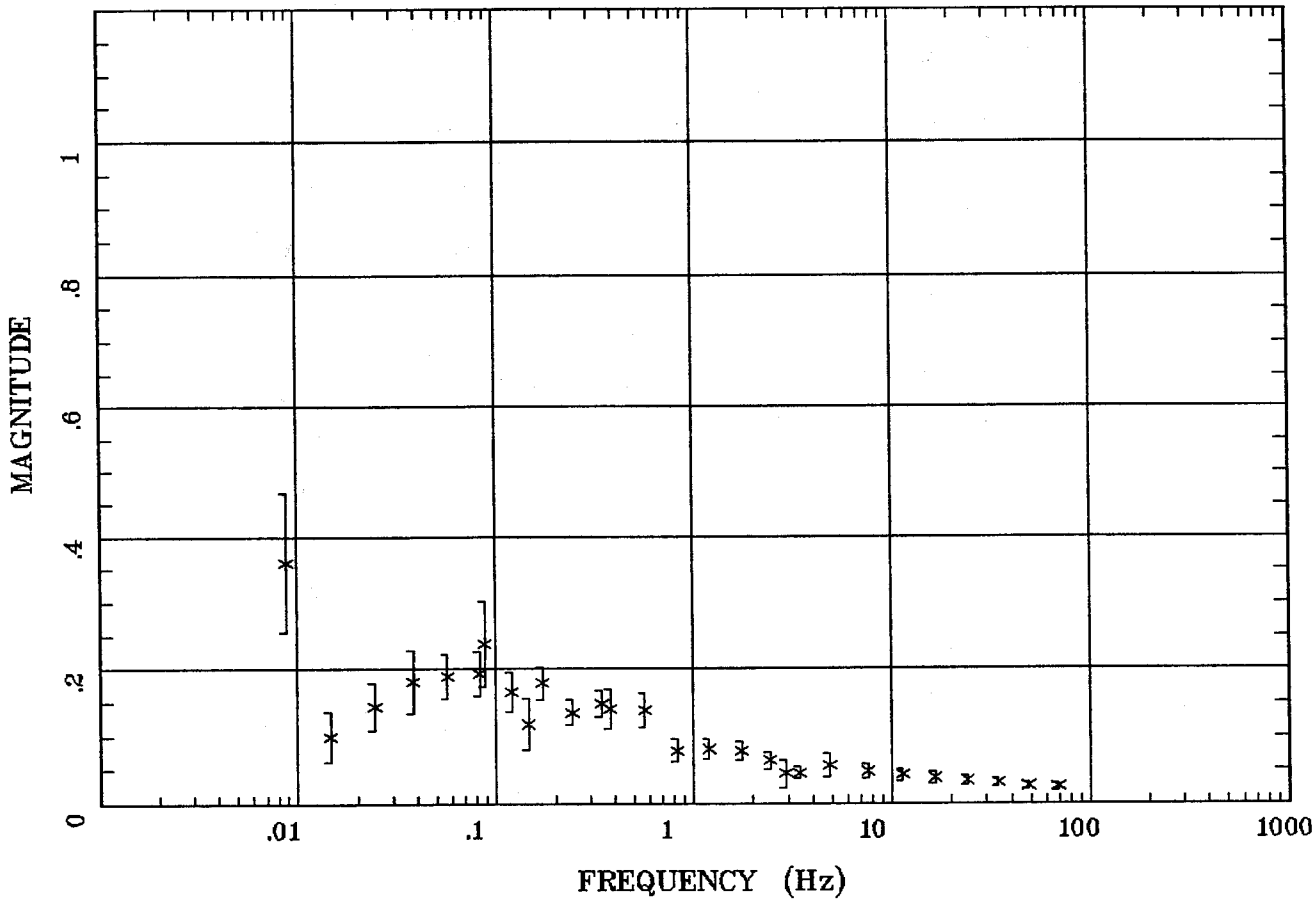


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k

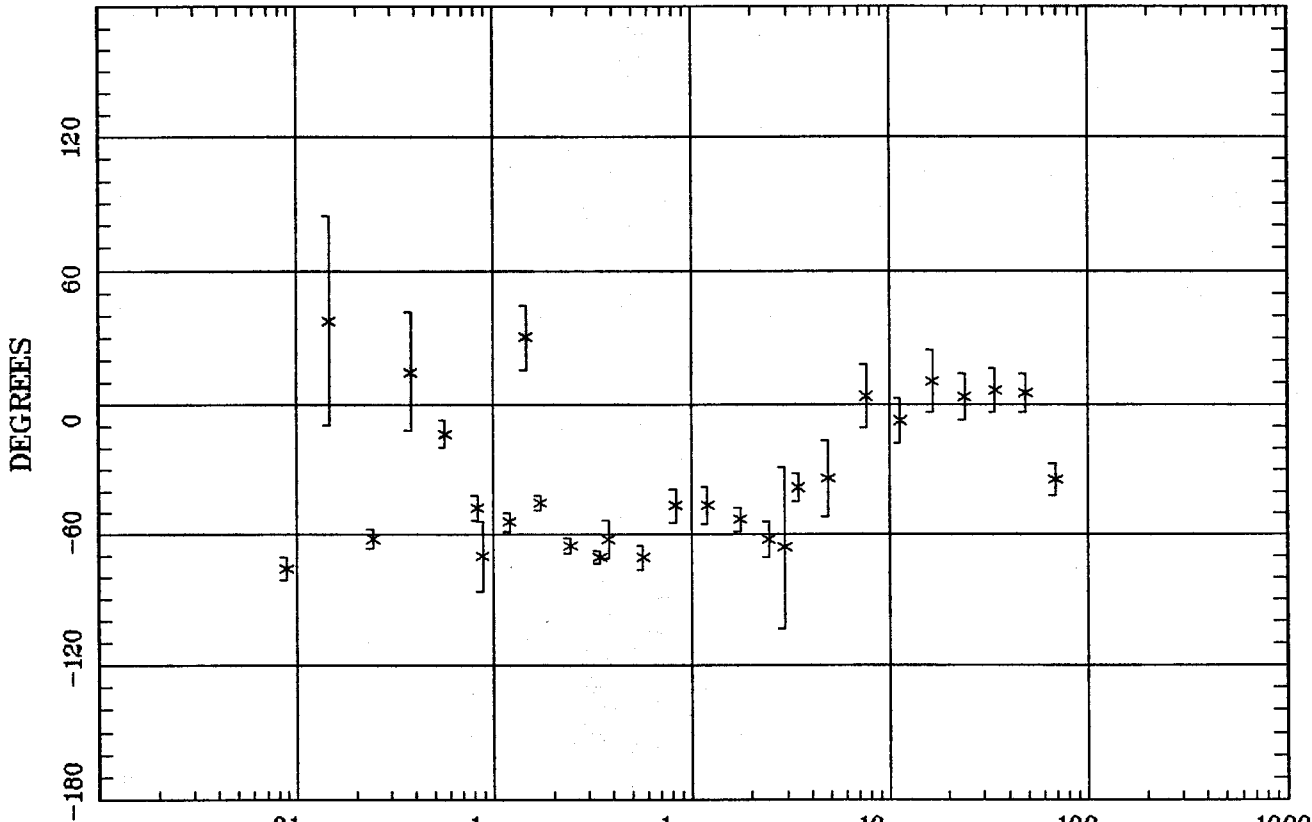


Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

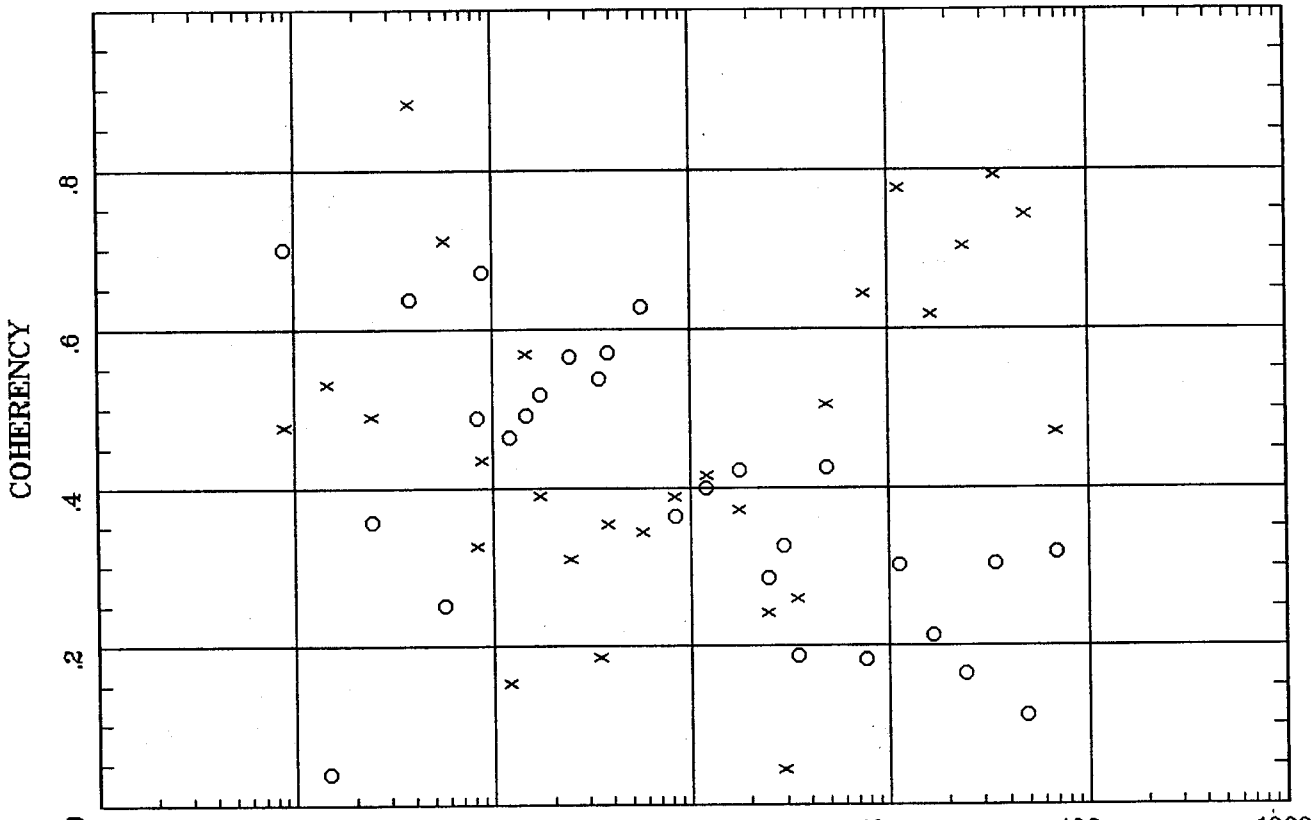


Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI – ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

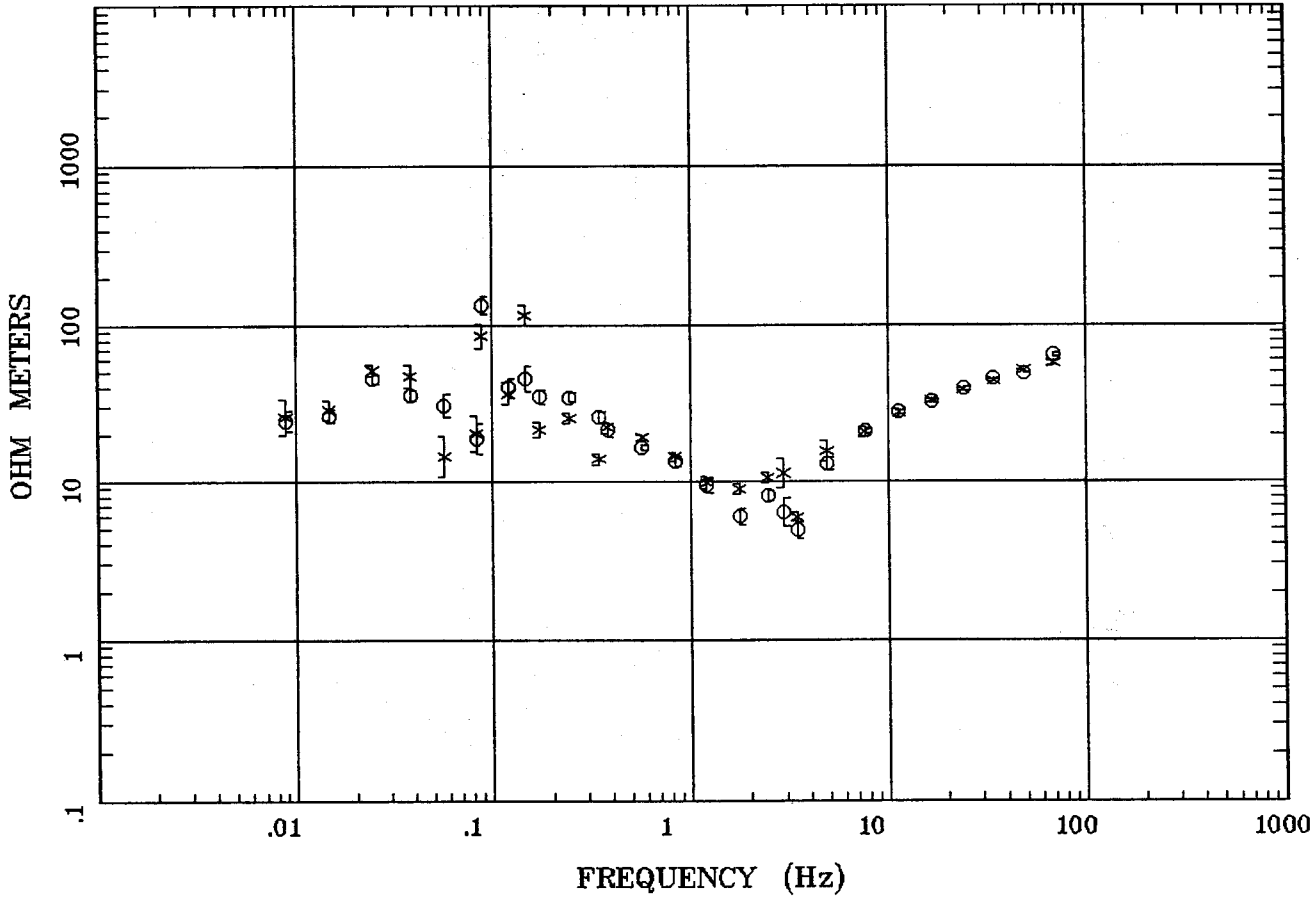
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 15:5 Aug 10, 2006
Survey Co:USGS

Rotation:
Filename: sl16m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 16:04 Mar 14, 2007
< EMI - ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k **Station 17**

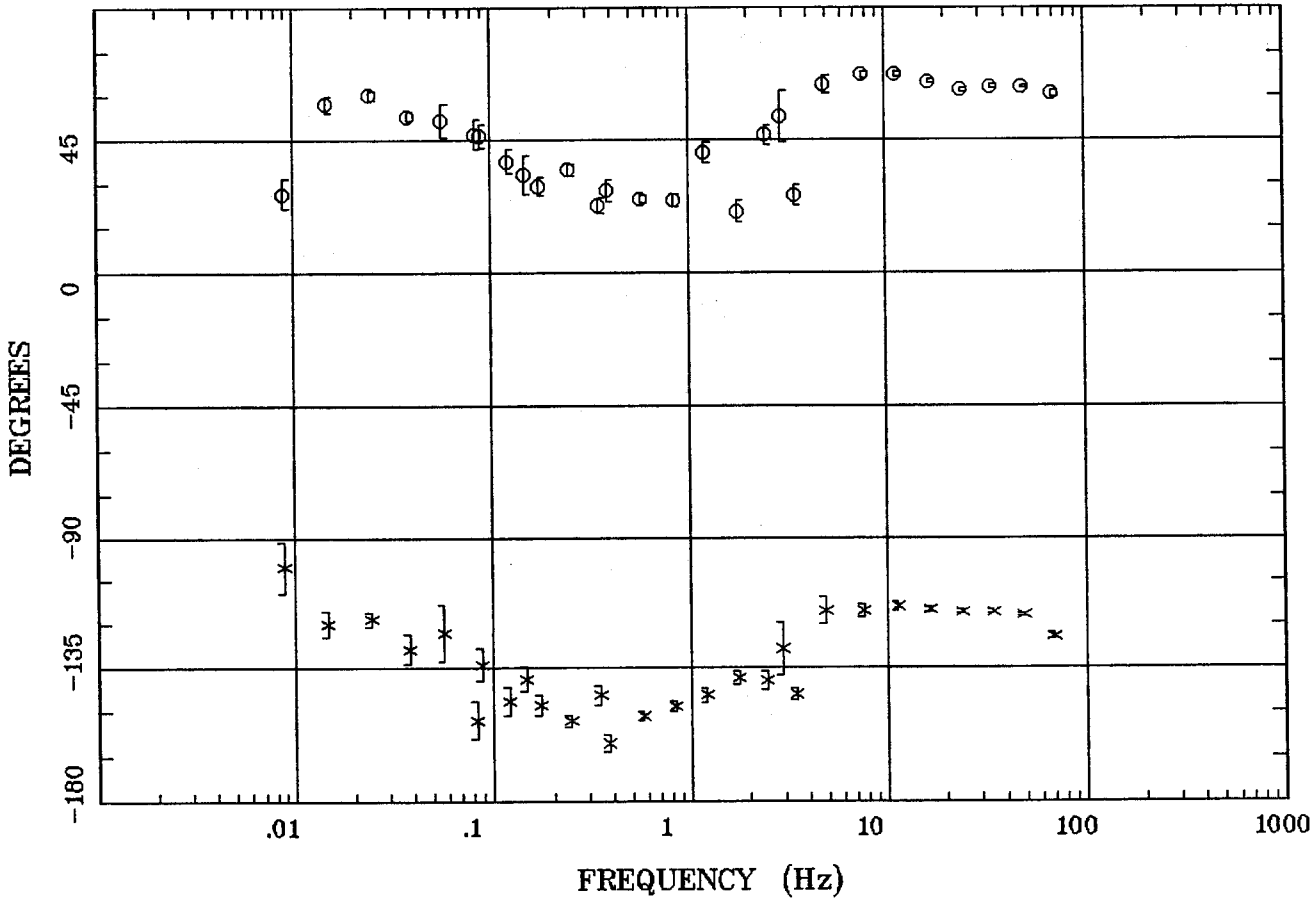


Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE

Alamosa Quad, 100k



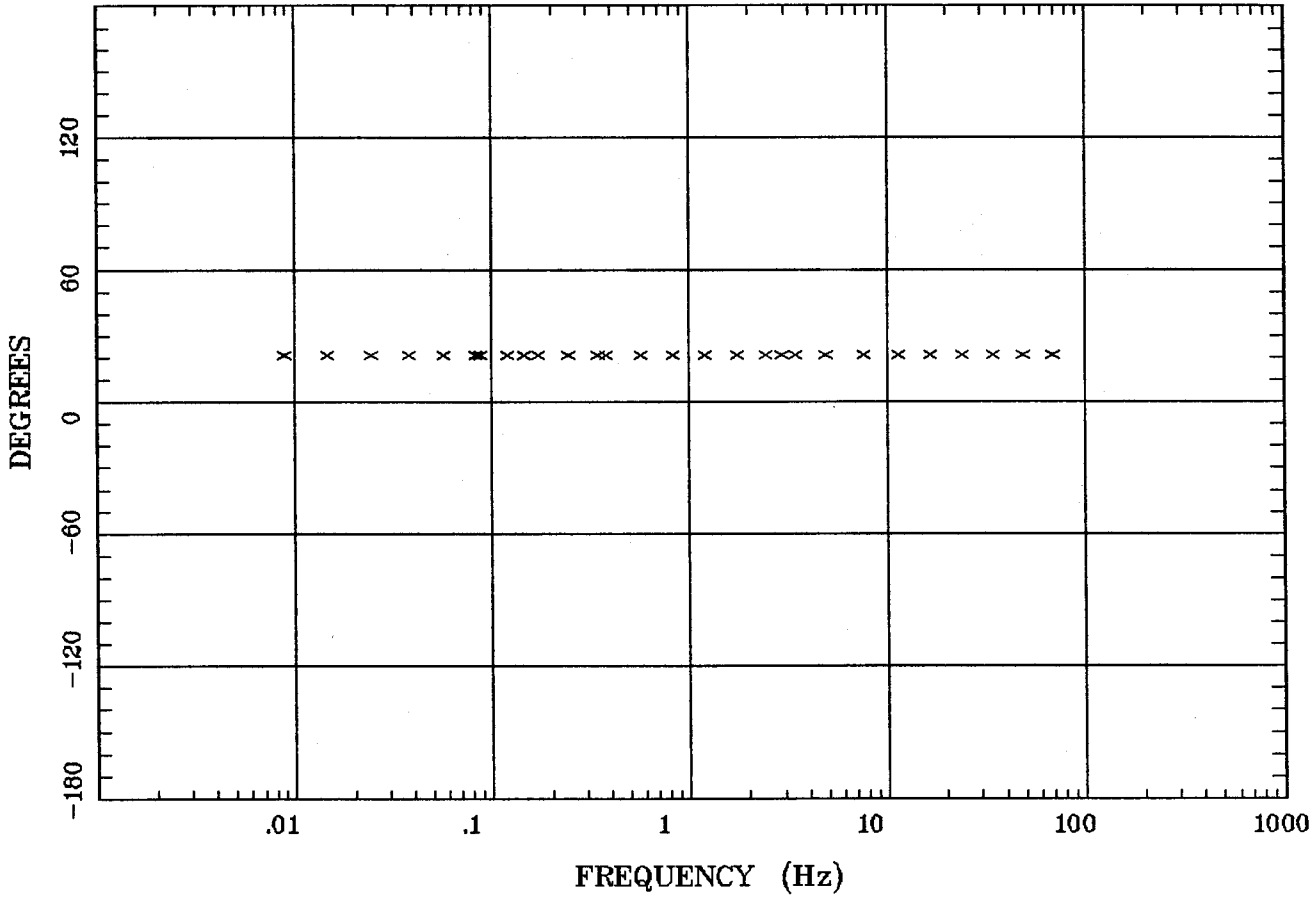
Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

Station 17



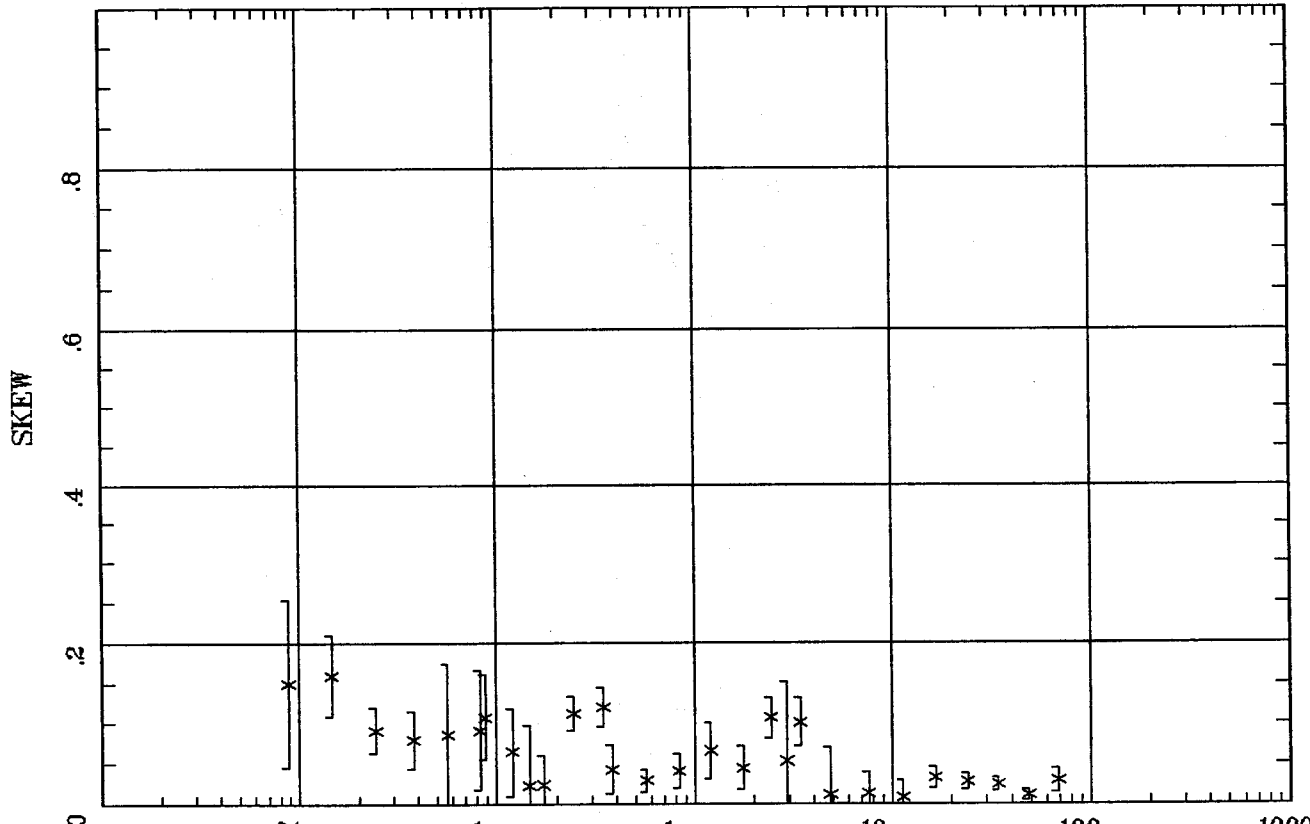
Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

Station 17

IMPEDANCE SKEW

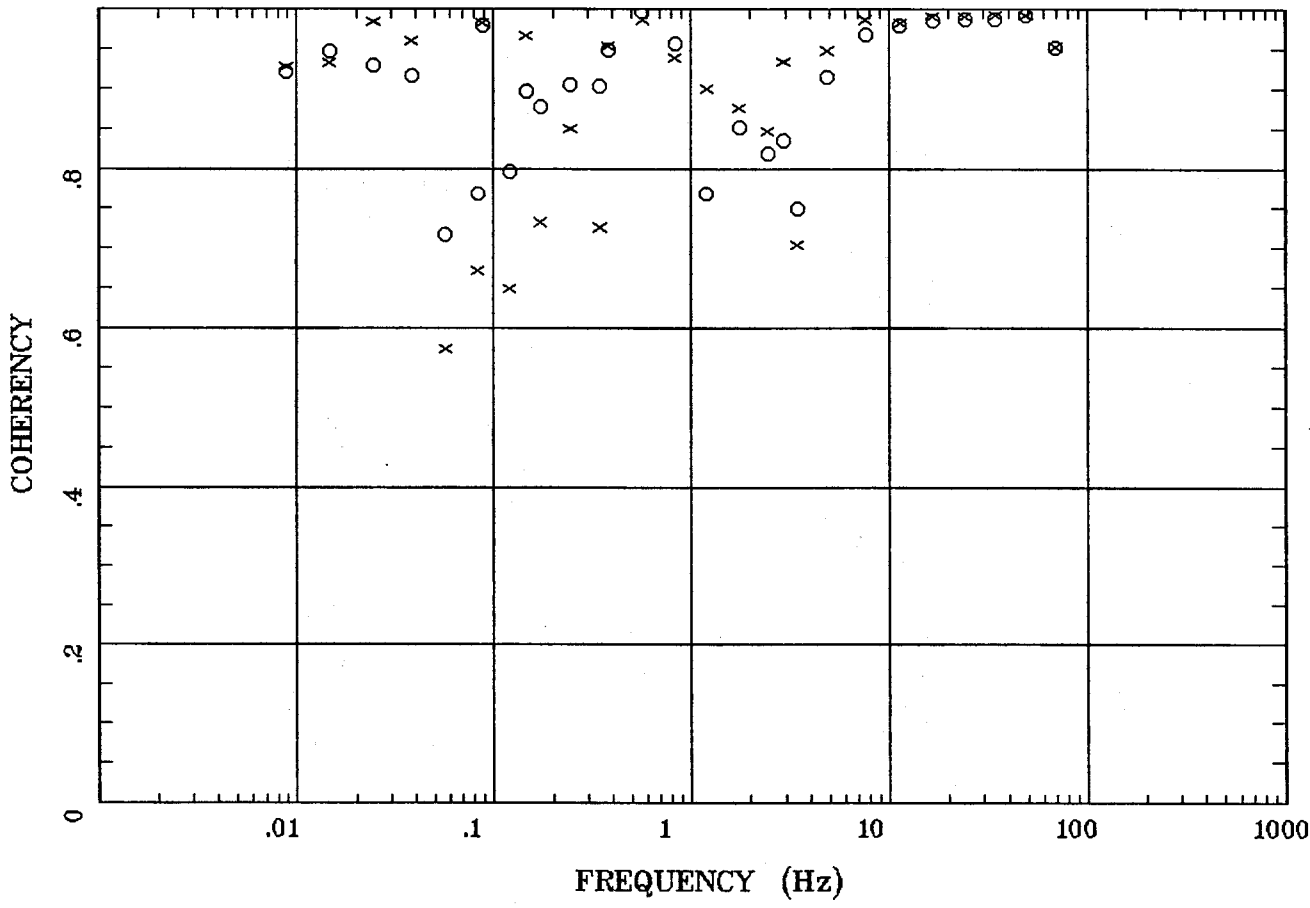
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

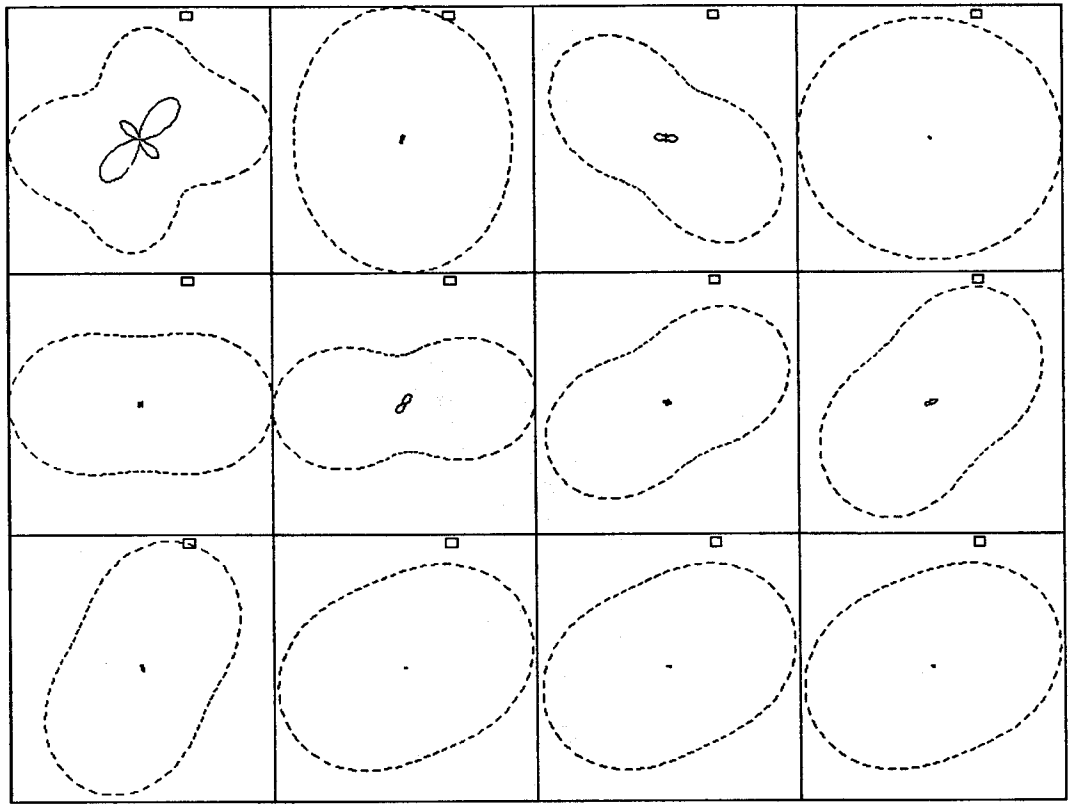
E MULT Coh. Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k

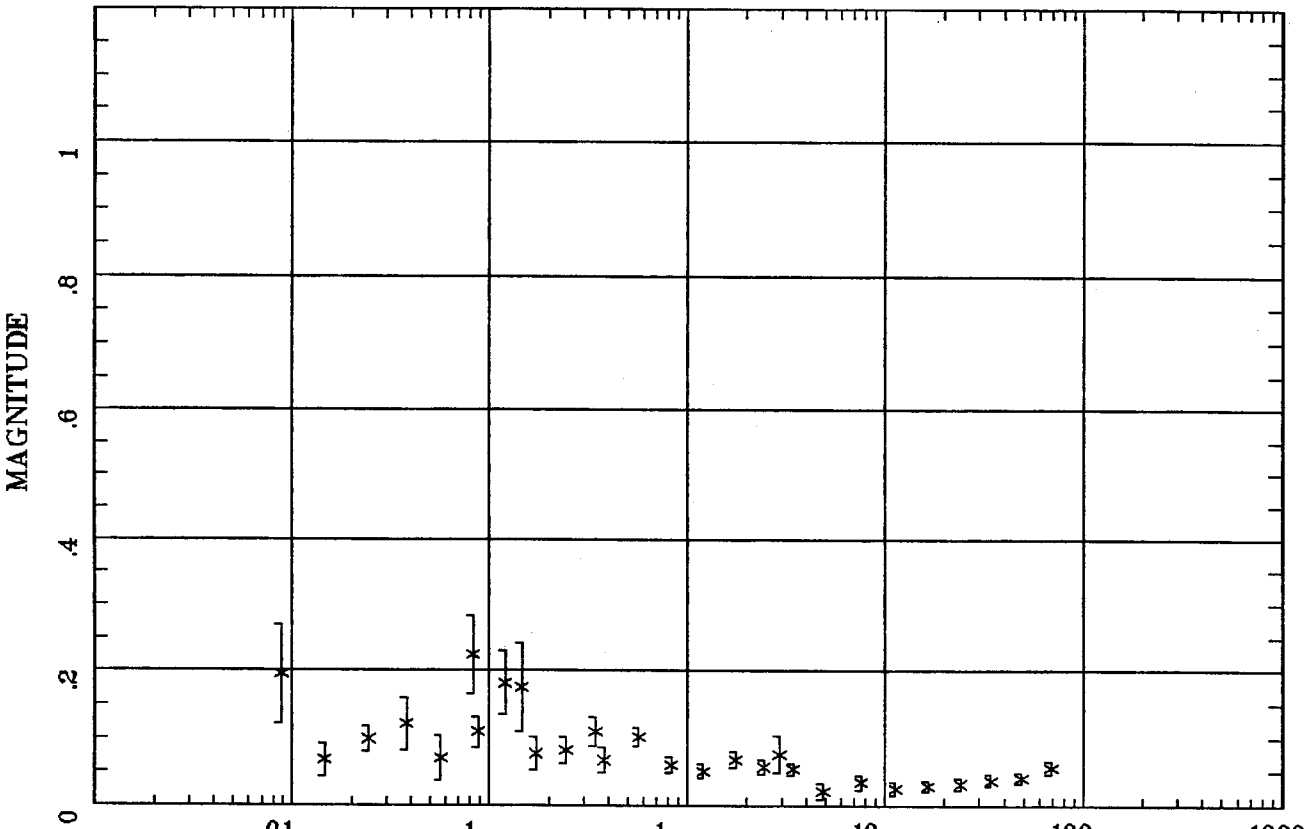


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k **Station 17**

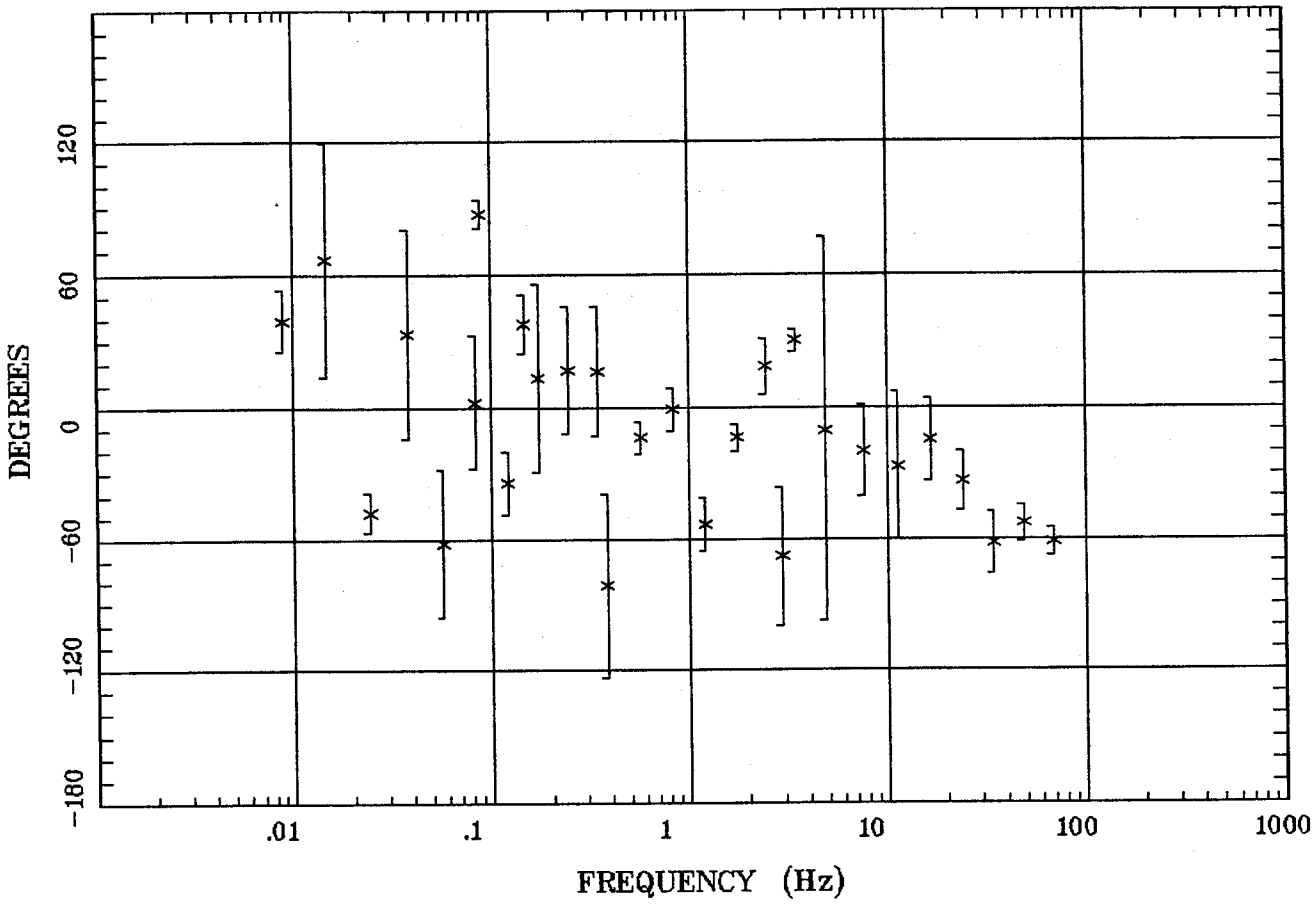


Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k



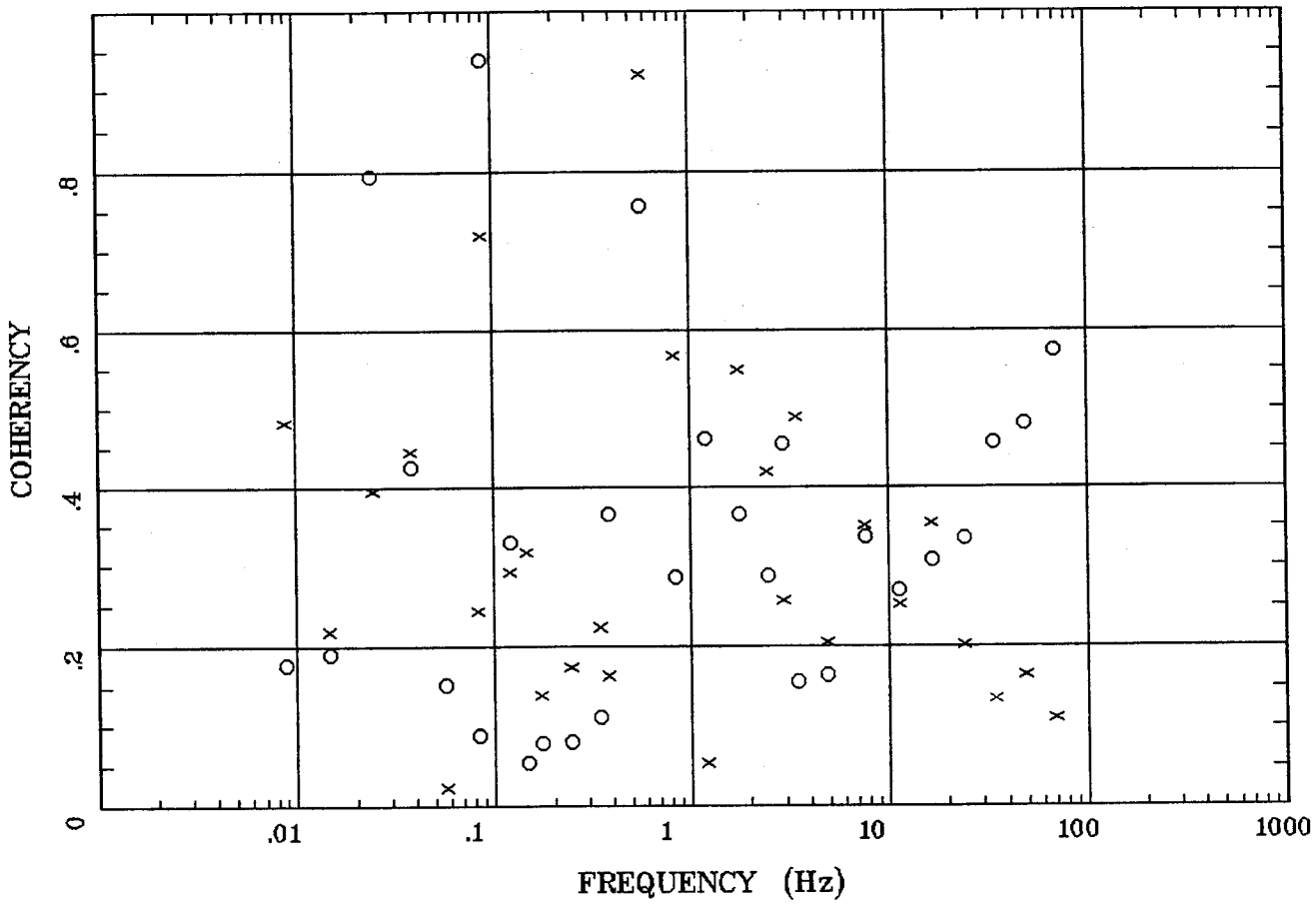
Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

Station 17

HzHx.x Coh HzHy.o

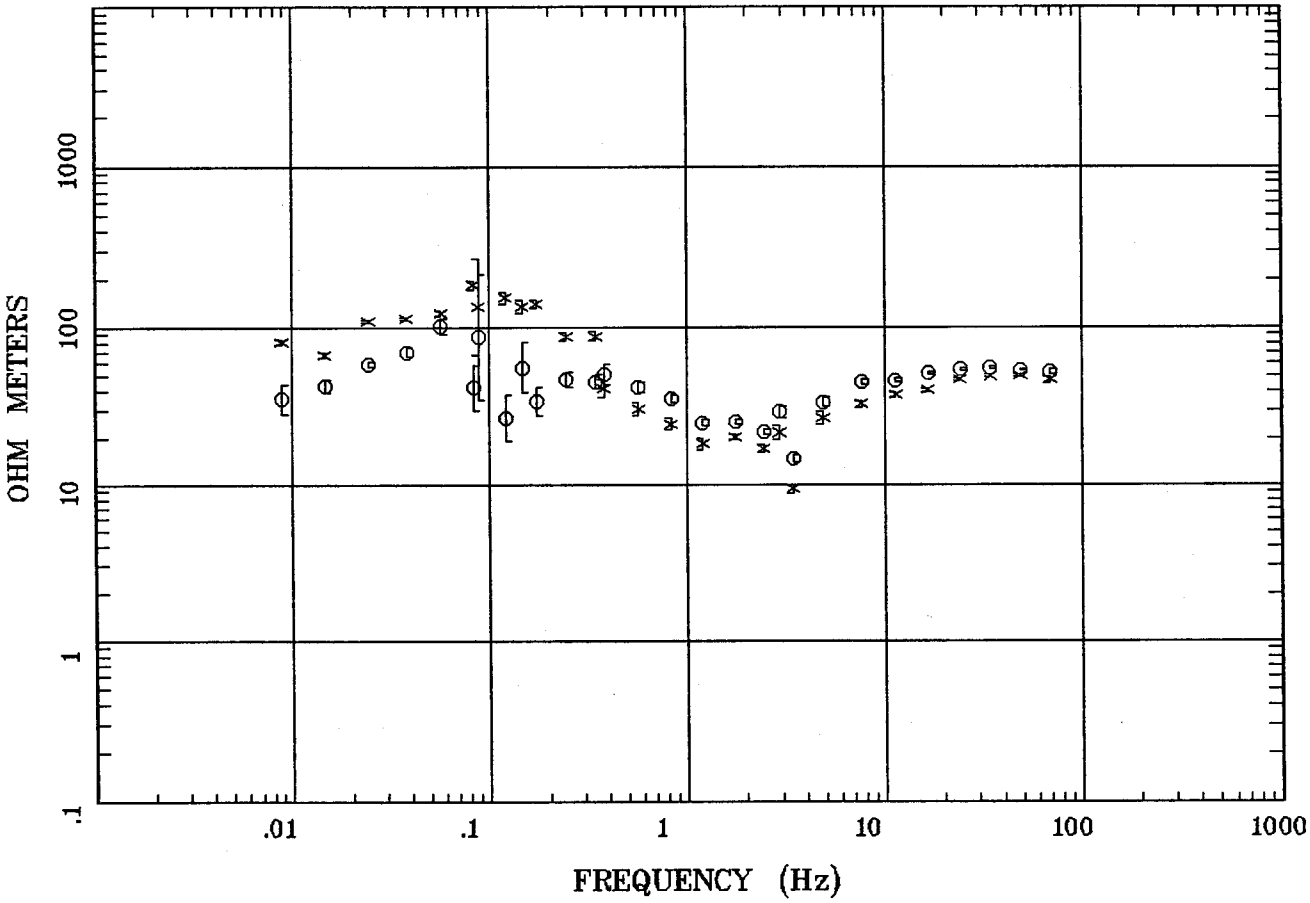
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:1 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl17m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:44 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

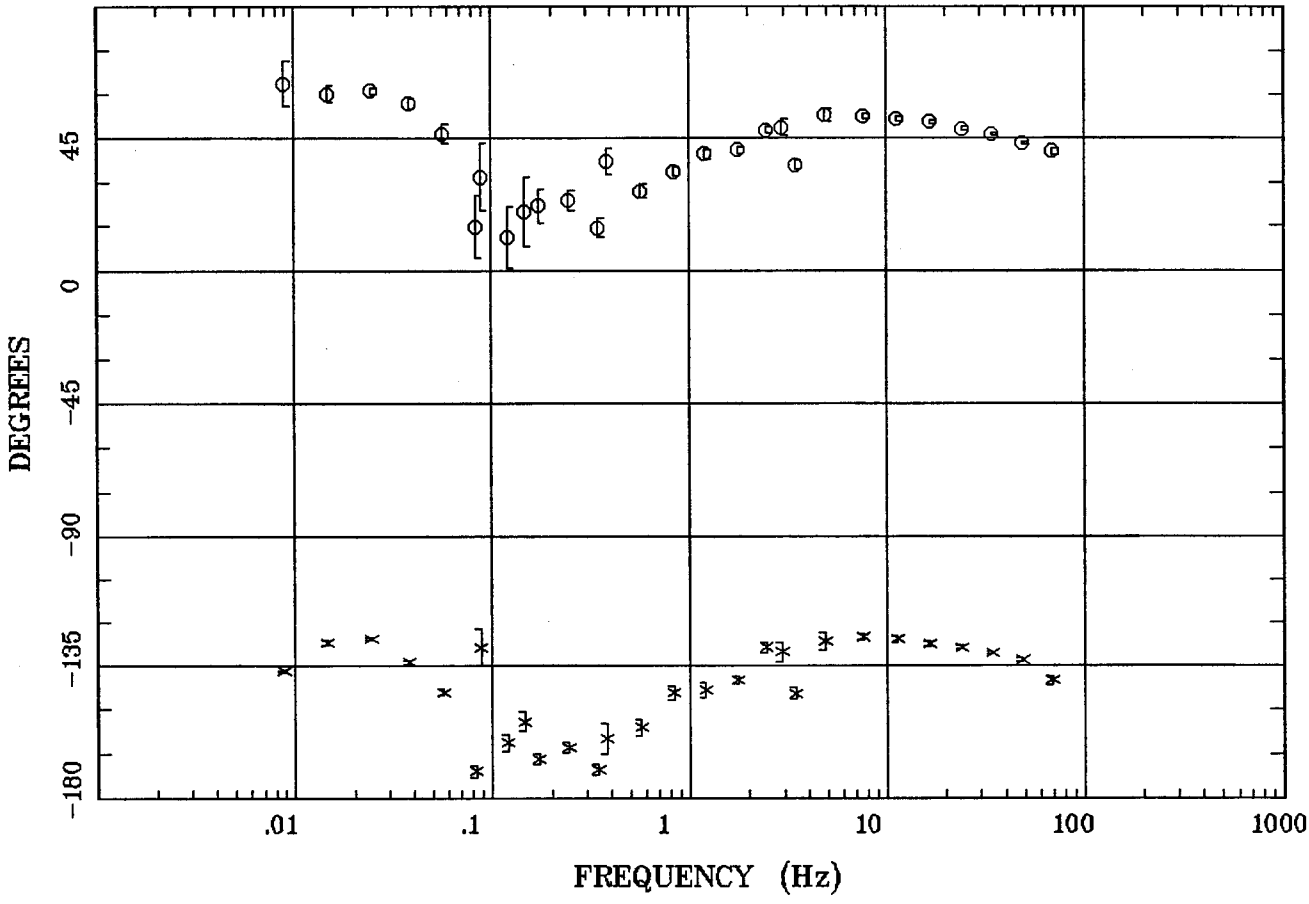
APPARENT RESISTIVITY Alamosa Quad, 100k **Station 18**



Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE Alamosa Quad, 100k



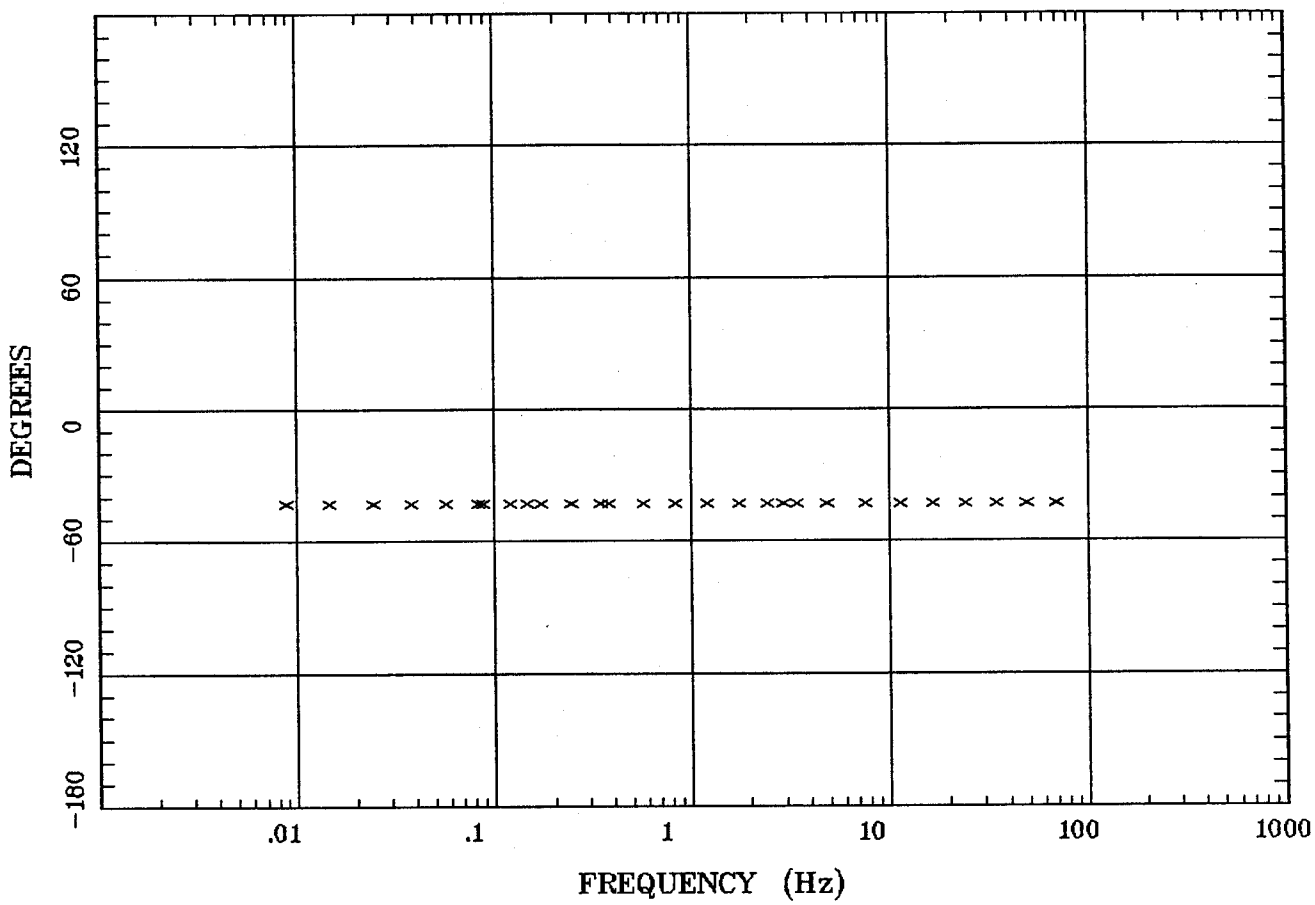
Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

Station 18

ROTATION ANGLE

Alamosa Quad, 100k

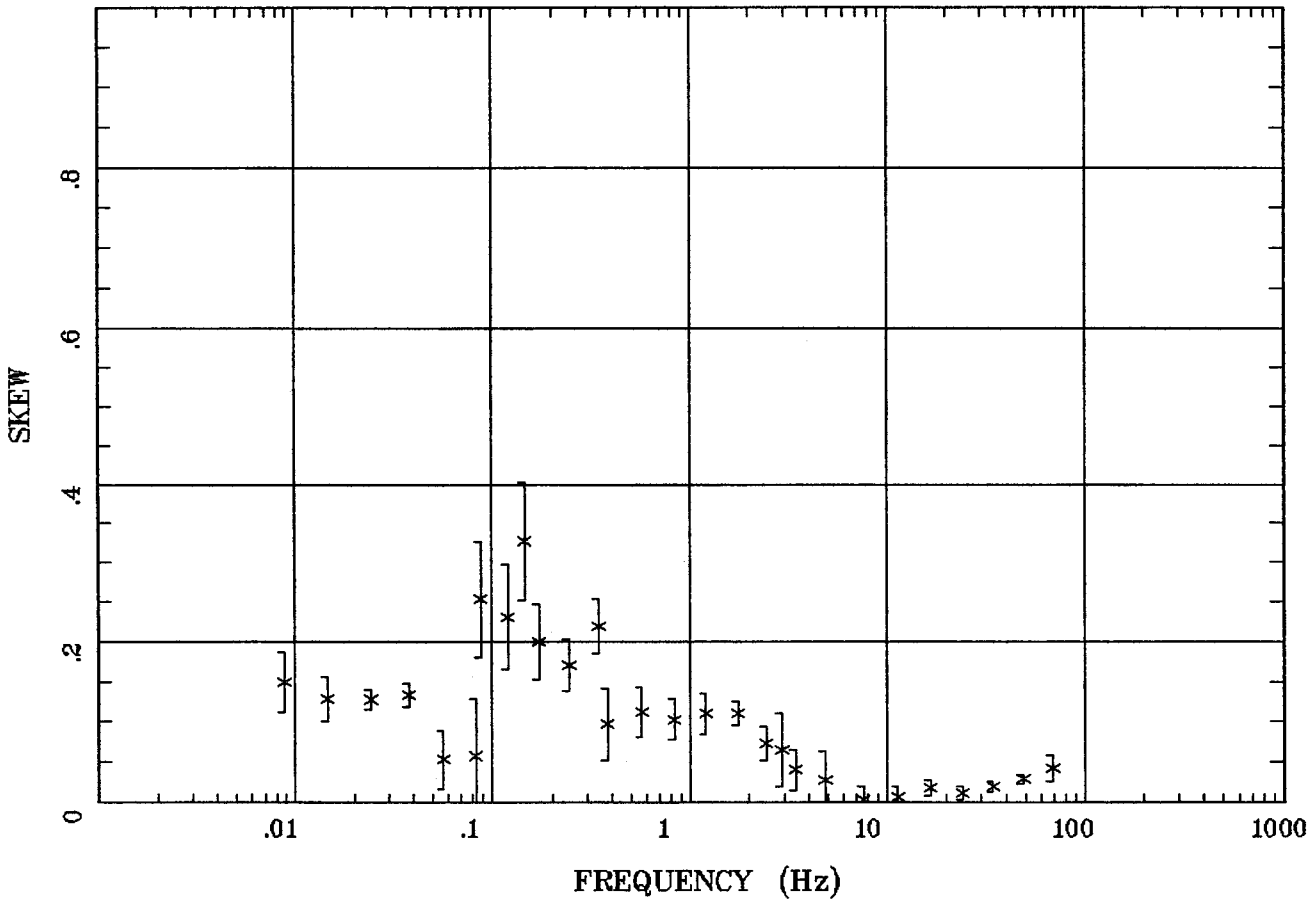


Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:50 Sep 24, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE SKEW

Alamosa Quad, 100k

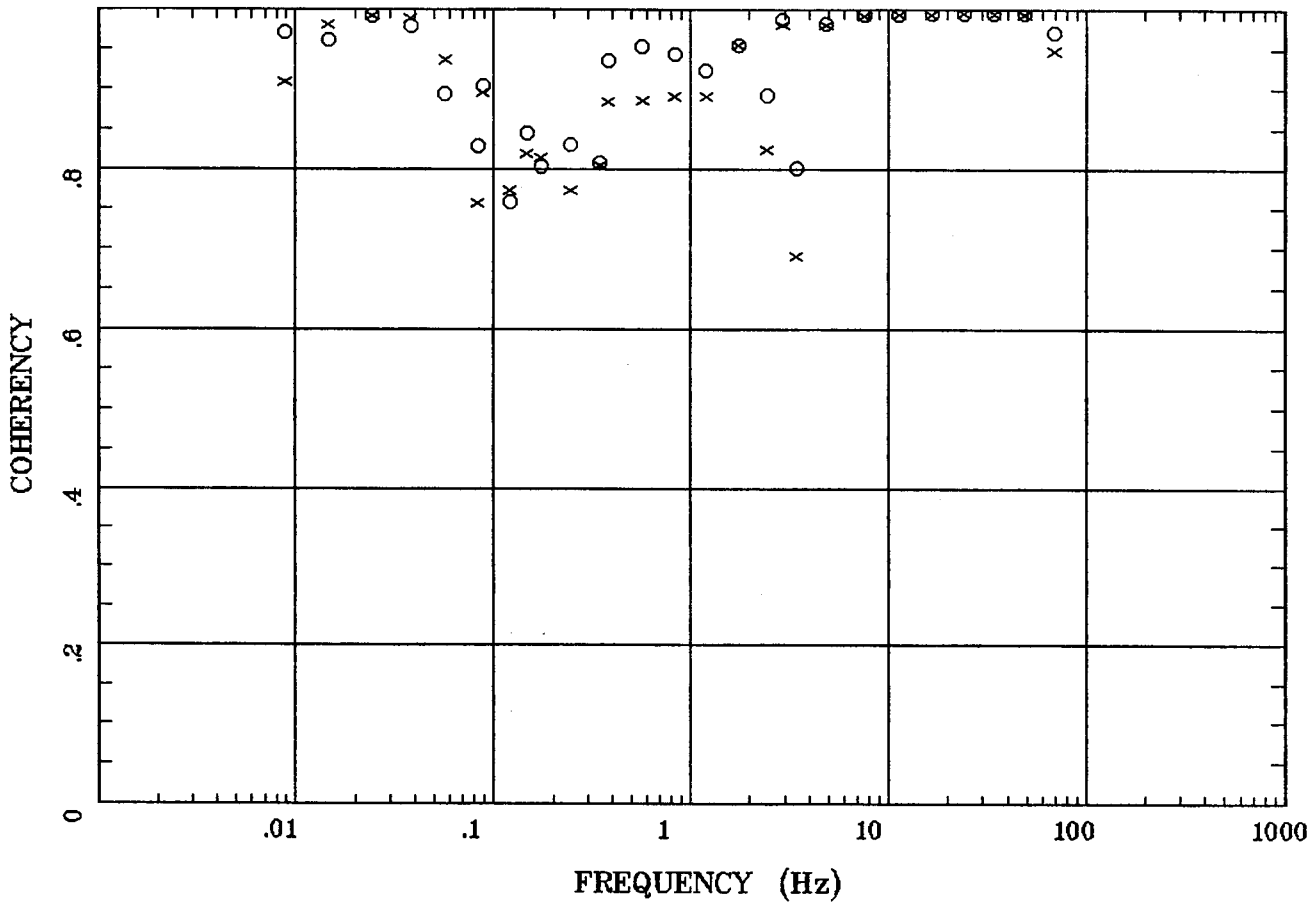


Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

E MULT Coh.

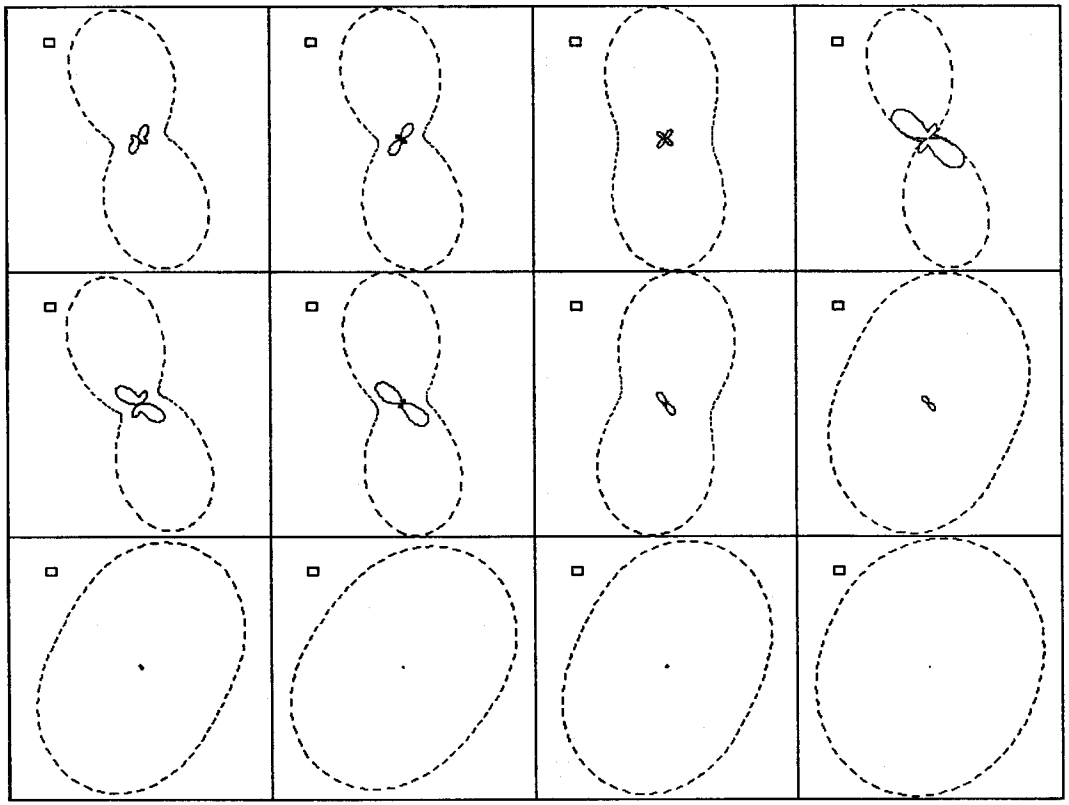
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k

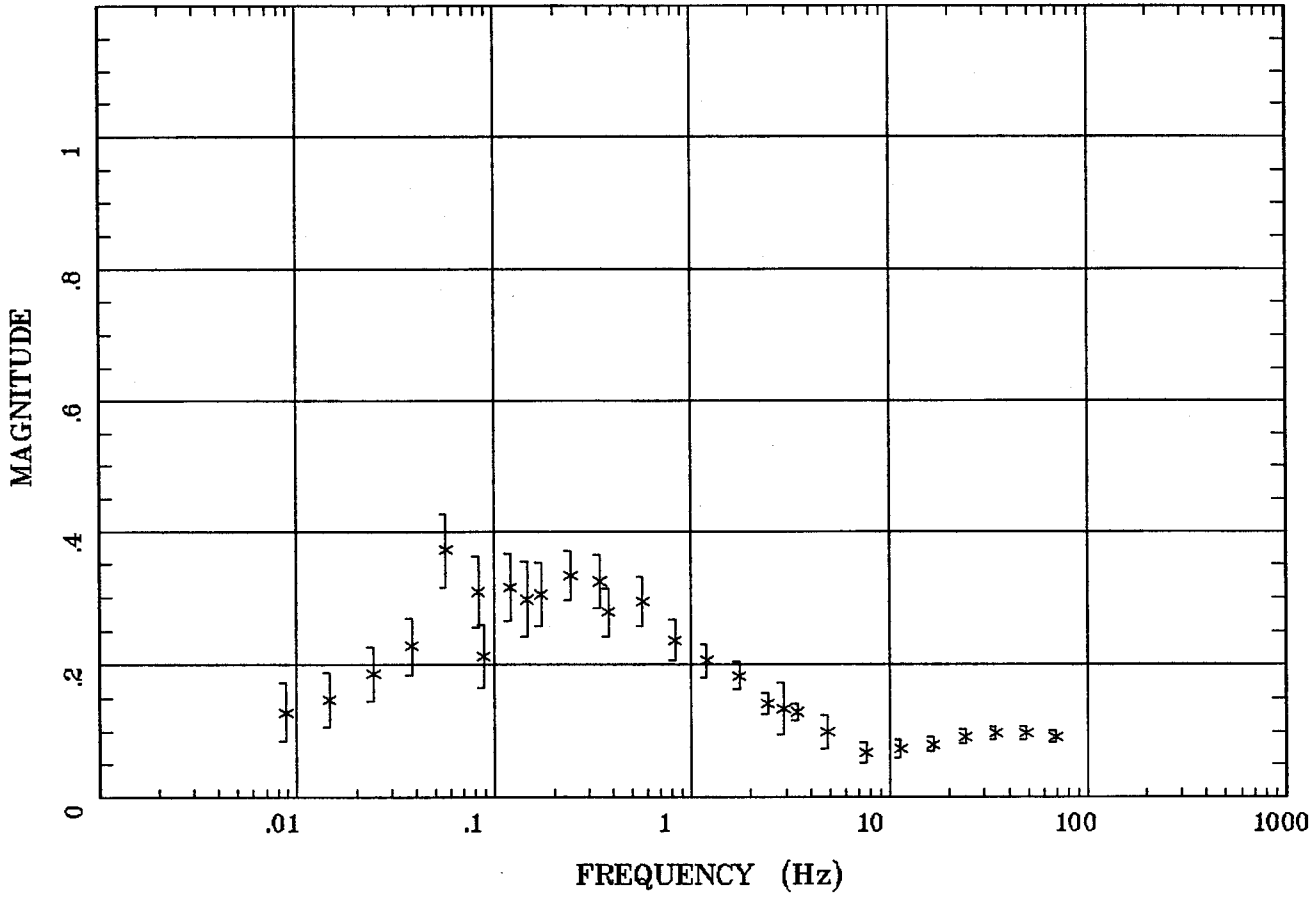


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k **Station 18**

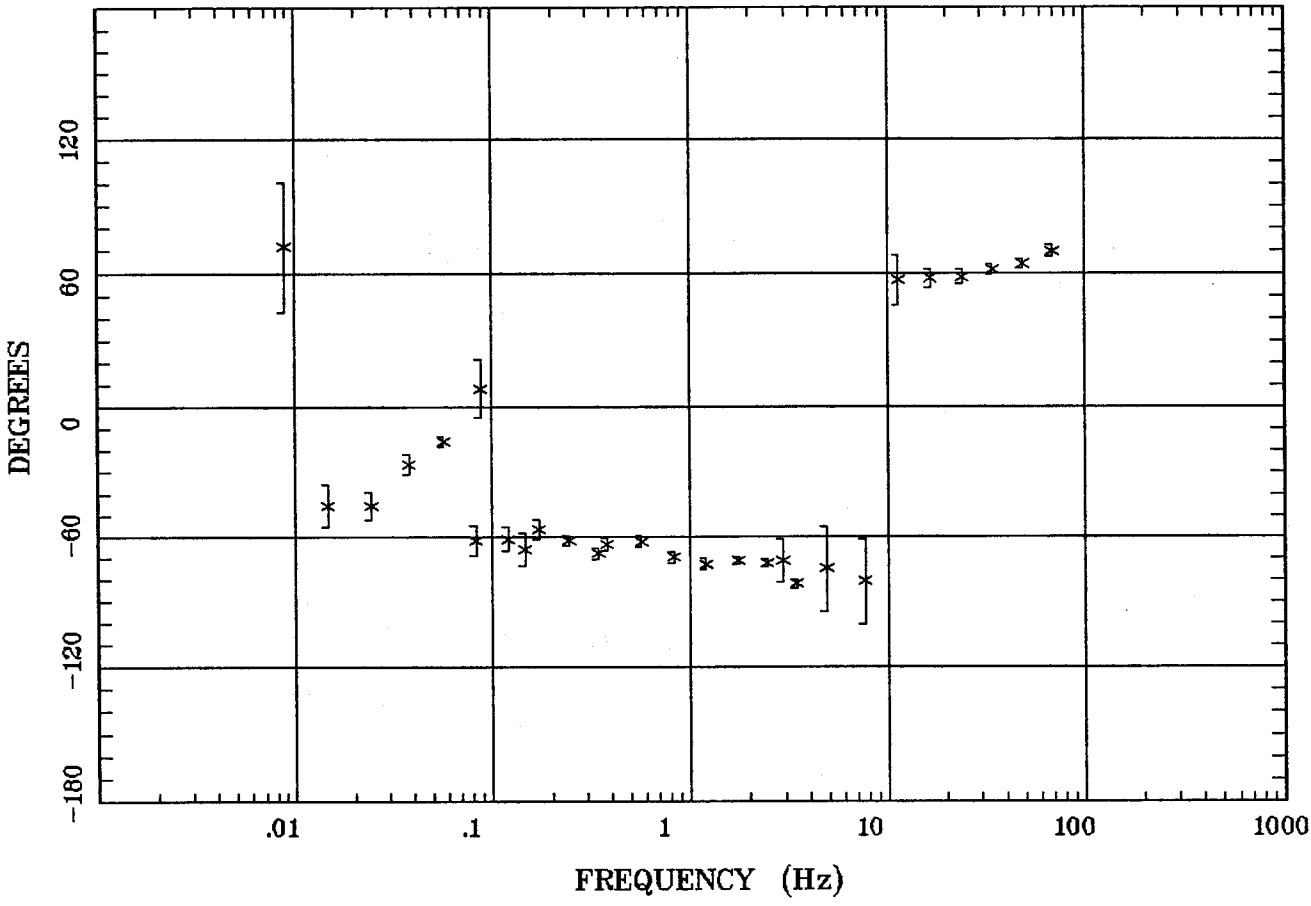


Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

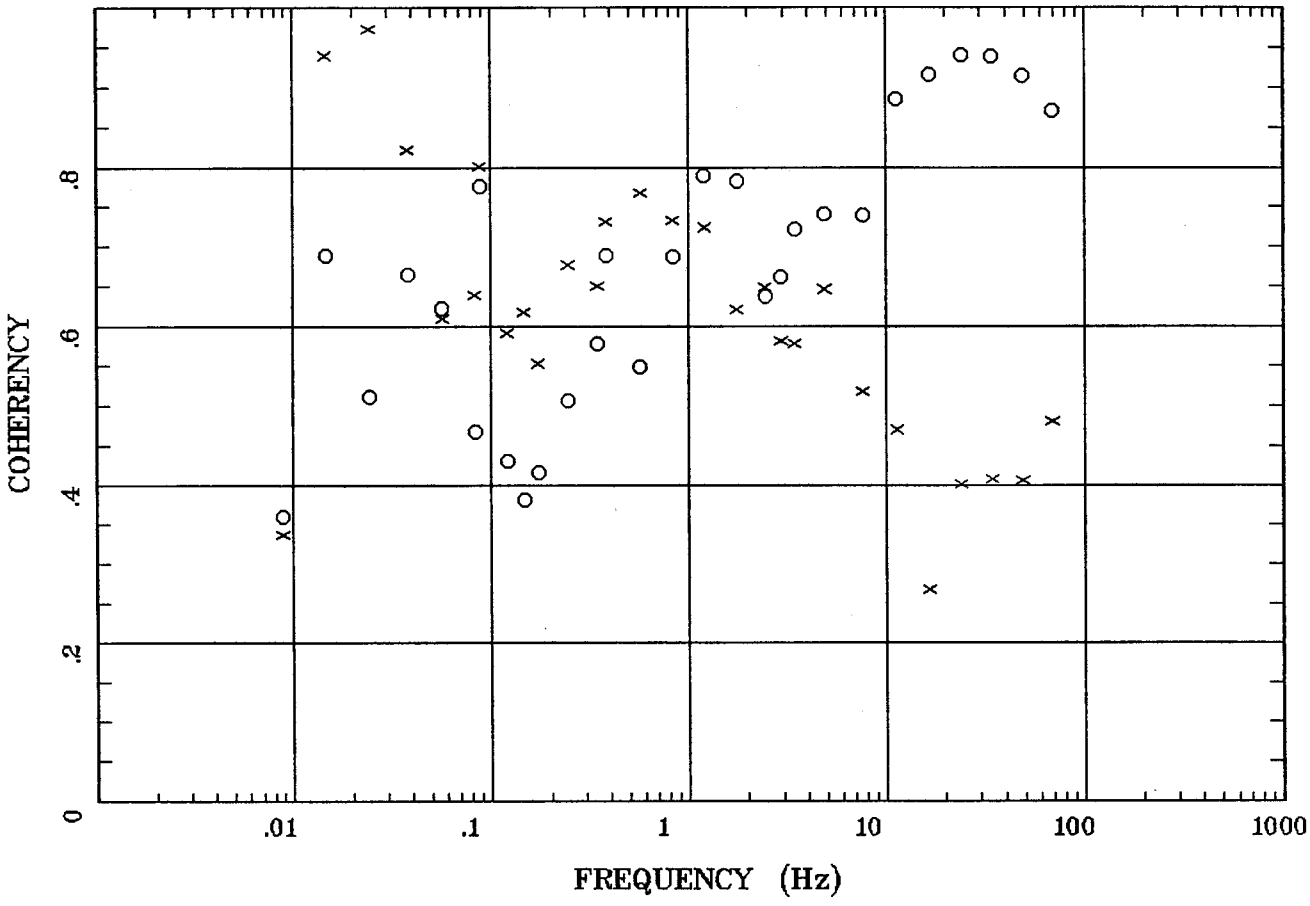


Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

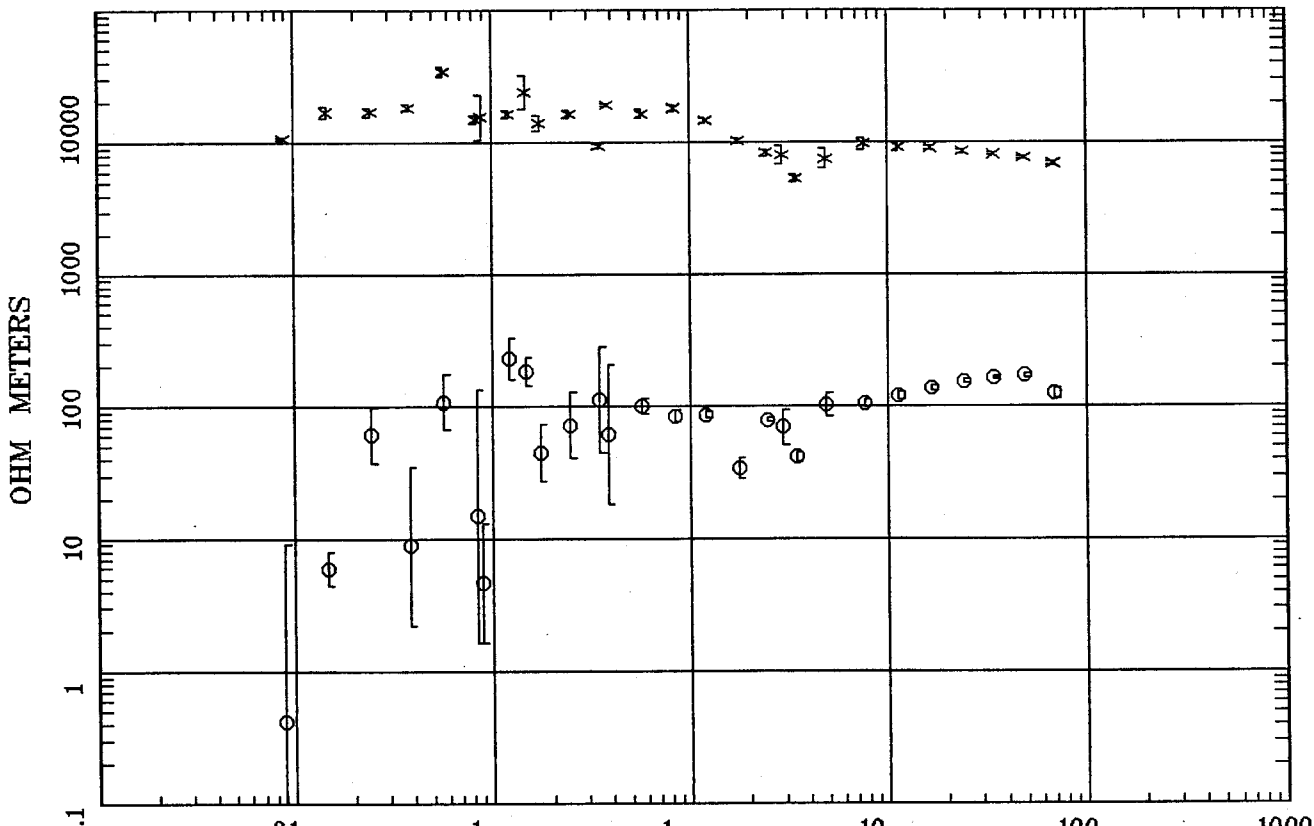
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 13:4 Aug 13, 2006
Survey Co:USGS

Rotation:
Filename: sl18m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 13:52 Oct 06, 2006
< EMI – ElectroMagnetic Instruments >

APPARENT RESISTIVITY Alamosa Quad, 100k **Station 19**

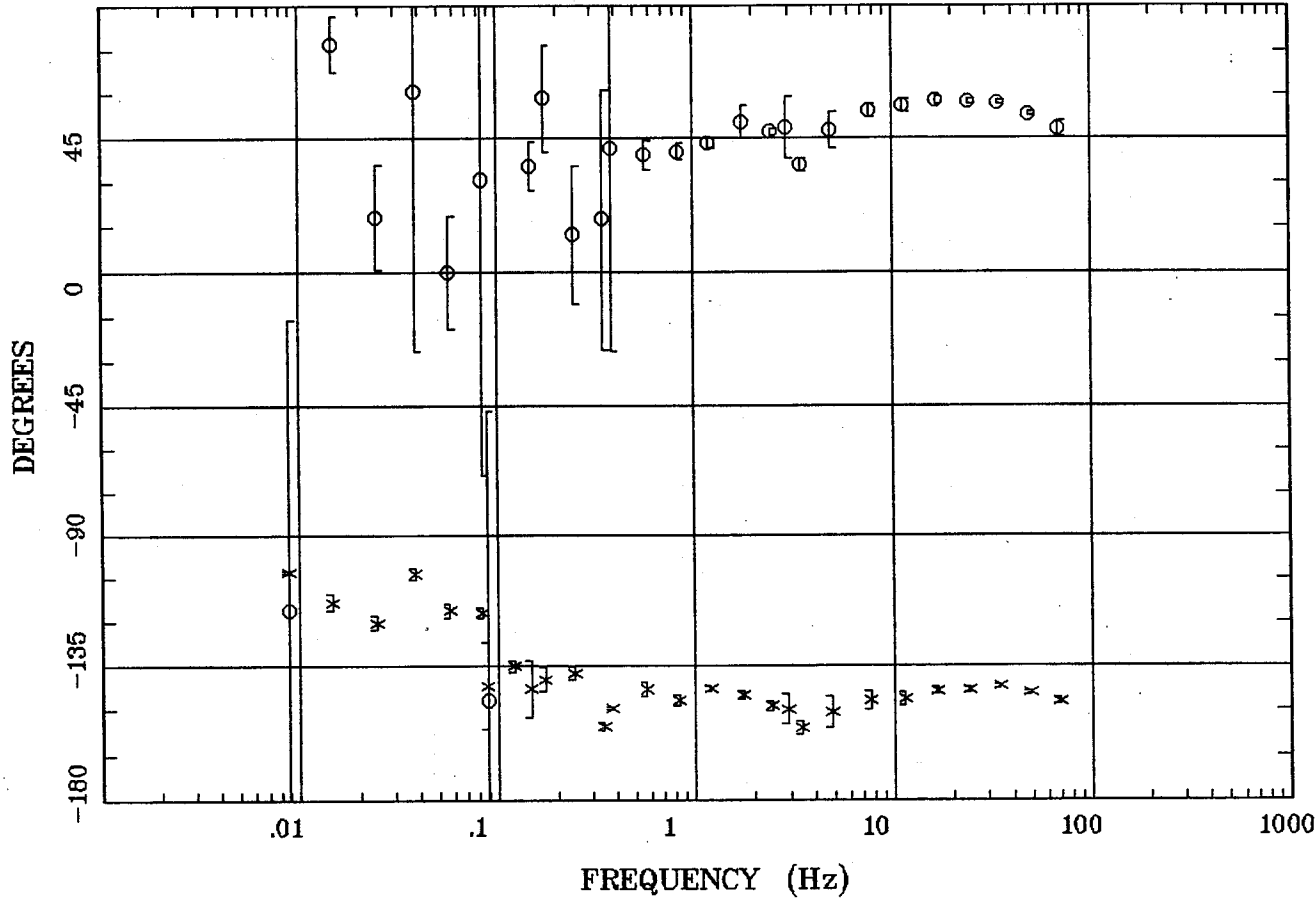


Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE

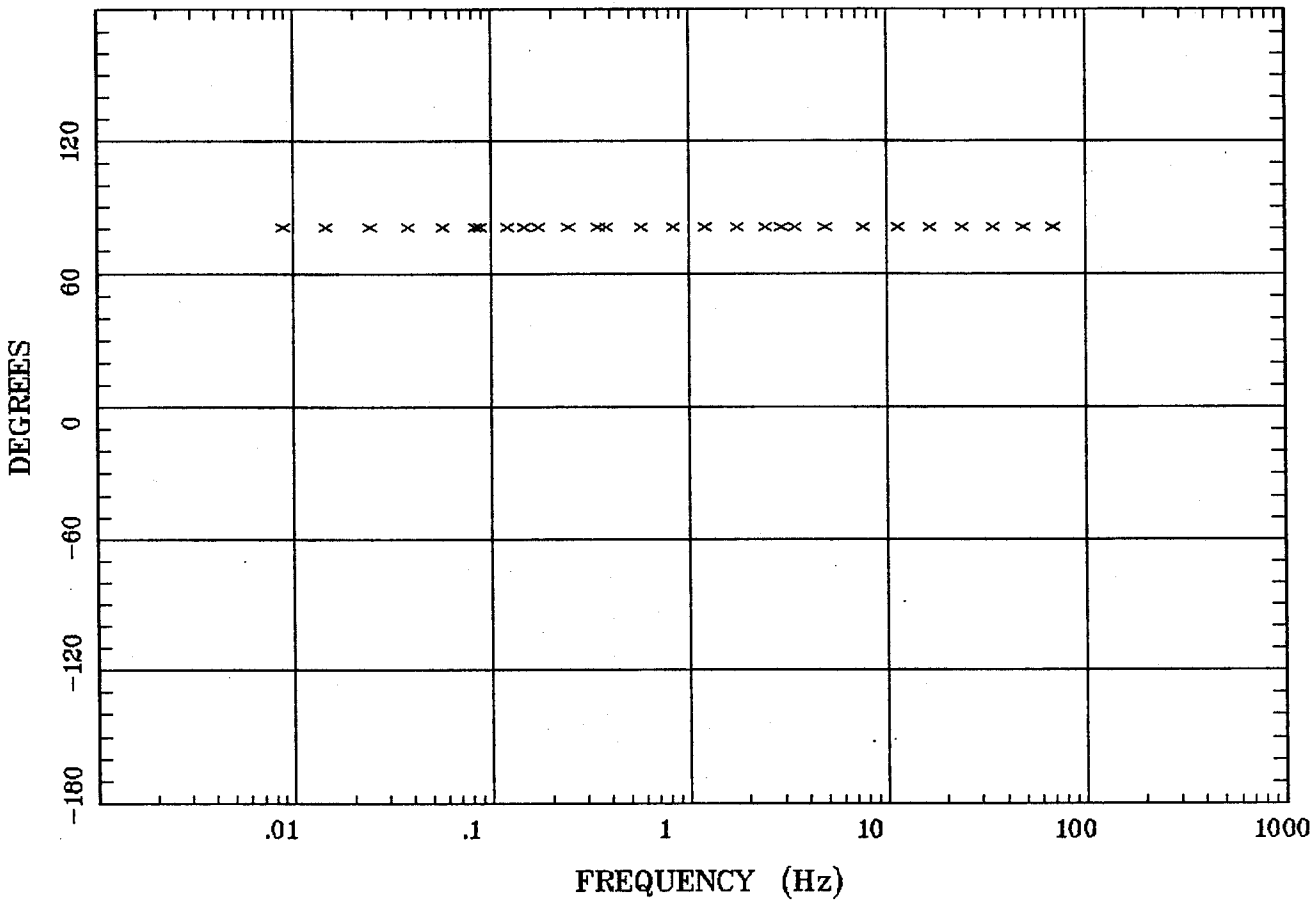
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

ROTATION ANGLE Alamosa Quad, 100k **Station 19**

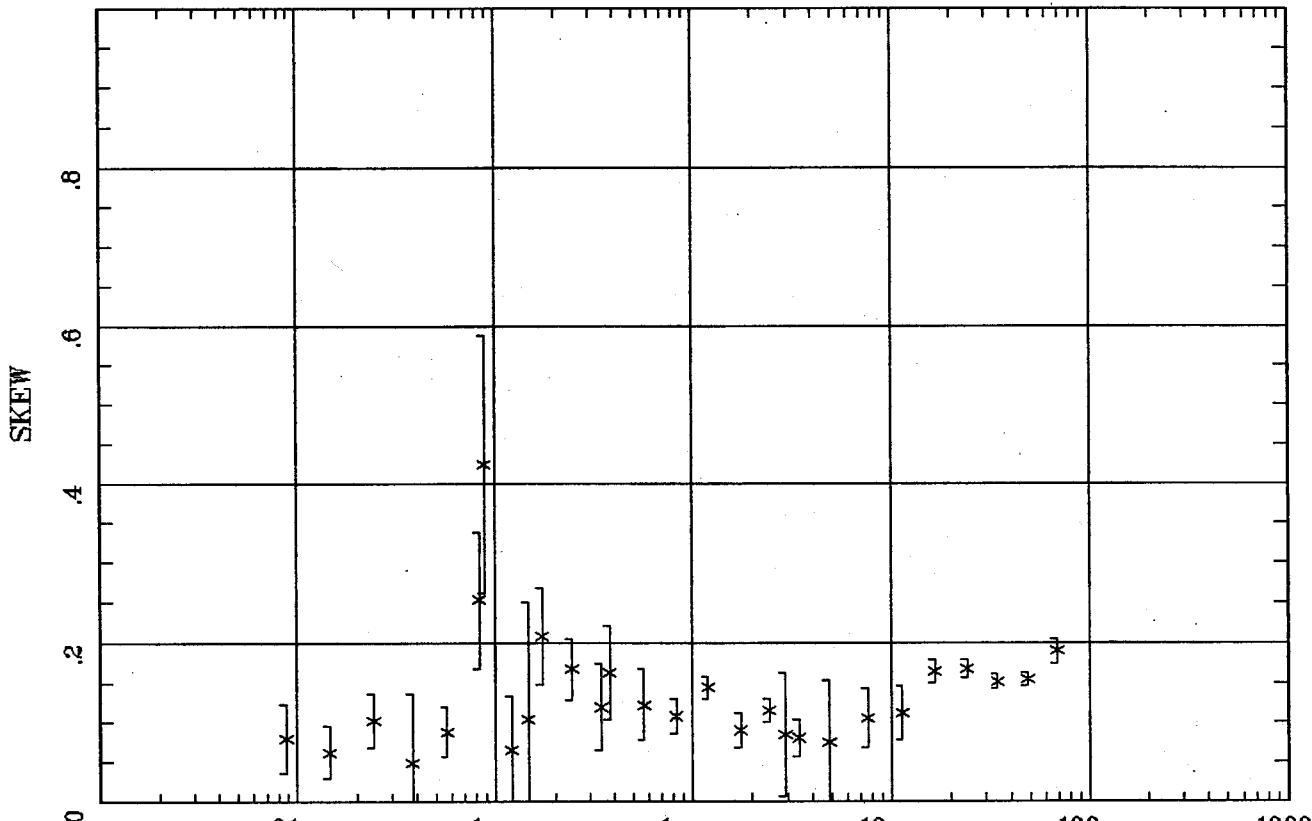


Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

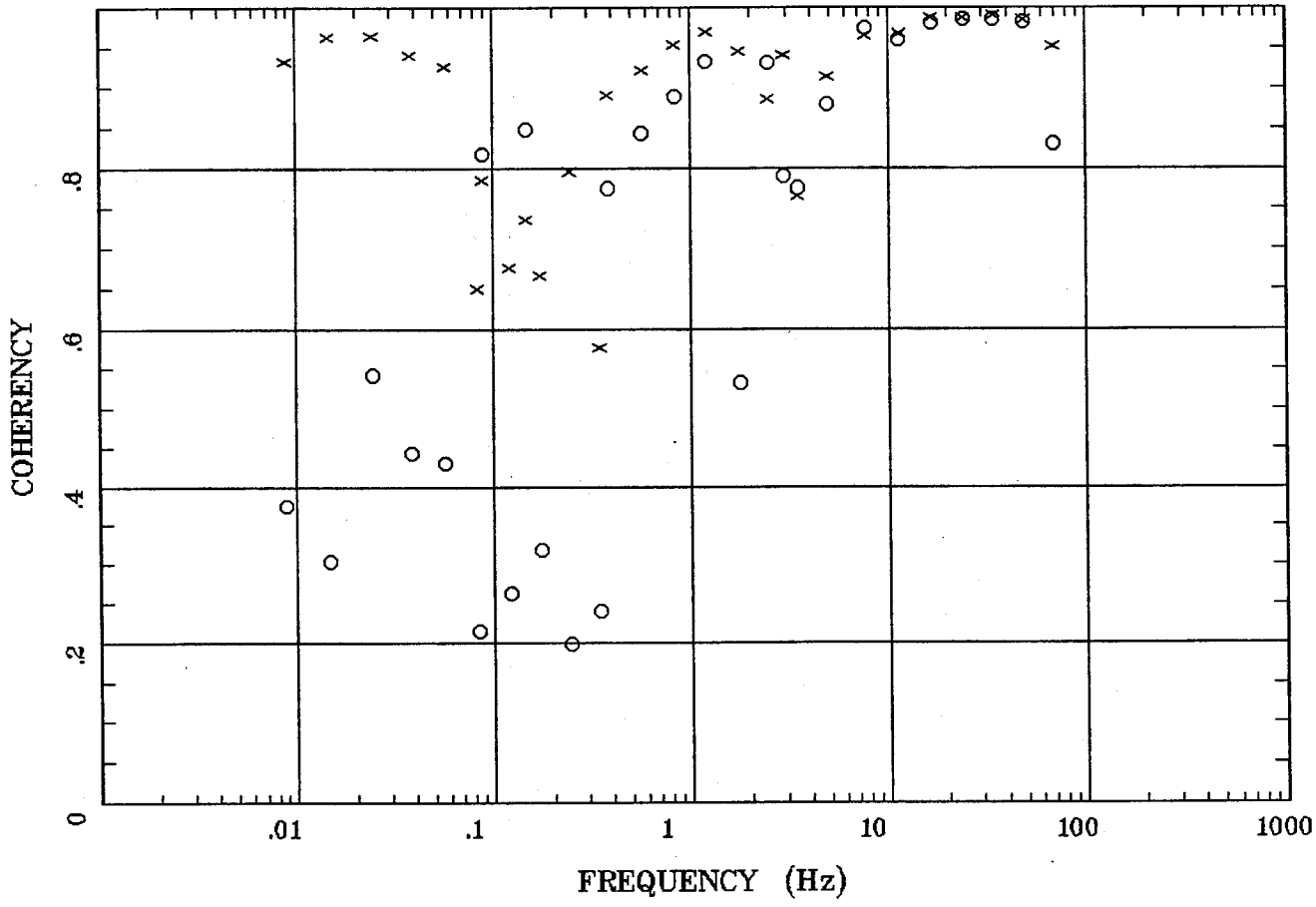
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

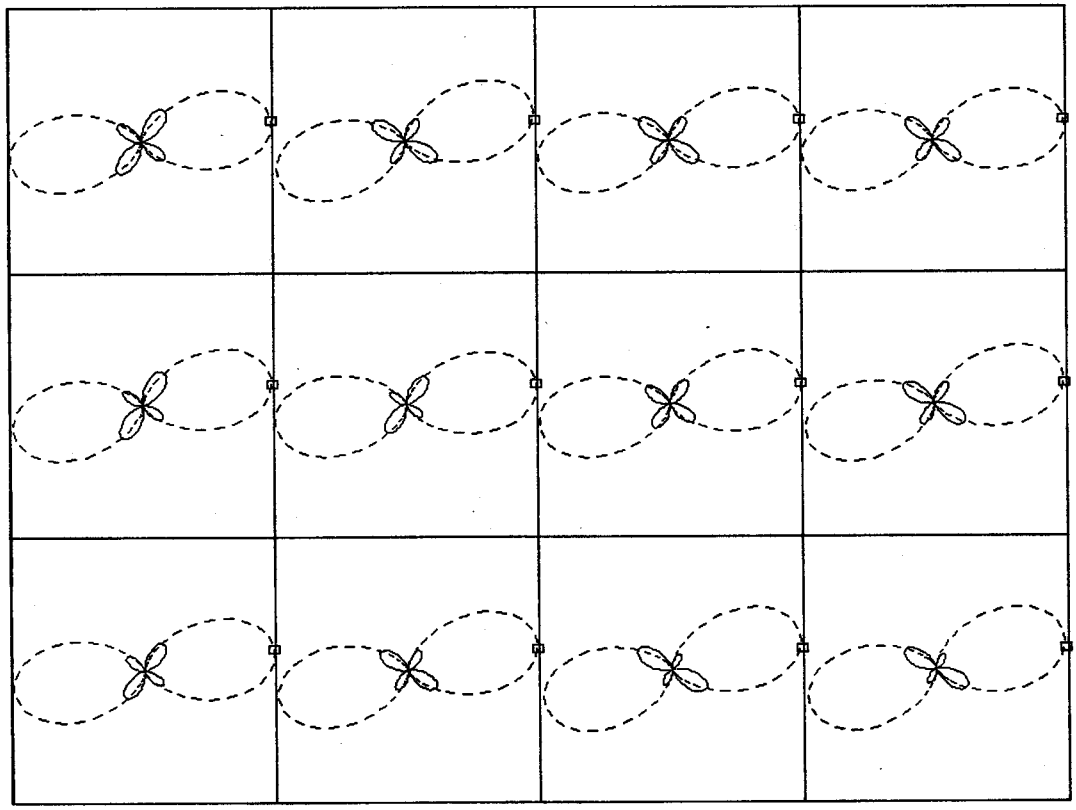
E MULT Coh. Alamosa Quad, 100k **Station 19**



Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k

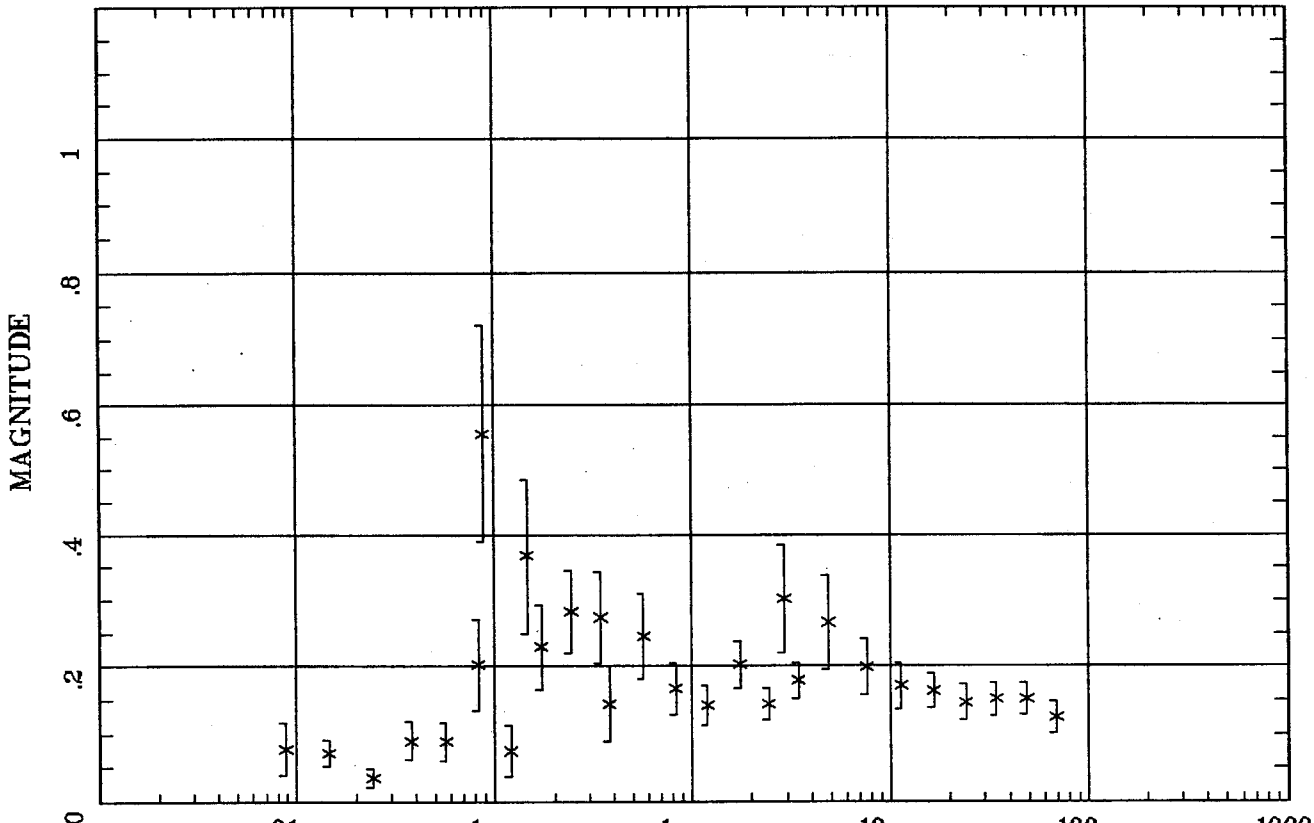


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k



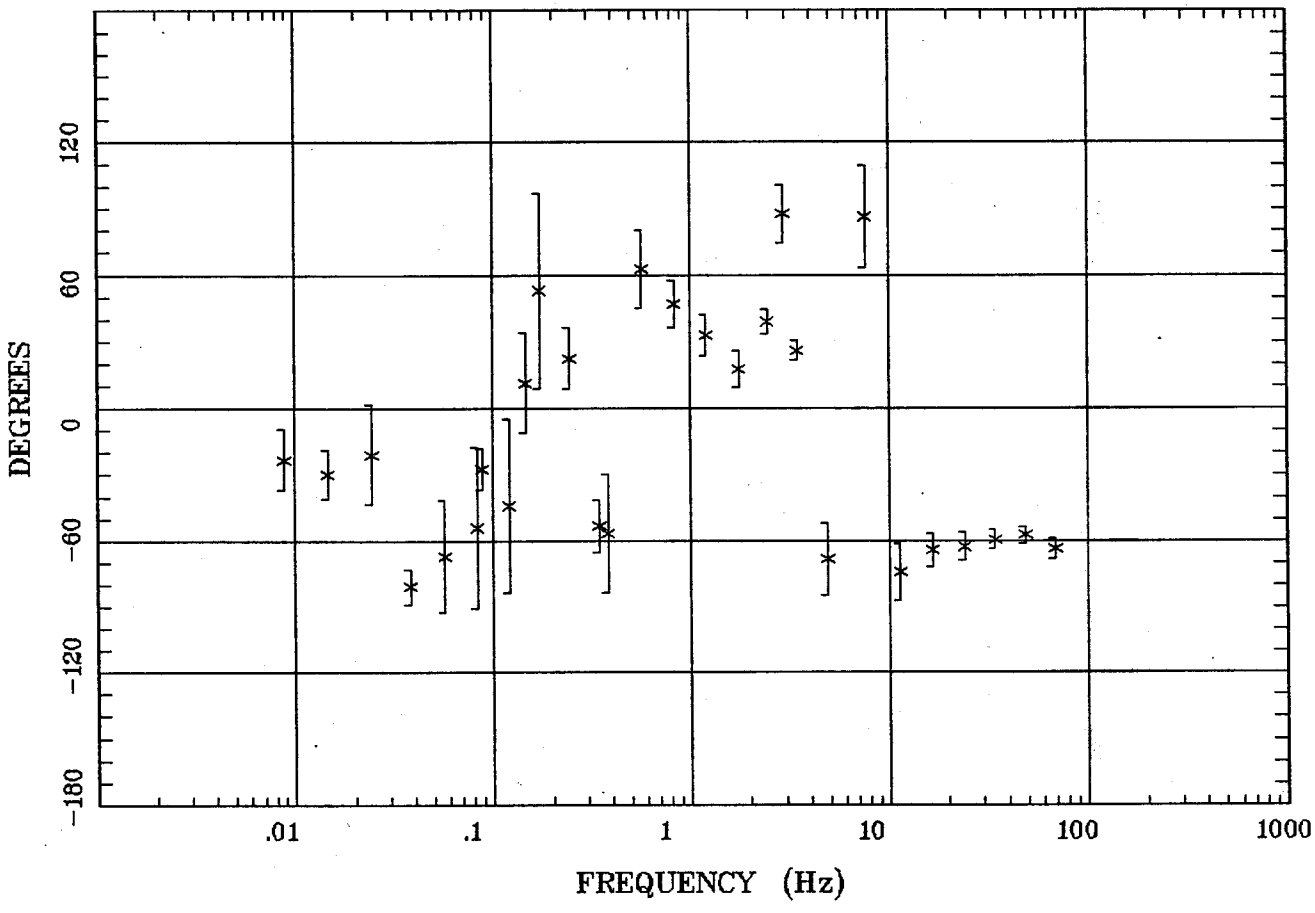
Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:56 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

Station 19

TIPPER STRIKE

Alamosa Quad, 100k

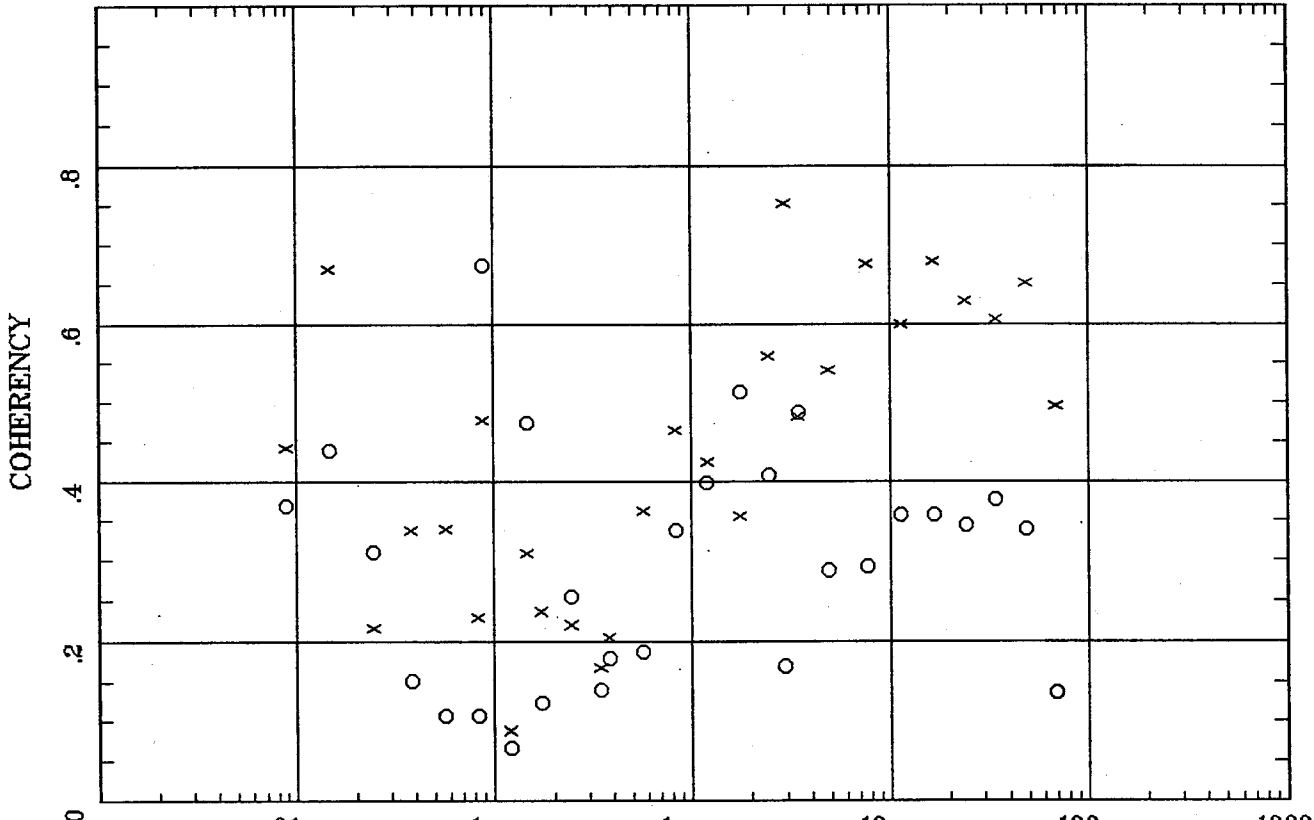


Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

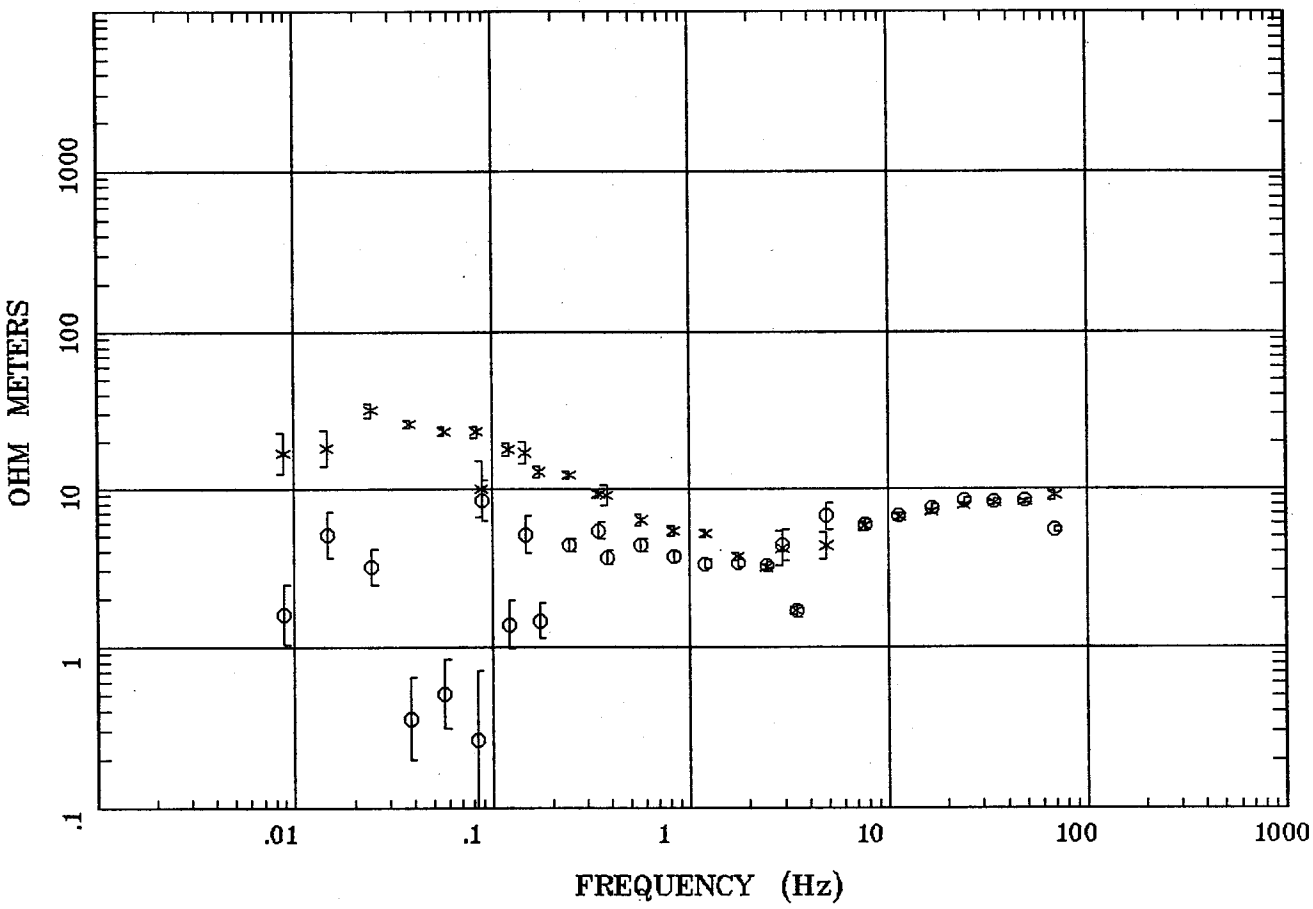
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 12:0 Aug 14, 2006
Survey Co:USGS

Rotation:
Filename: sl19m2.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 08:58 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

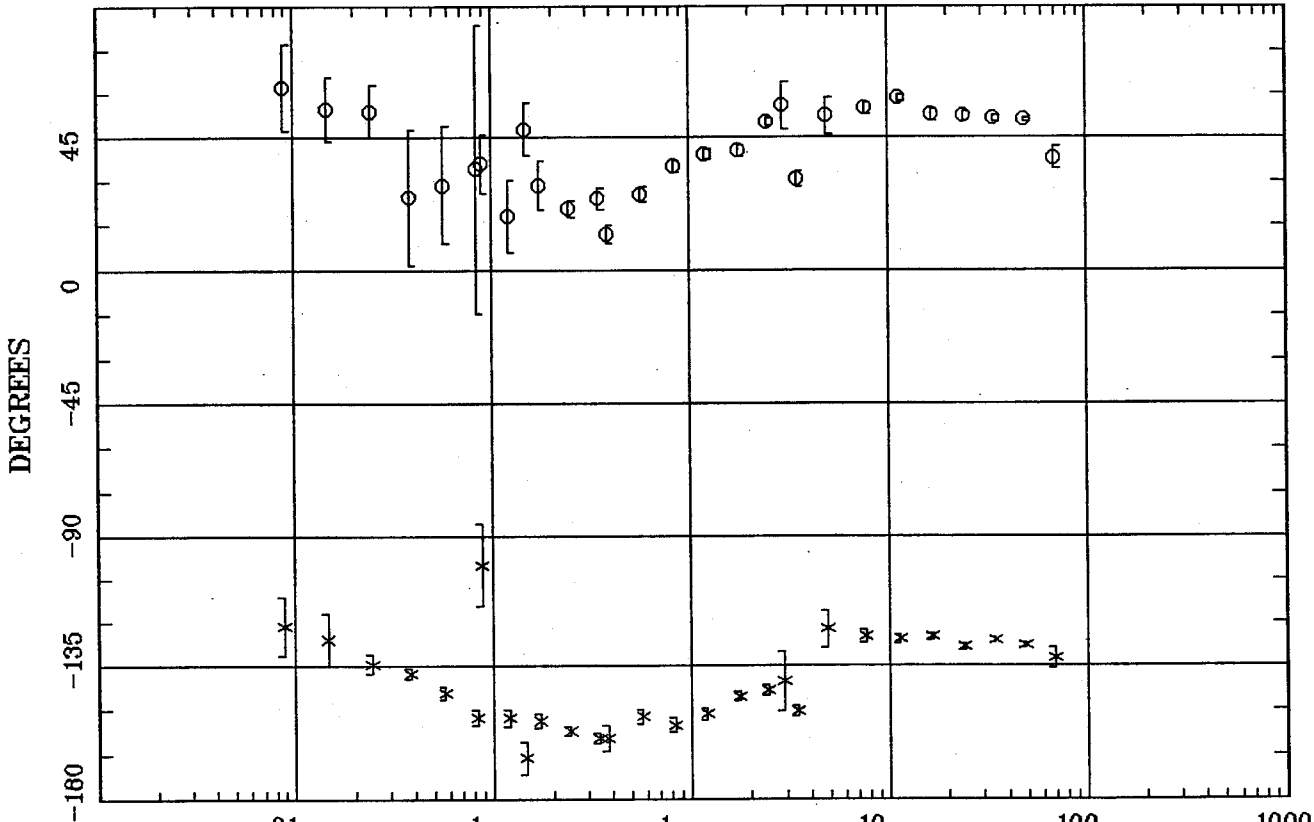
APPARENT RESISTIVITY Alamosa Quad, 100k **Station 20**



Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

IMPEDANCE PHASE Alamosa Quad, 100k



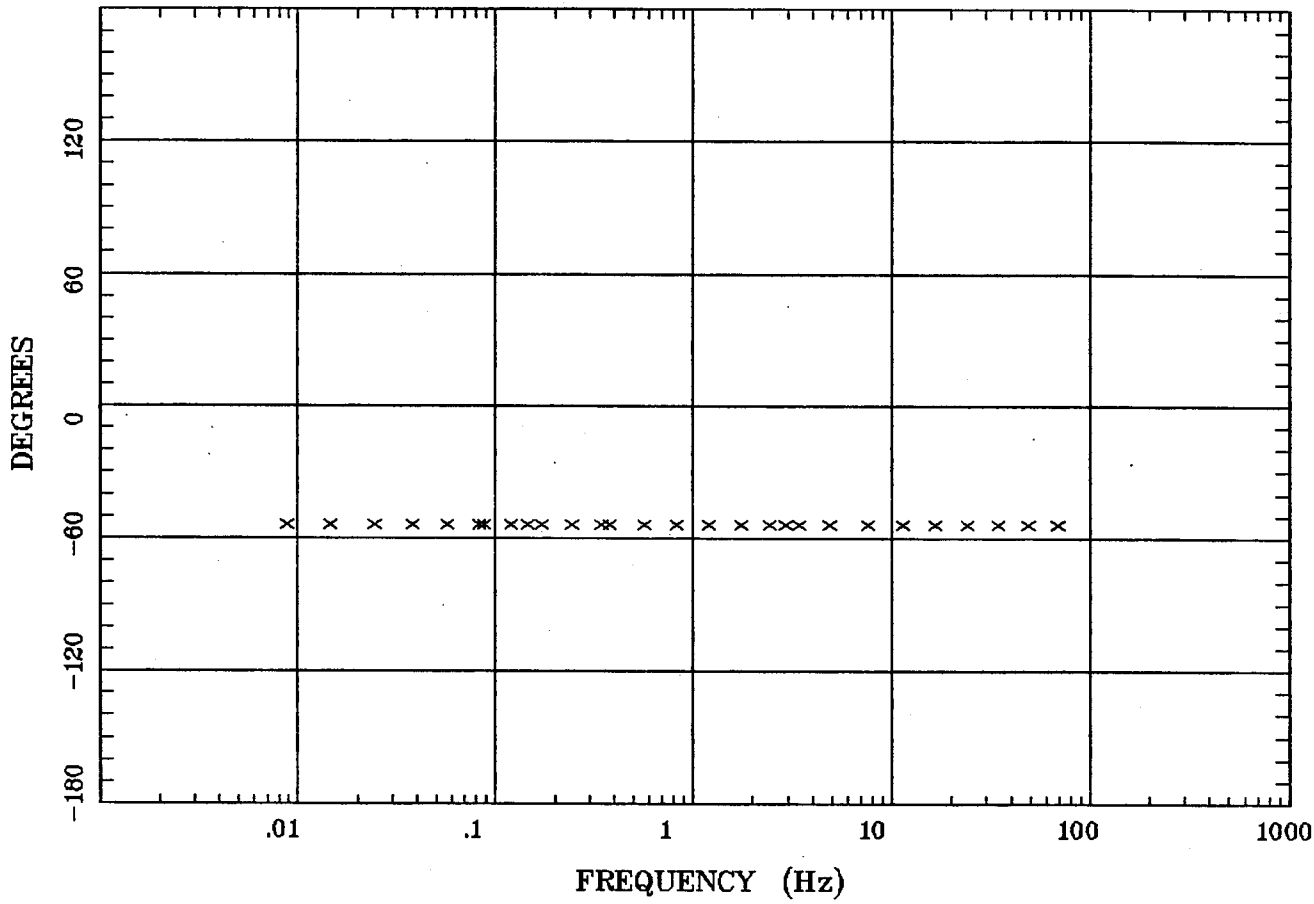
Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

Station 20

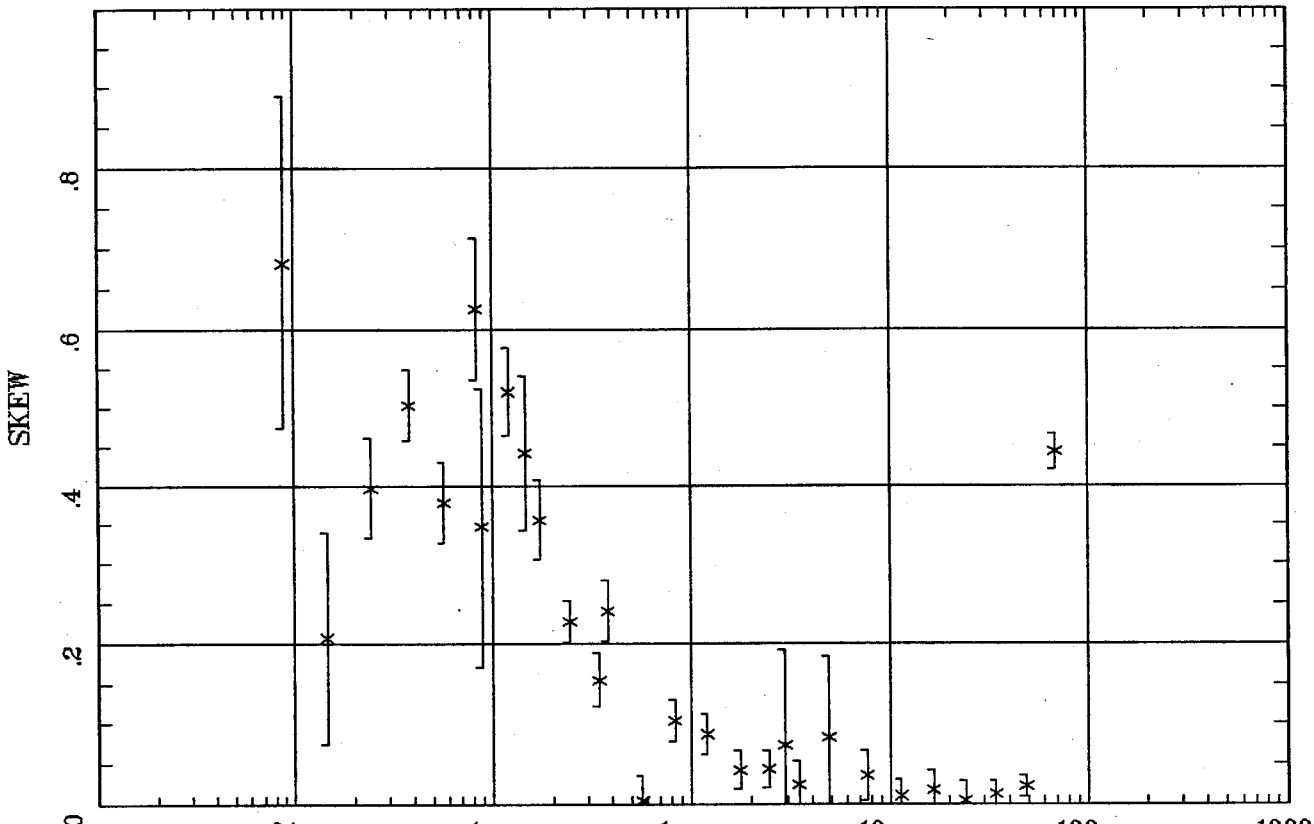


Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

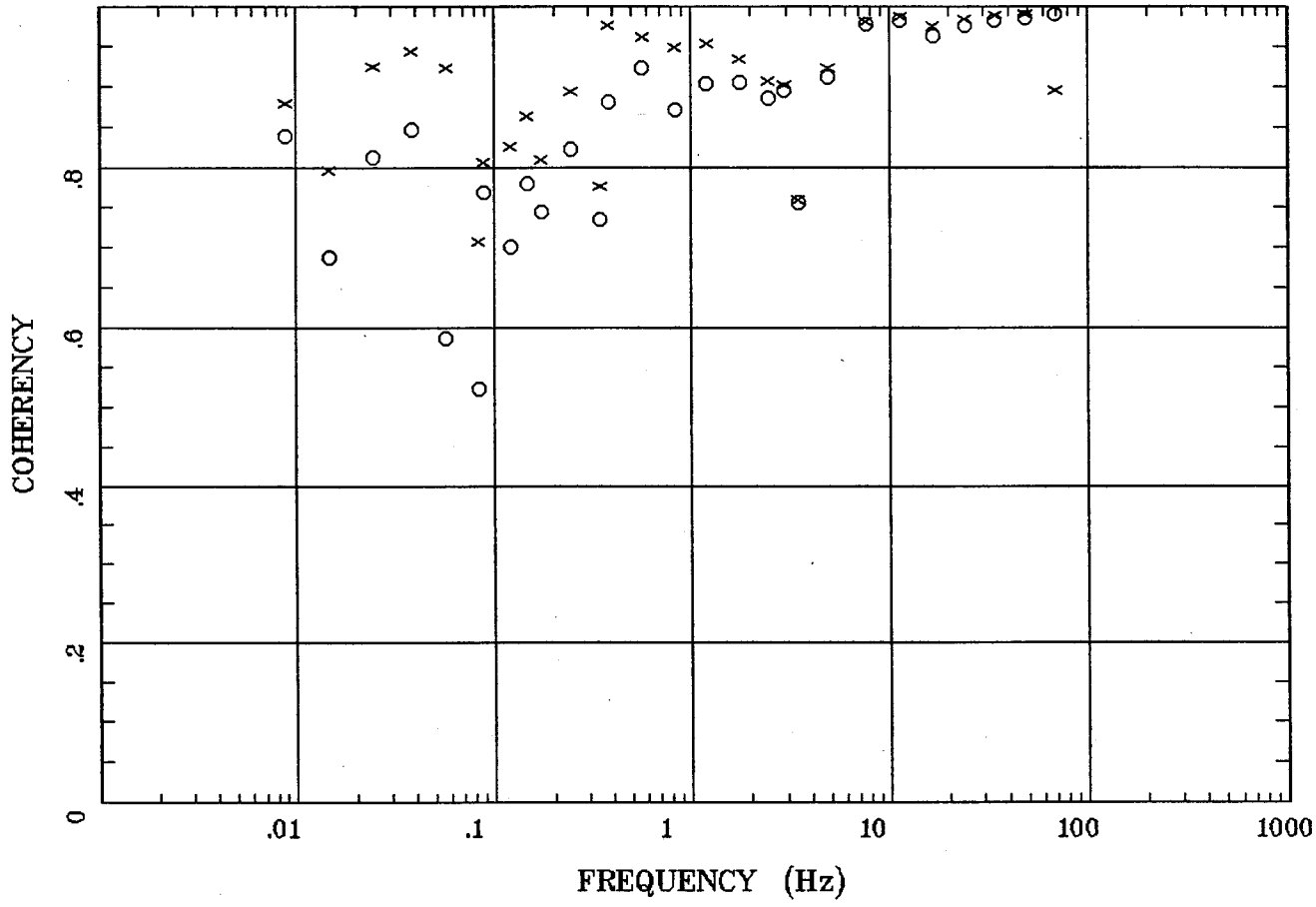
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

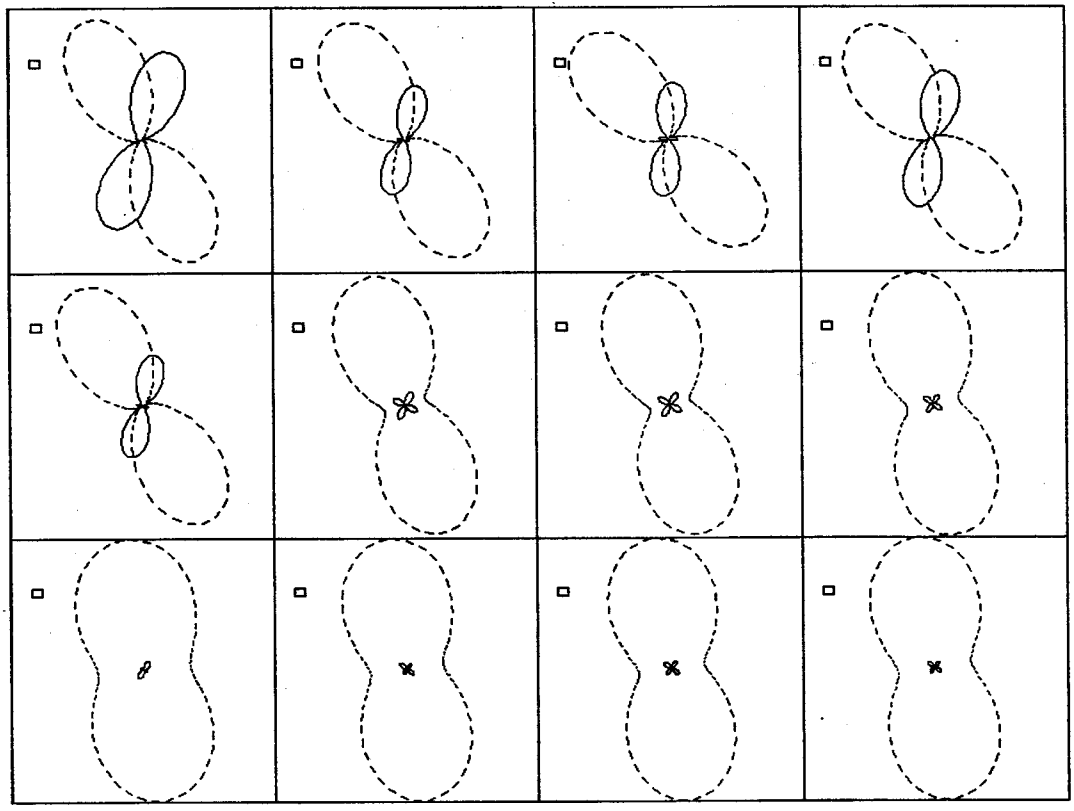
E MULT Coh. Alamosa Quad, 100k



Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS Alamosa Quad, 100k



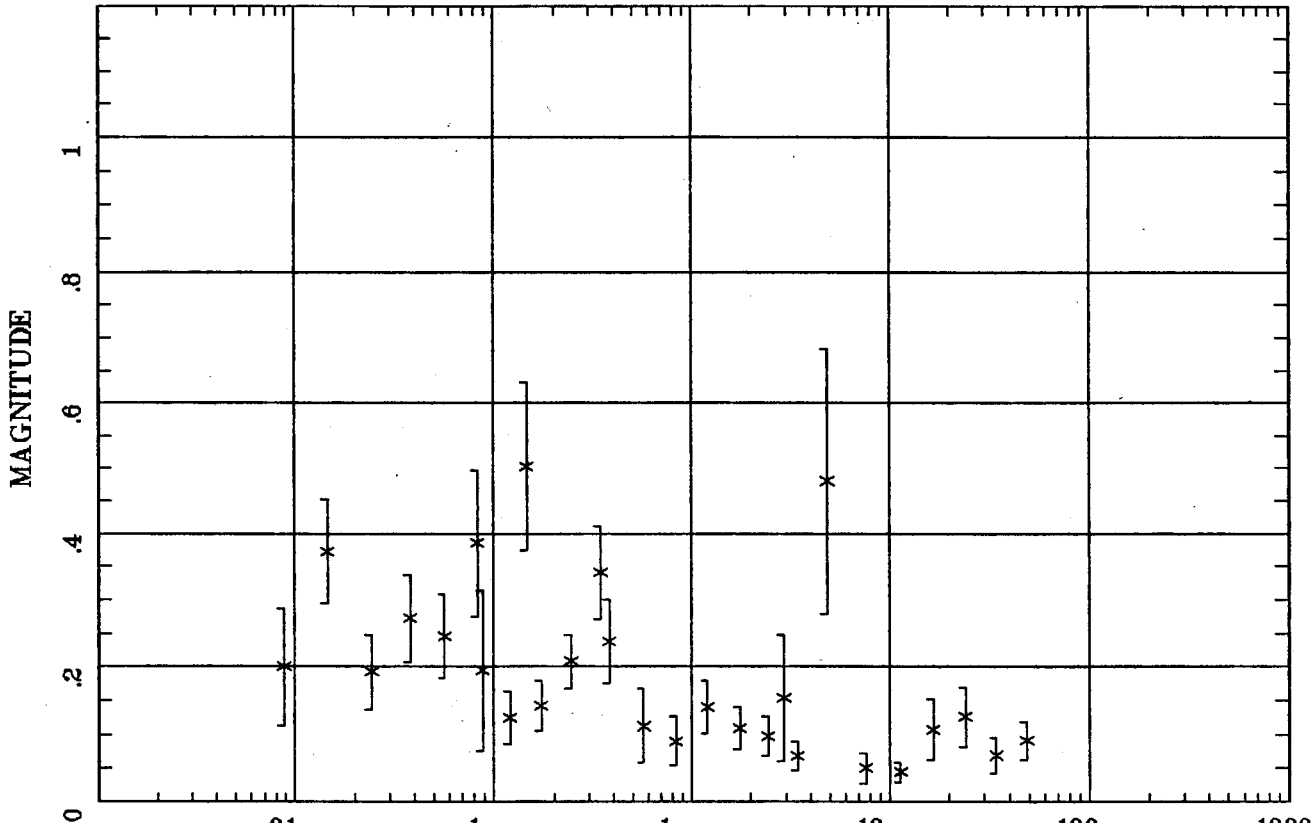
.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 20

TIPPER MAGNITUDE Alamosa Quad, 100k

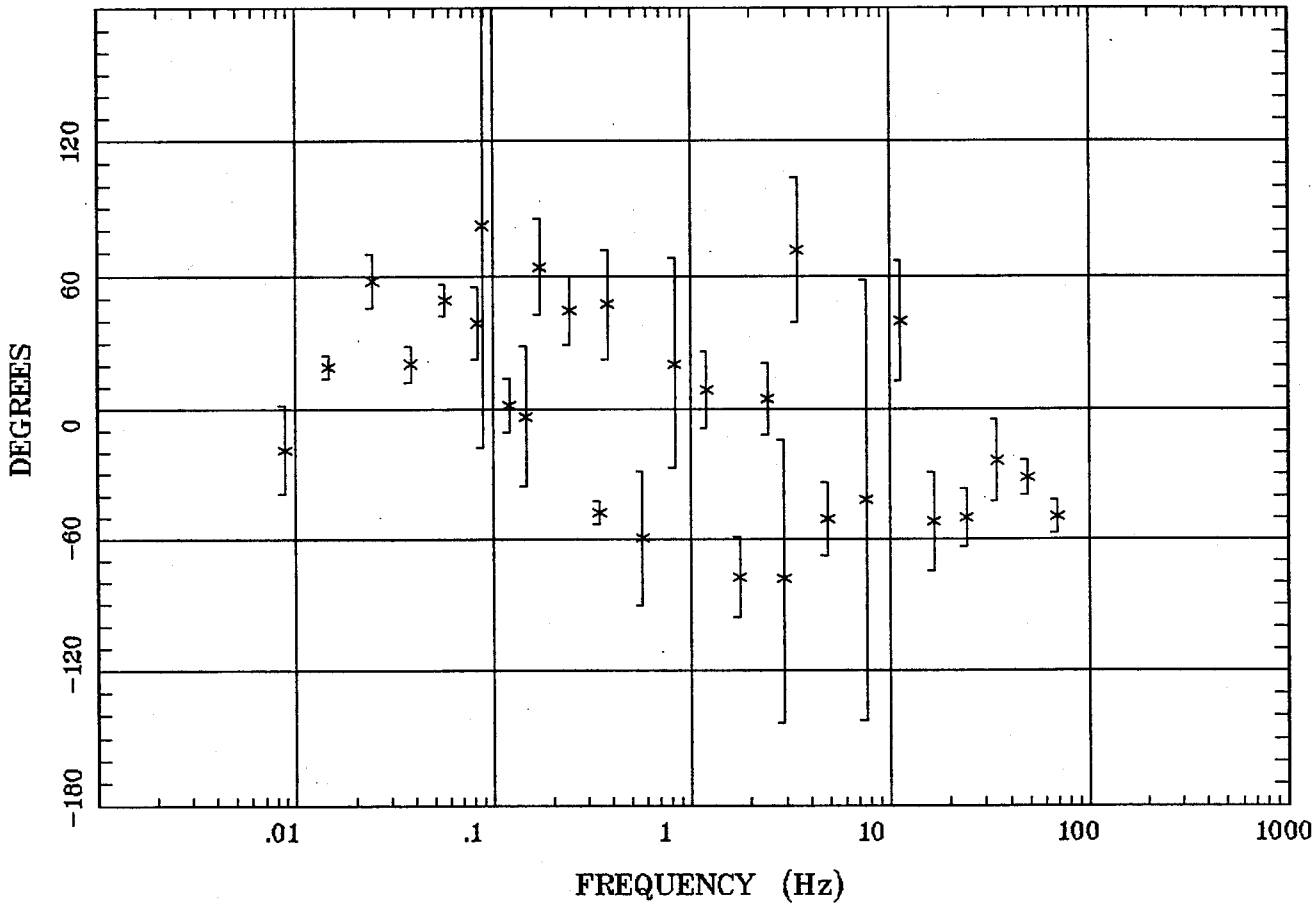


Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

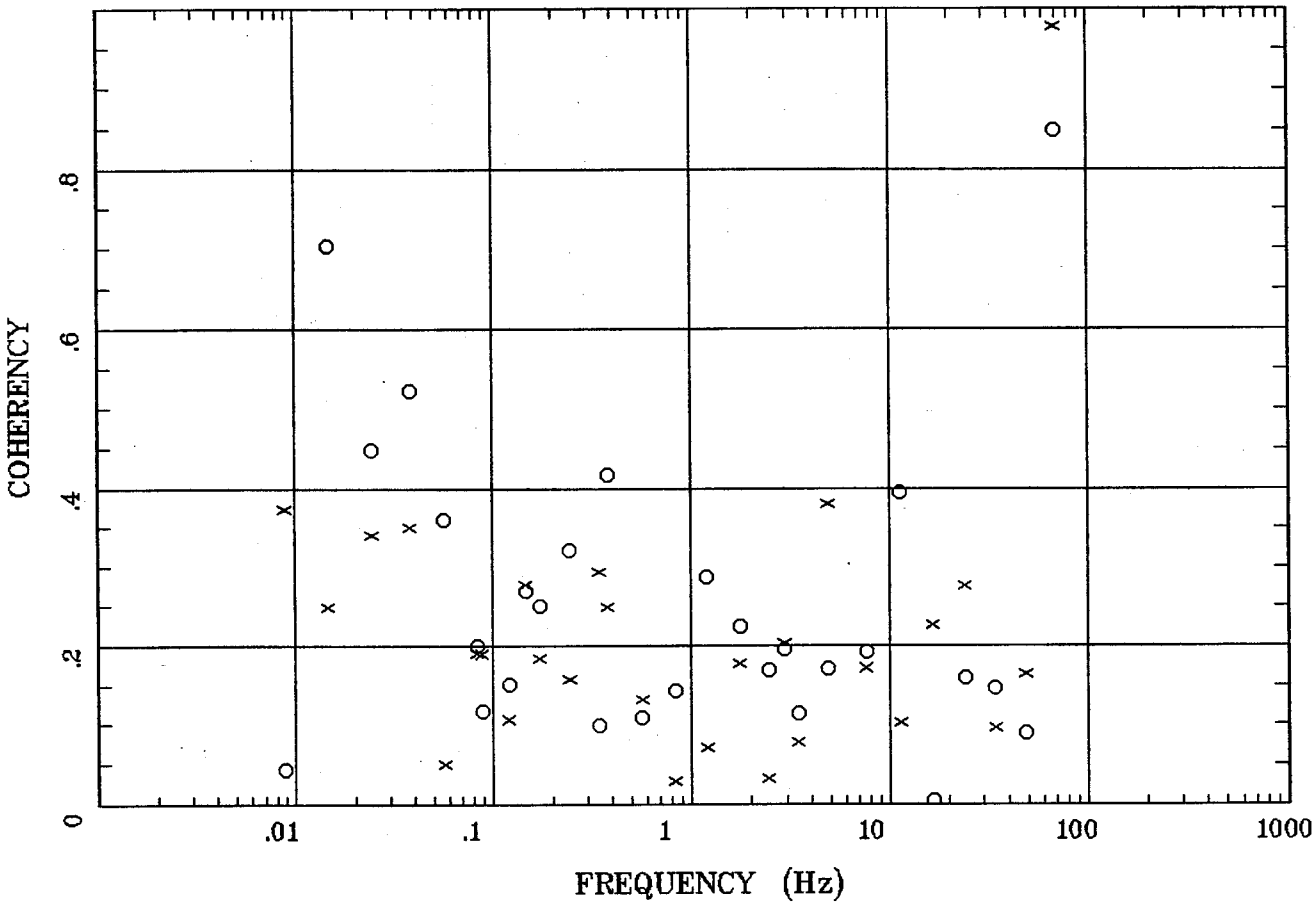


Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k

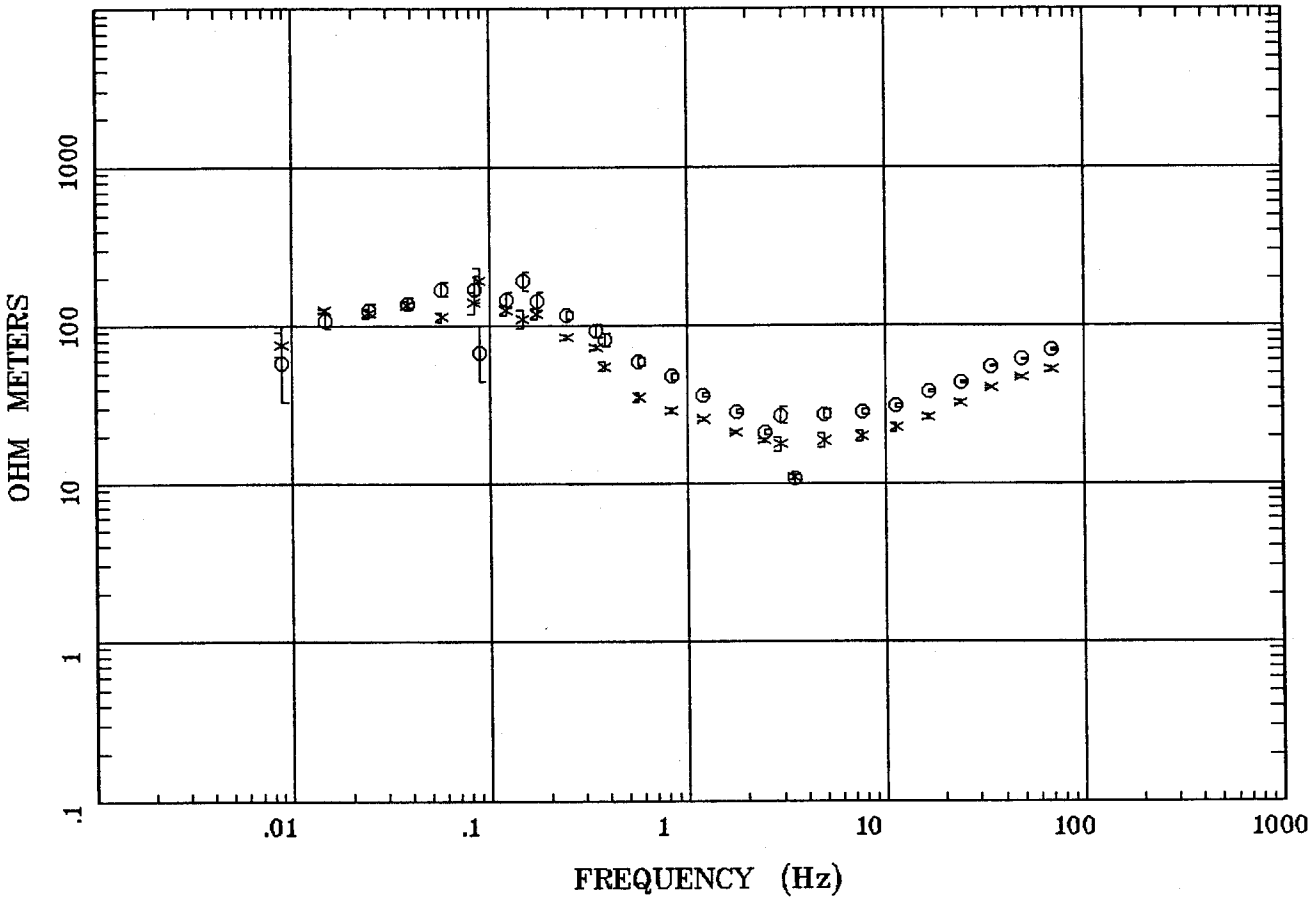


Client:
Remote: none
Acquired: 10:1 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl20m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 09:38 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

Station 21

APPARENT RESISTIVITY Alamosa Quad, 100k



Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

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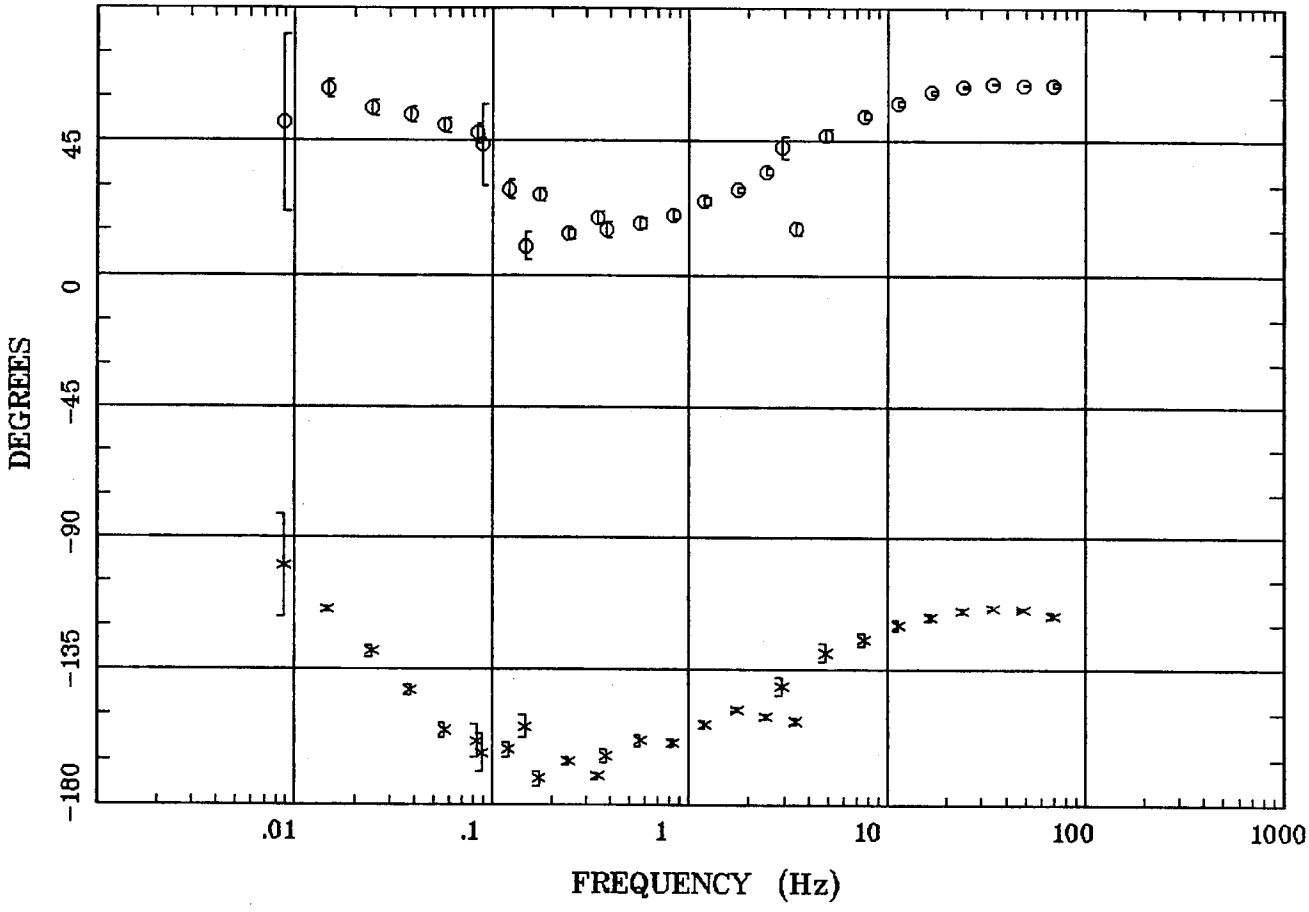
IMPEDANCE PHASE

Alamosa Quad, 100k

Station 21



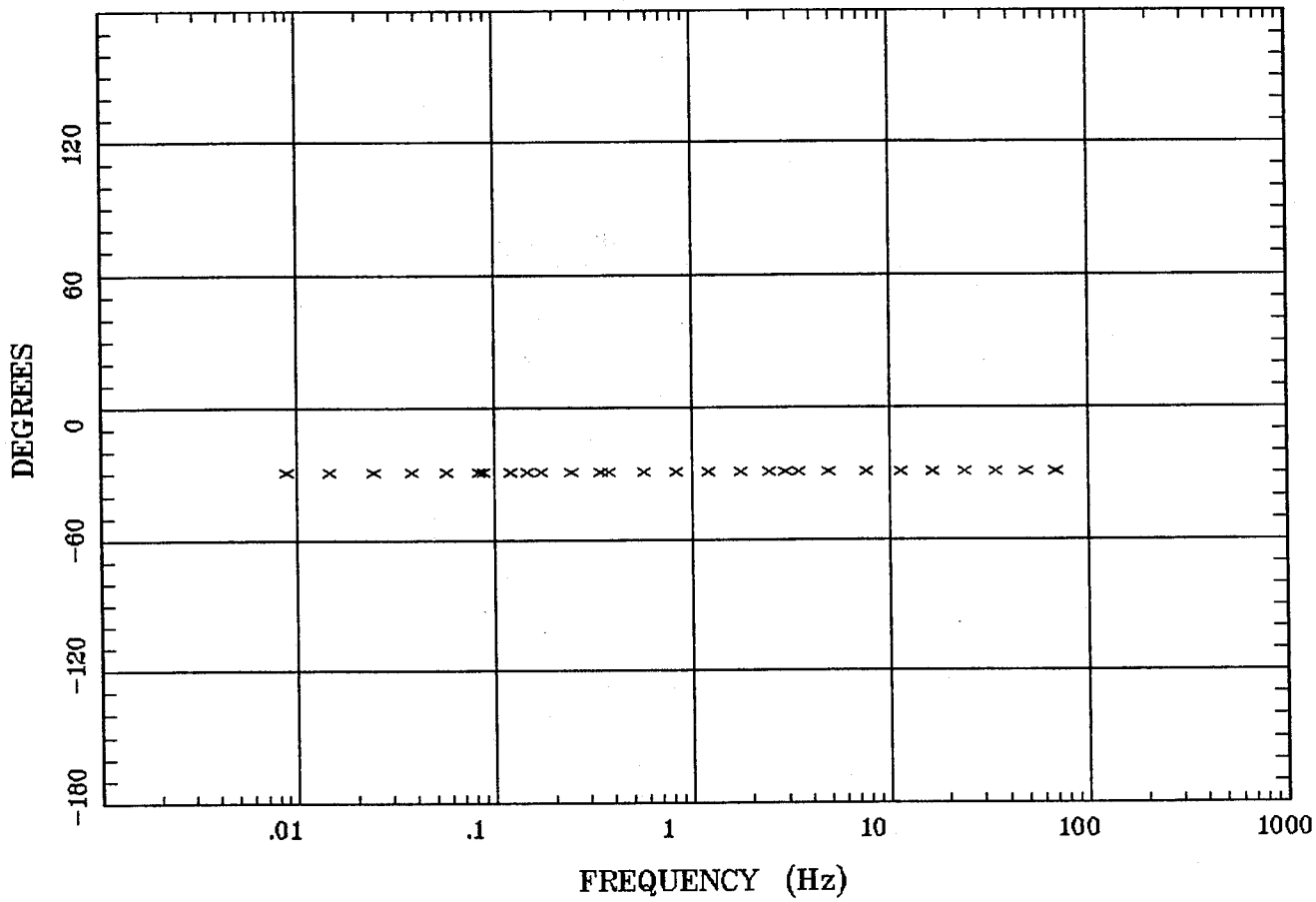
Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

ROTATION ANGLE

Alamosa Quad, 100k

Station 21



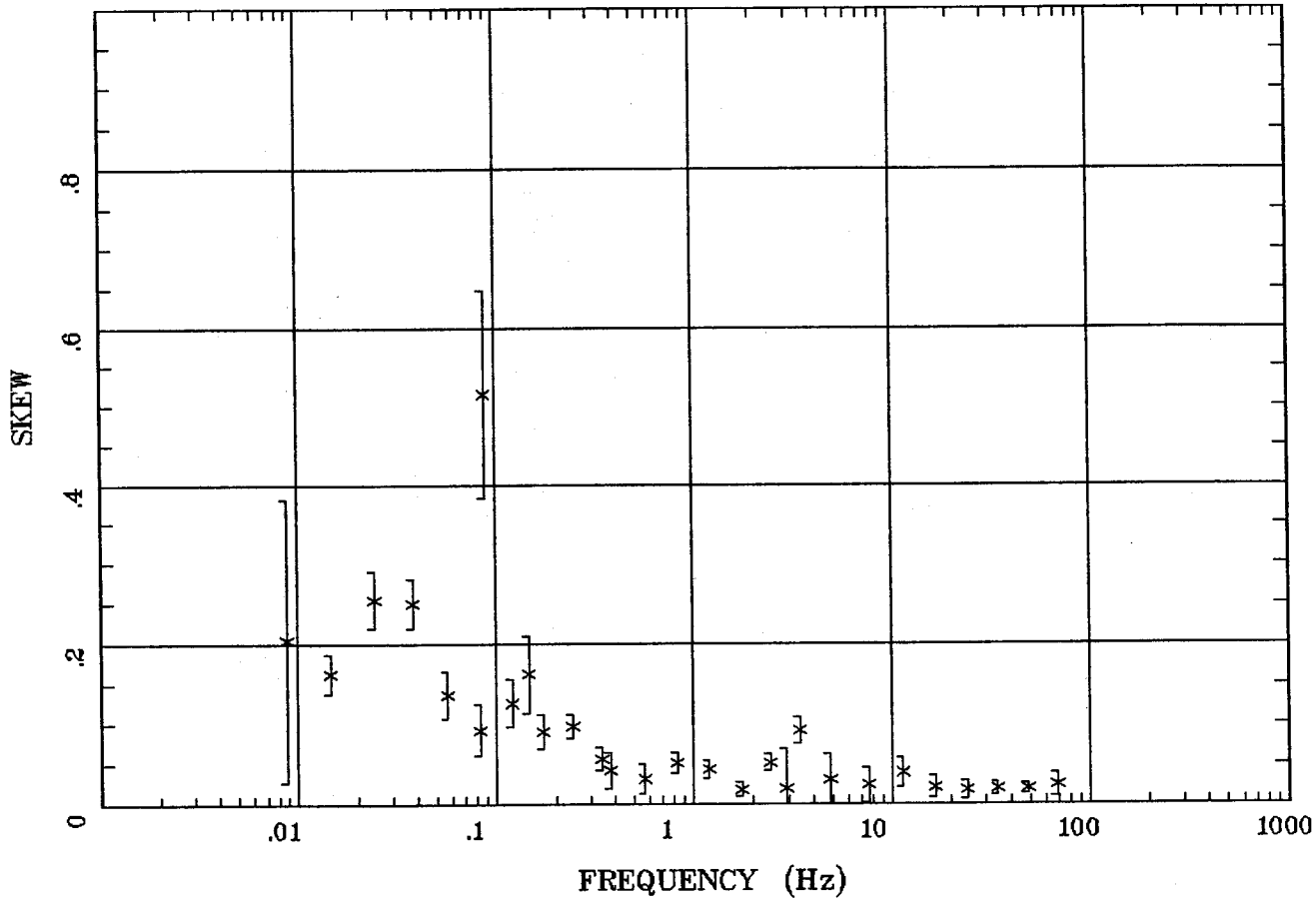
Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

IMPEDANCE SKEW

Alamosa Quad, 100k

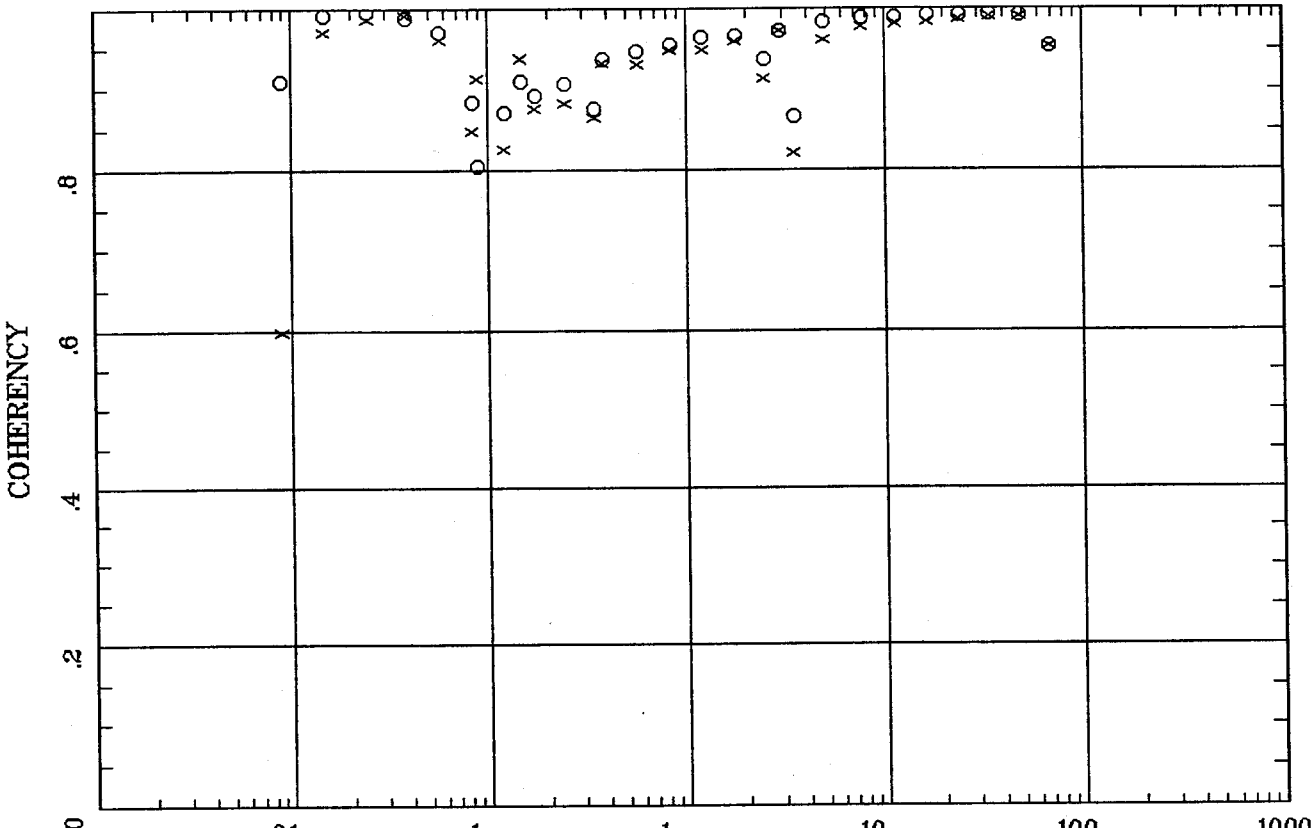
Station 21



Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k



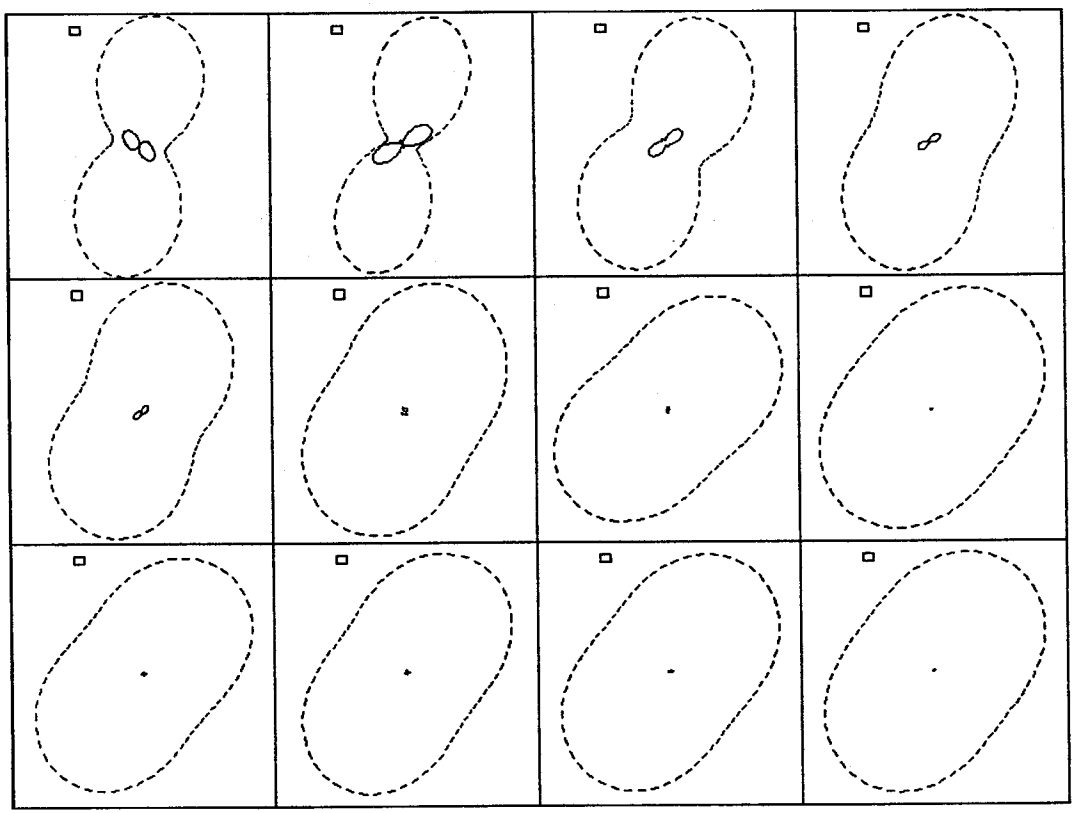
Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k

Station 21

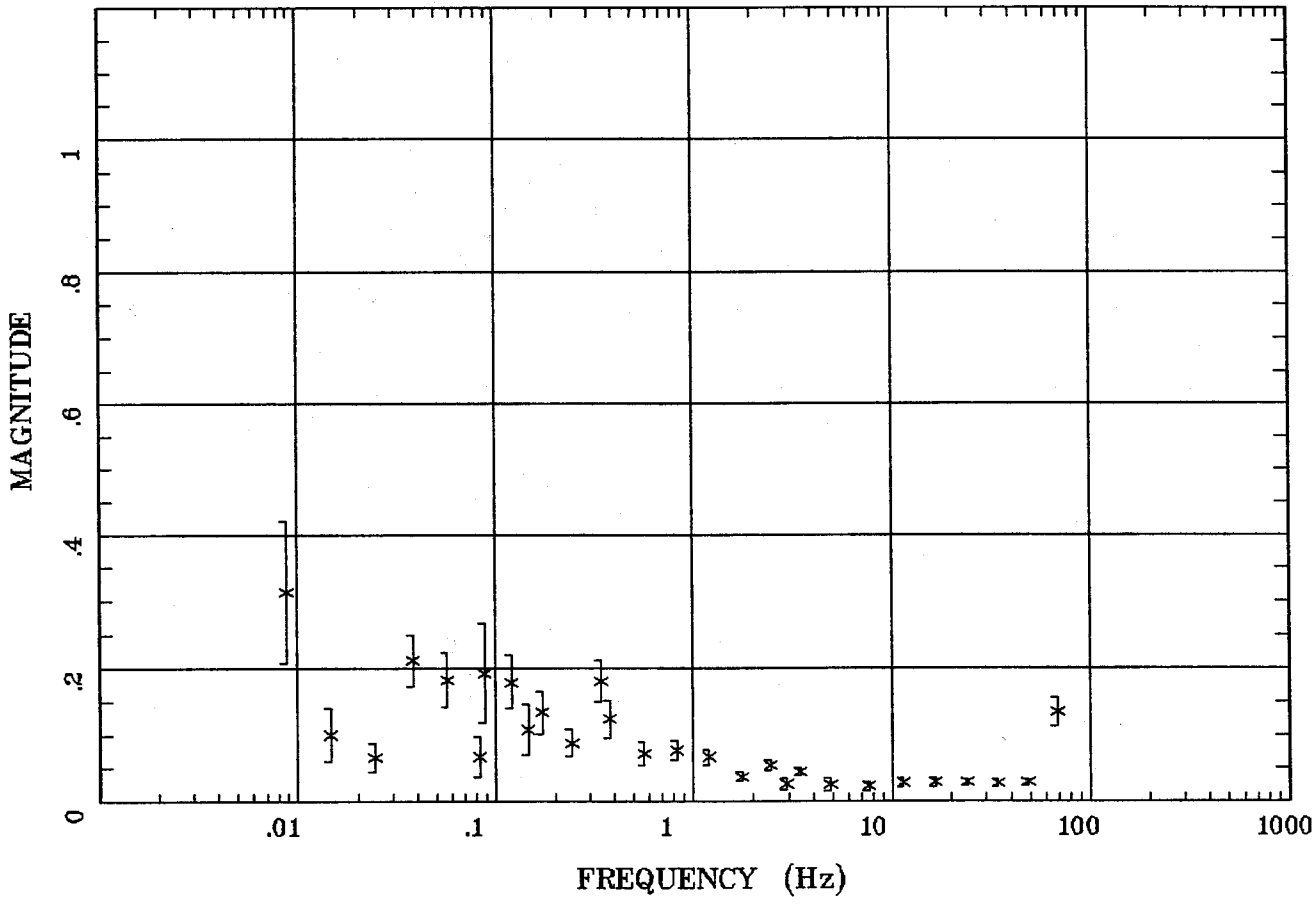


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI – ElectroMagnetic Instruments >

TIPPER MAGNITUDE Alamosa Quad, 100k



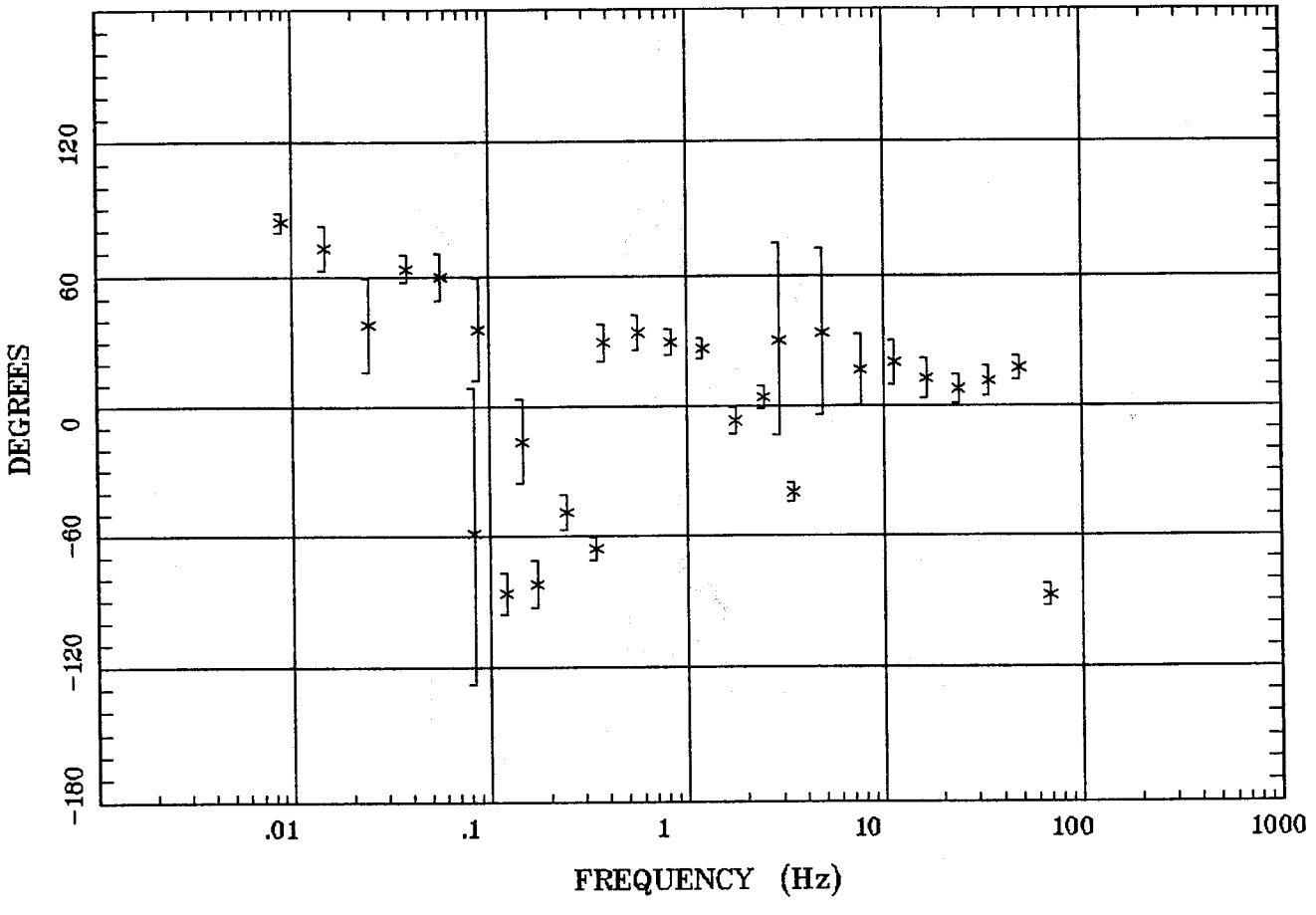
Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

TIPPER STRIKE

Alamosa Quad, 100k

Station 21

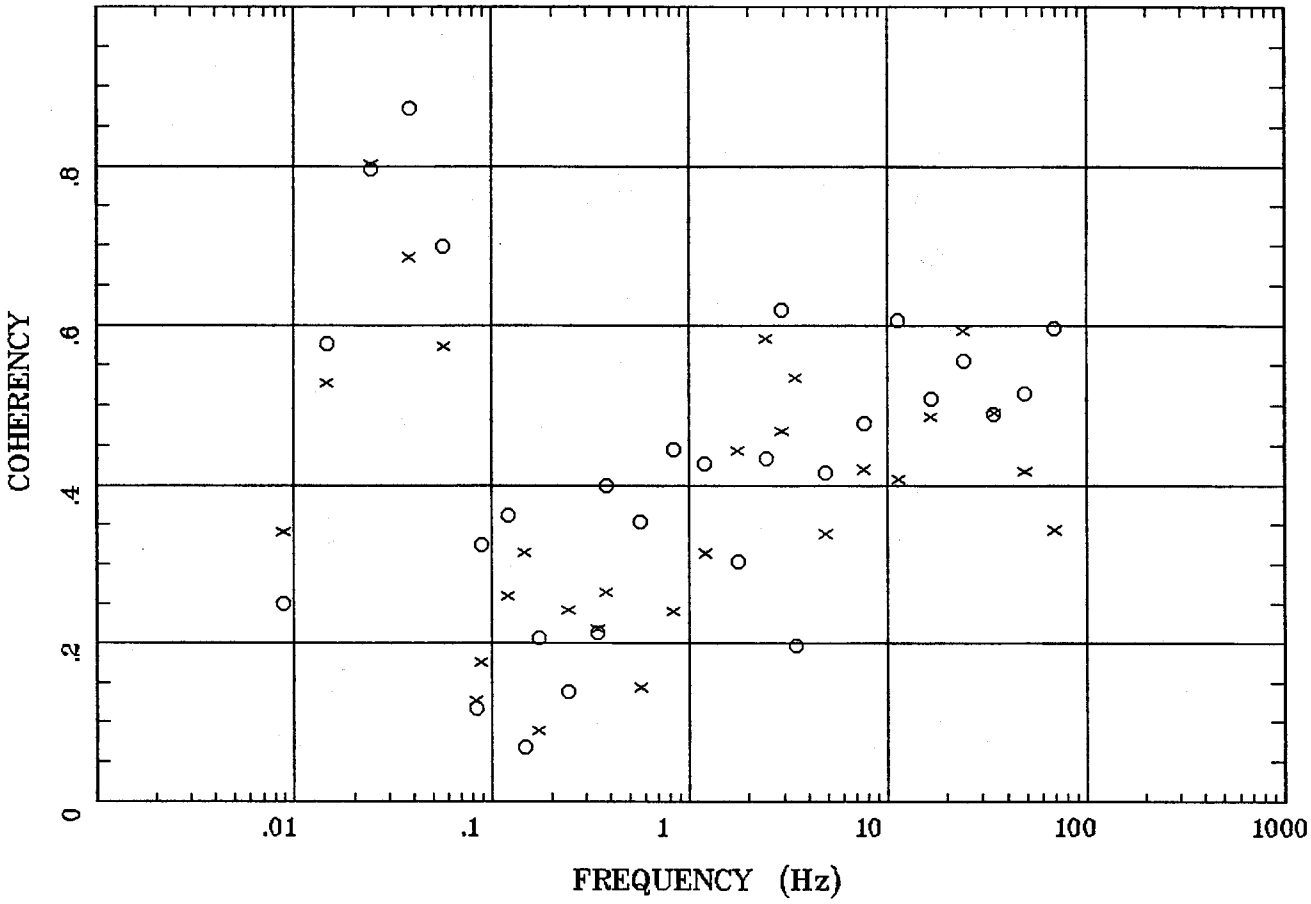


Client:
Remote: none
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o

Alamosa Quad, 100k



Client:
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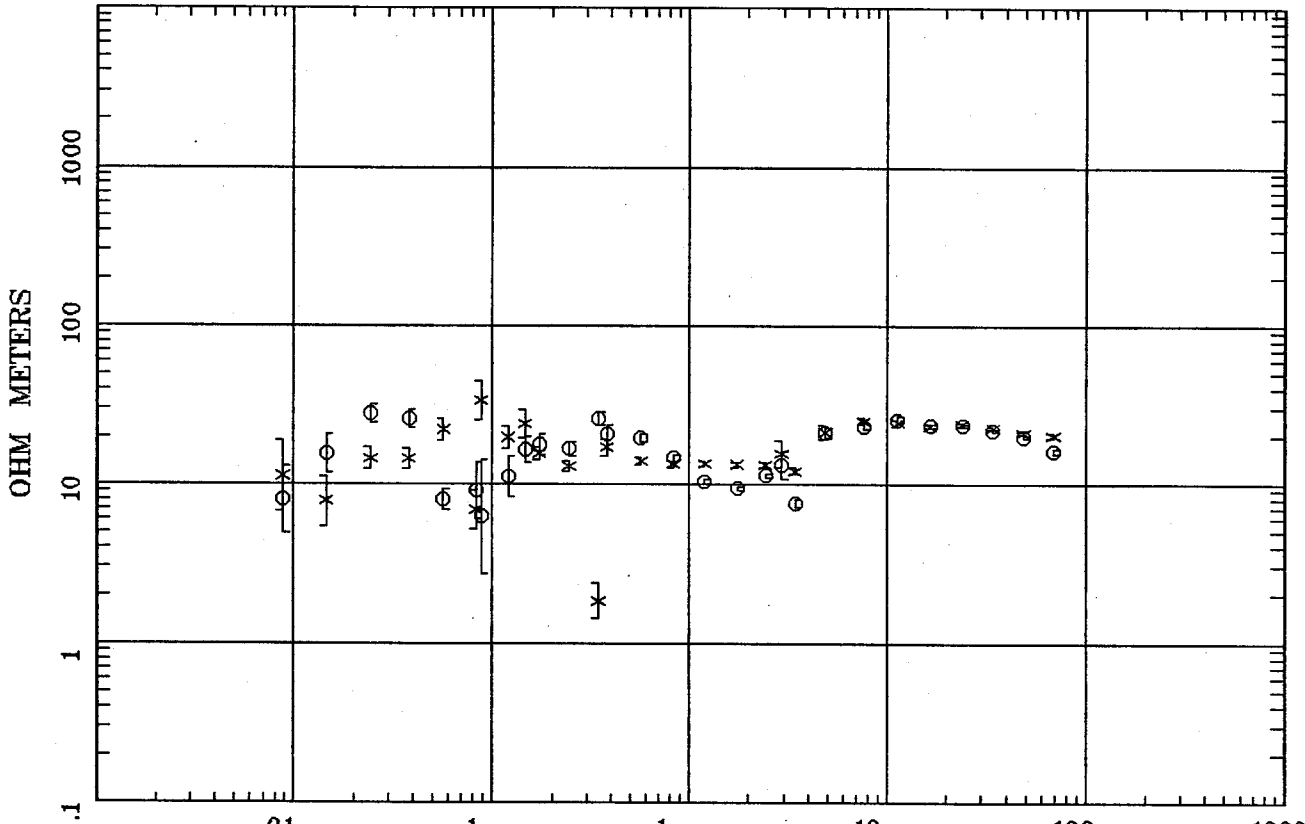
Acquired: 16:5 Aug 15, 2006
Survey Co:USGS

Rotation:
Filename: sl21m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:42 Mar 15, 2007
< EMI - ElectroMagnetic Instruments >

Station 22

APPARENT RESISTIVITY Alamosa Quad, 100k

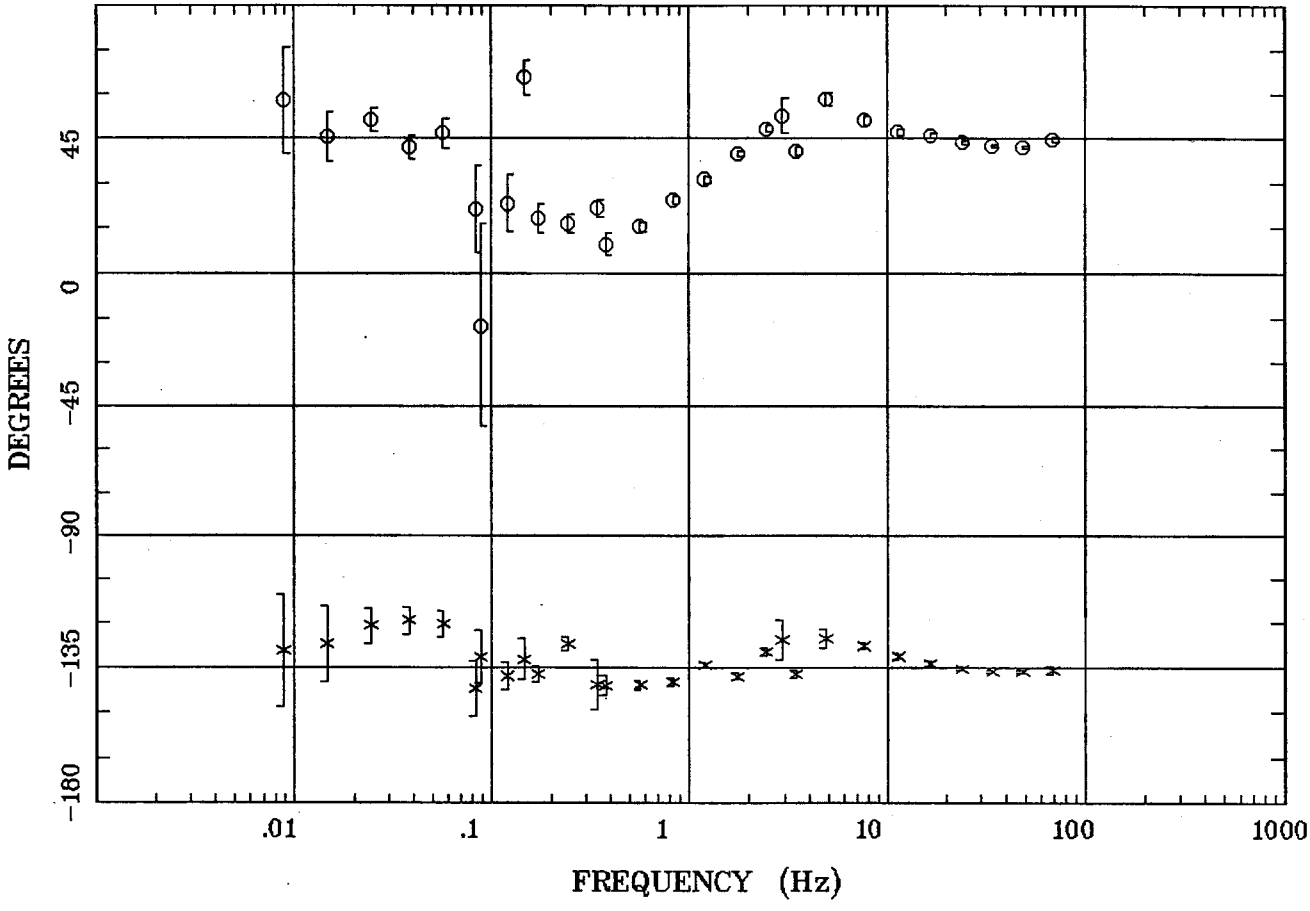


Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

200

IMPEDANCE PHASE Alamosa Quad, 100k

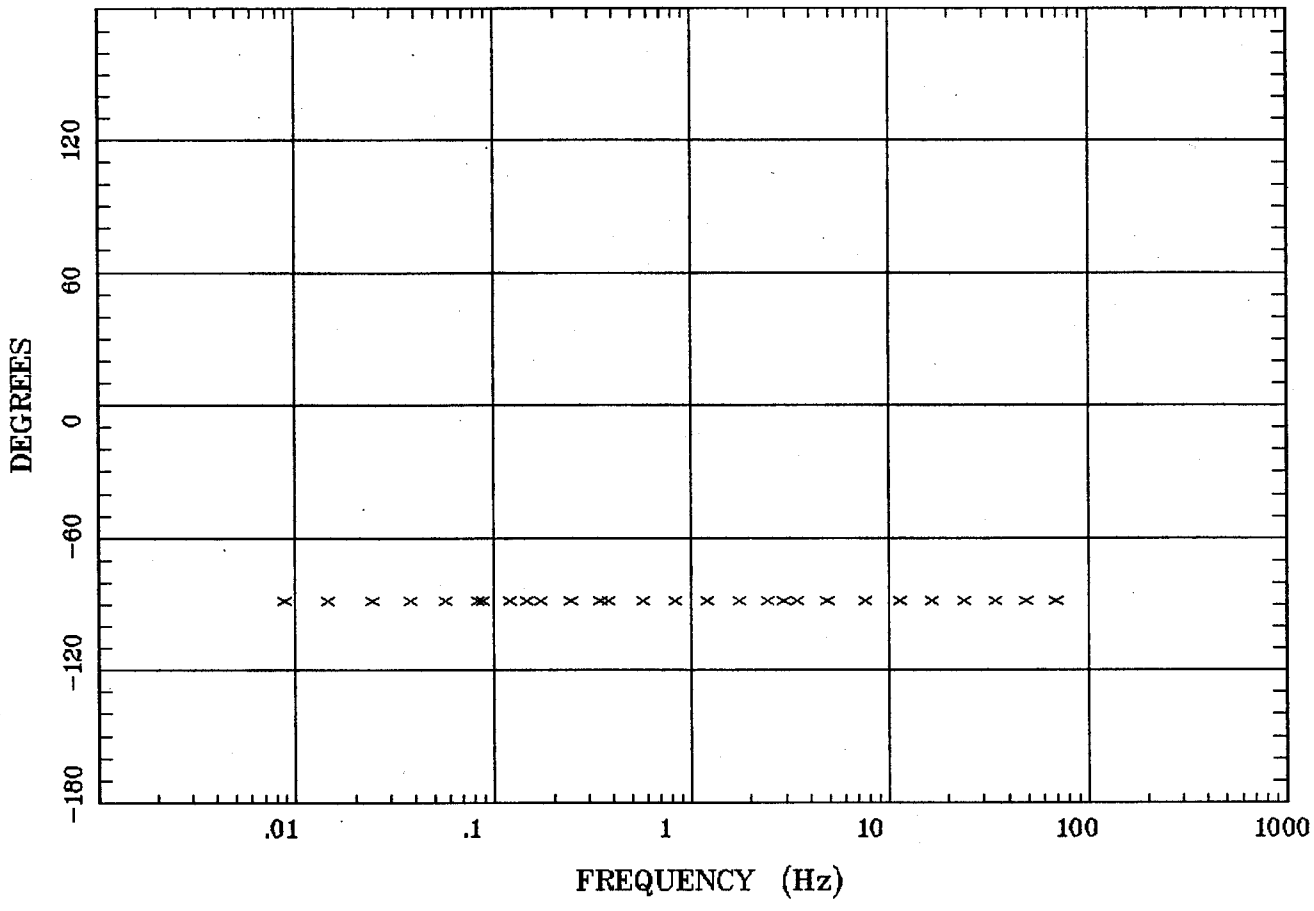


Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

Station 22

ROTATION ANGLE Alamosa Quad, 100k



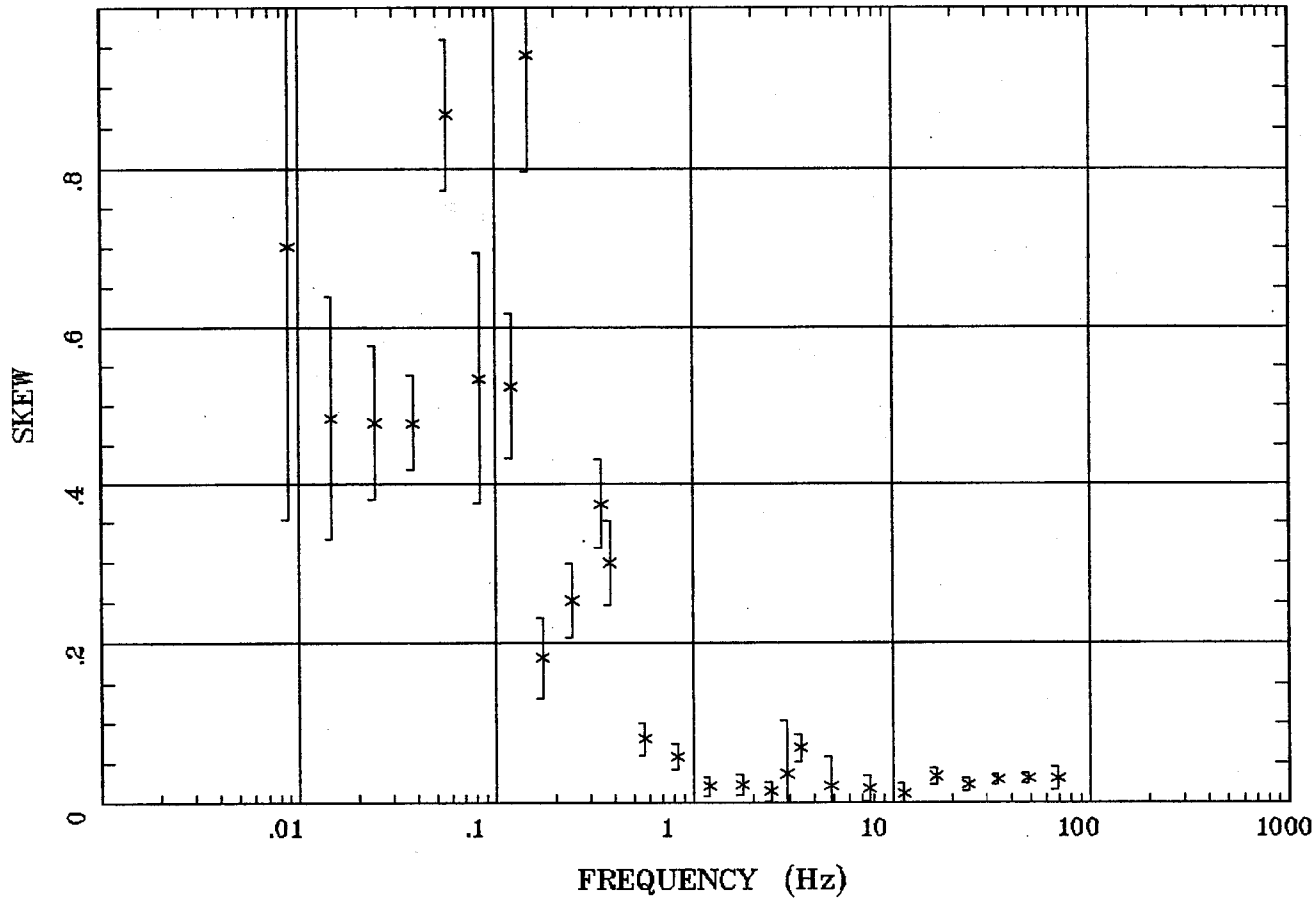
Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

Station 22

IMPEDANCE SKEW

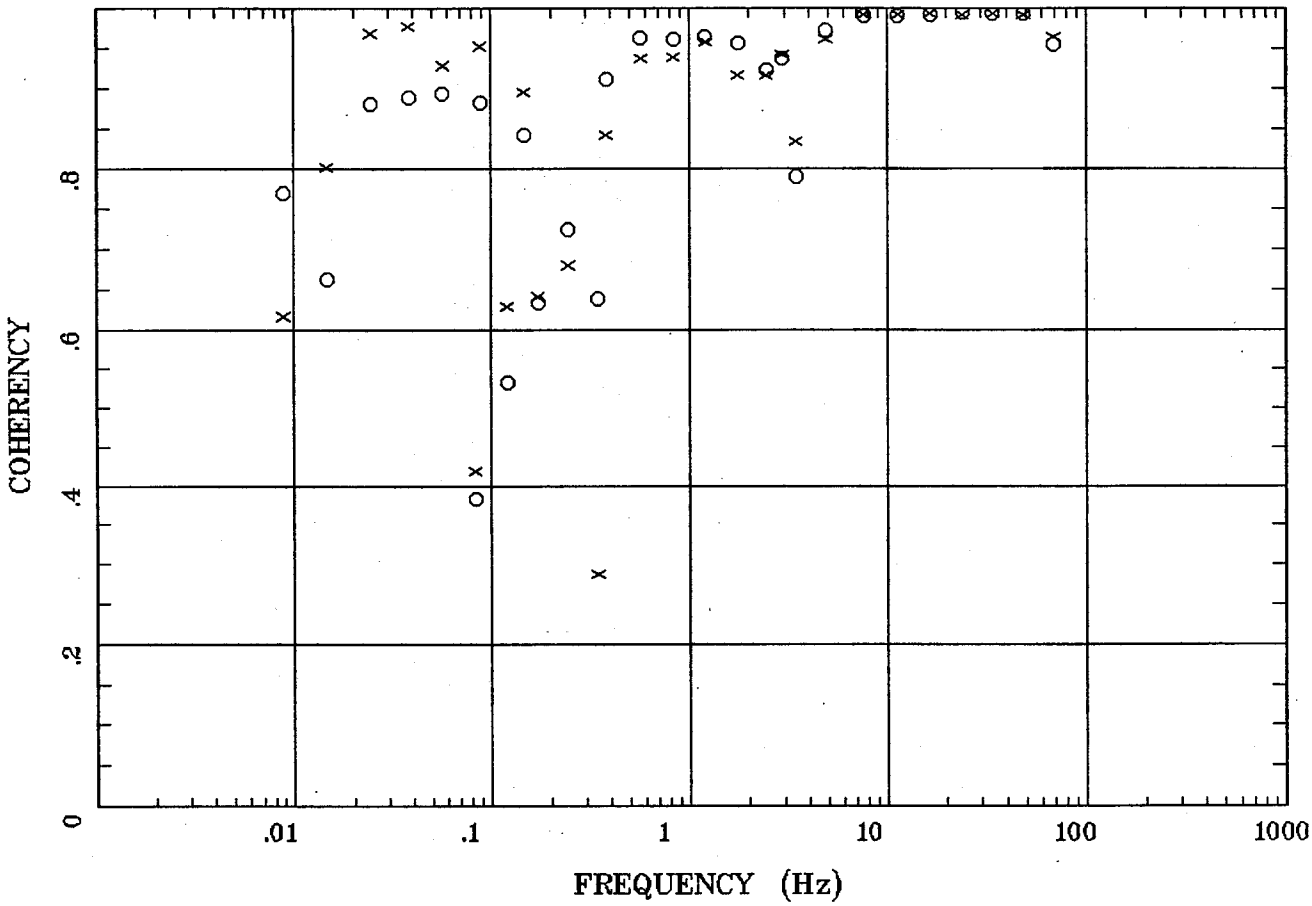
Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

E MULT Coh. Alamosa Quad, 100k



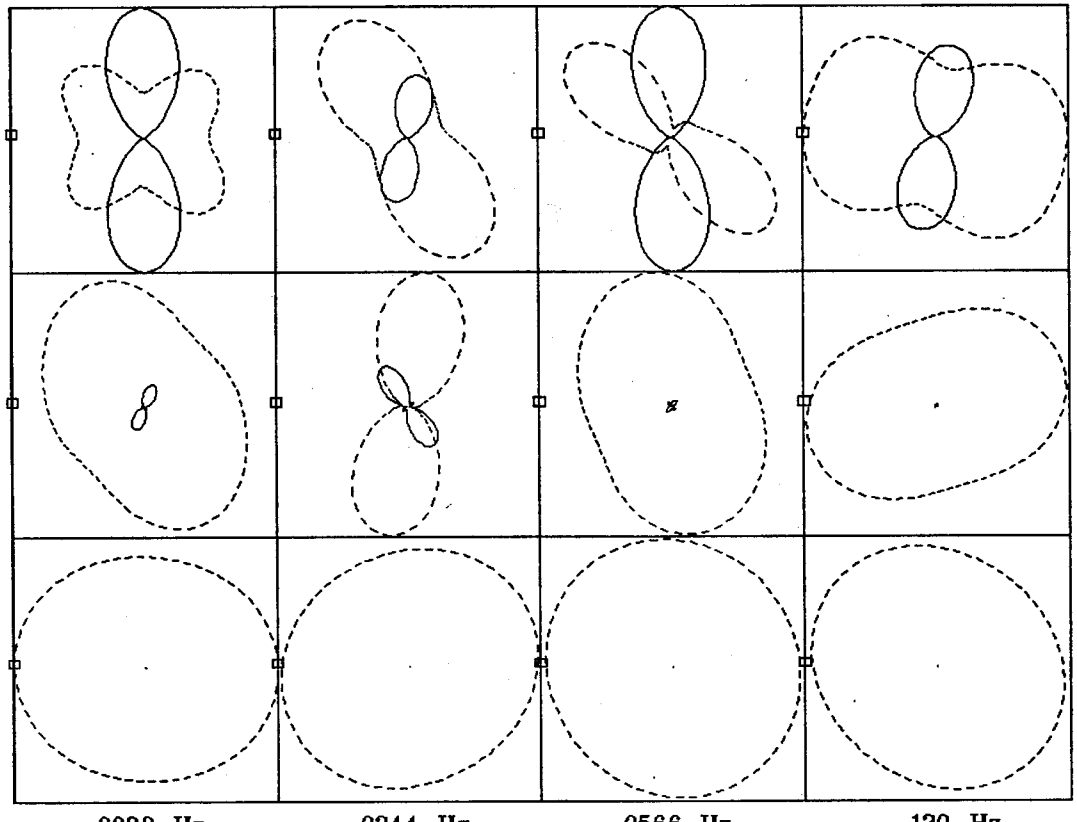
Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >

POLAR PLOTS

Alamosa Quad, 100k

Station 22

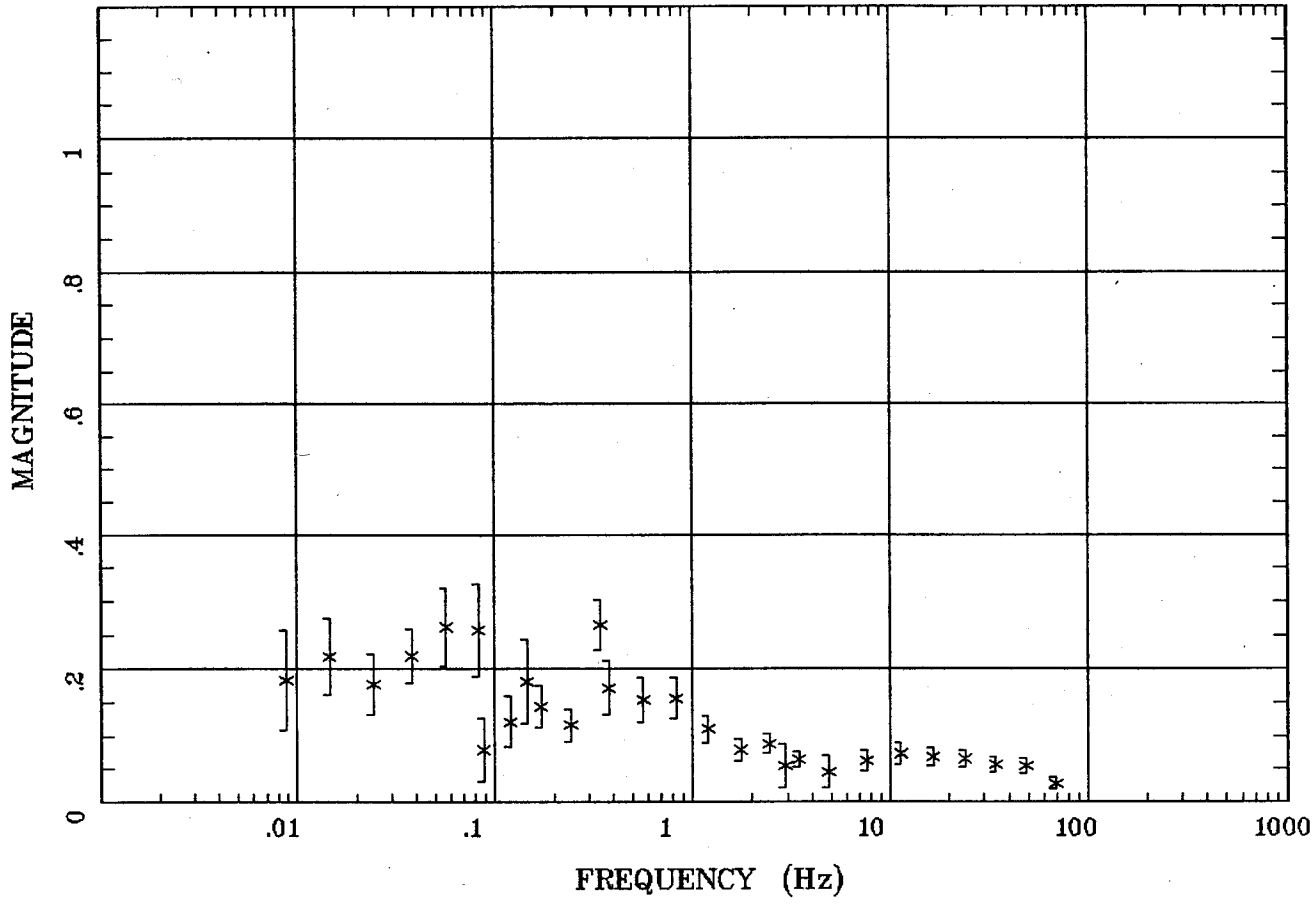


.0088 Hz	.0244 Hz	.0566 Hz	.120 Hz
.172 Hz	.345 Hz	.566 Hz	1.758 Hz
2.930 Hz	7.617 Hz	16.602 Hz	34.375 Hz

Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

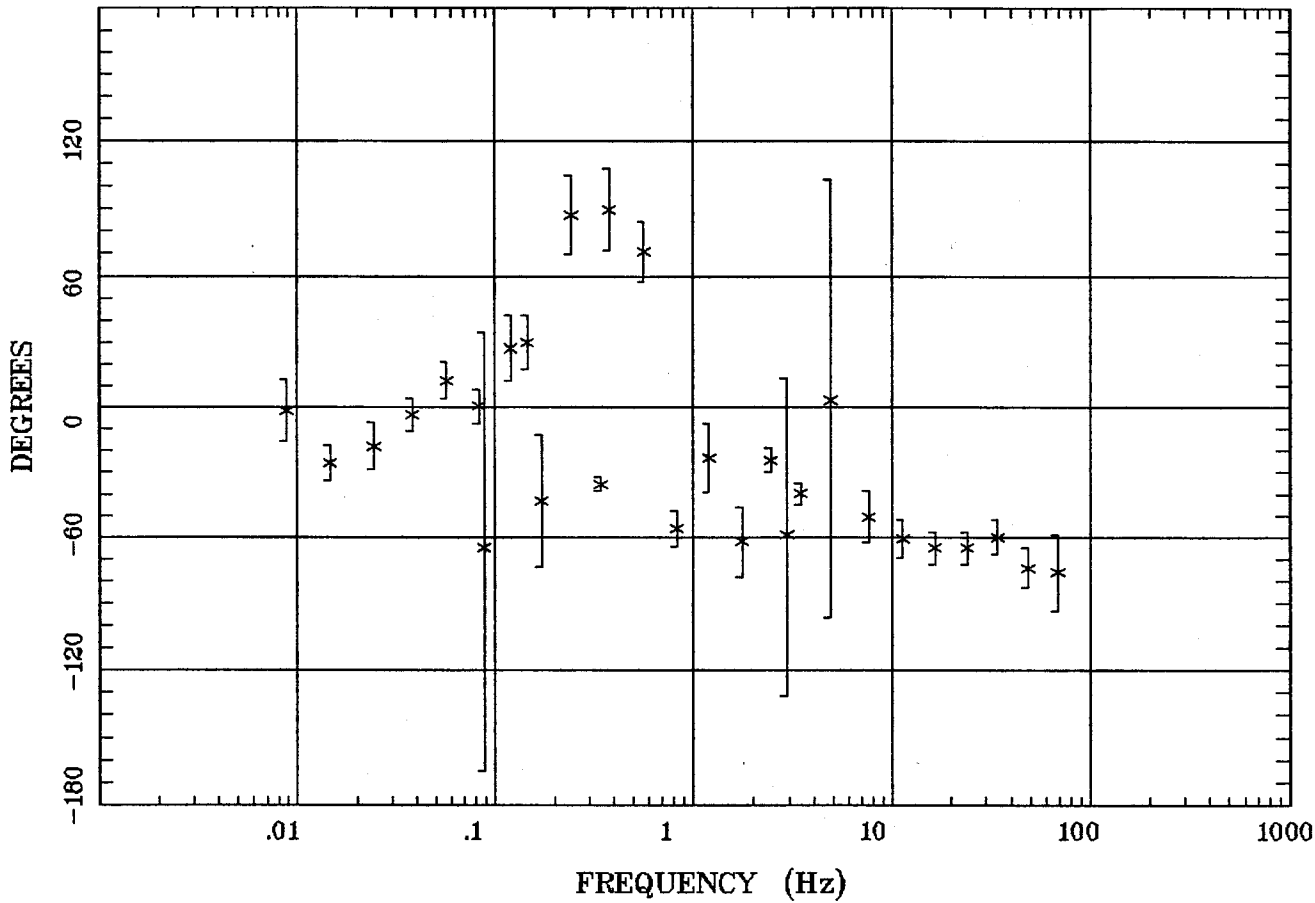
TIPPER MAGNITUDE Alamosa Quad, 100k **Station 22**



Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

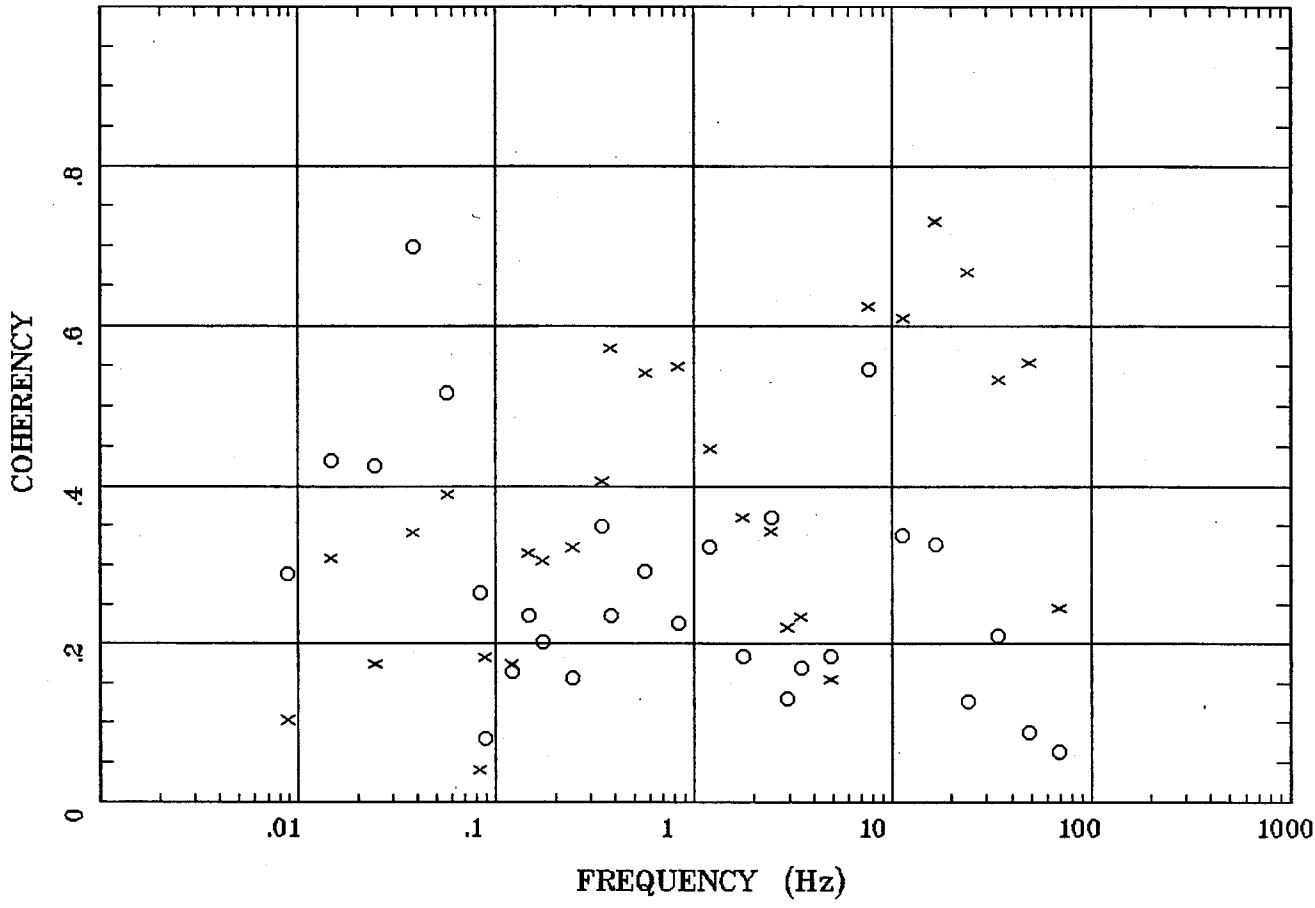
TIPPER STRIKE Alamosa Quad, 100k **Station 22**



Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI - ElectroMagnetic Instruments >

HzHx.x Coh HzHy.o Alamosa Quad, 100k



Client:
Remote: none
Acquired: 09:5 Aug 16, 2006
Survey Co:USGS

Rotation:
Filename: sl22m.avg
Channels: Ch1 Ch2 Ch3 Ch4 Ch5 Ch3 Ch4
Plotted: 10:09 Mar 19, 2007
< EMI – ElectroMagnetic Instruments >