Importing Data into IX1D v 3 – A Tutorial

Version 1.0

© 2006 Interpex Limited All rights reserved If a database is already loaded, Clear Data to start with a blank database



Use File/New/Clear Data to clear database, unless you want to add data to an existing database.

Next Select File/Import or press

X Interpex Limited 1-D Interpretation								
File Edit View	C	reate Profile Batch H	elp					
New Open	۲	16 c 🛉 👩	<u>8</u>					
Save Save_As Load IXR files								
Import	Þ	ASCII Data File 🔶	DC Resistivity Data					
Export	Þ	ASCII Model File	DC Resistivity/IP Data					
Print		XYZ Data File 🔷 🕨	Frequency EM Data					
Exit	_	USF Data File	MT Data KM Conductivity Data					
	-	Station locations	TEM Data 🔹 🕨					
		Well Log File	Circular Loop Hz Data					



Select the type of data you wish to import from Flat ASCII file.

For MT and TEM Data, there are options

Frequency EM Data	1
MT Data 🔹 🕨 🕨	MT Data
EM Conductivity Data	MT Data from SEG standard EDI file
TEM Data 🔹 🕨	MT Data from EMI Data file
Circular Loop Hz Data	MT Data from Geotools TBL file

MT data can be imported from Flat file, SEG standard EDI file, EMI data file or GeoTools TBL data file.

EM Conductivity Data		
TEM Data	≯	TEM Data
Circular Loop Hz Data		TEM Data from TEMIX .TEM file
XYZ Data File	•	

TEM data can be imported from Flat file or from TEMIX compatible .TEM files.

Profile data are best imported from XYZ files



XYZ file format is currently supported for EM Conductivity and Frequency EM data. Importing from XYZ files creates profiles from the soundings as they are imported. Universal Sounding Format can be used to import any of the data types



USF files can contain one or more data types in the same file!



First select the array type, length units and data type.

Flat ASCII Resis	stivity Data Fi	le			? 🛛
Look in:	Data		•	= 🗈 💣 📰 •	•
My Recent Documents Desktop My Documents	MTTest.DAT Ncct1.dat Ncct2.dat PEMBROKE.I S1.dat S2.dat S3.dat S3.dat S5.dat S5.dat S5.dat S5.dat S5.dat S5.dat S7.dat S8.dat S9.dat S10.dat S10.dat	DAT		 S12.dat S13.dat S14.dat S15.dat S16.dat S18.dat S19.dat S19.dat S20.dat S20.dat SCHLUMEW SCHLUMS, SCHLUMNS, SMOOTH.D, StaLoc.DAT SYND.DAT SYNS.DAT 	ət .DAT DAT AT
	<		in and	1	2
My Network Places	File <u>n</u> ame: Files of <u>type</u> :	S6.dat	y Data File	• •	<u>O</u> pen Cancel

Next select the file to be imported.

🛣 Flat File	e Columns				X
Column f	for AB/2:	2 🗧 Column fo	r Resistivity:	3 🗧	
Calum		4	·	_	
Column					
🔲 Start Re	ading at Row:	2 🕂 🗖	Stop Reading at Row:	3099 🛨	
S6	SCHL	0.000	0.000 1	700000.000	4390(🔨
No.	AB/2	RH0-A	MN		
1	4.0000	159.9574	0.8000		
2	5.0000	84.5431	0.8000		
3	7.0000	68.5003	0.8000		
4	10.0000	61.6132	0.8000		
5	10.0000	58.0177	1.5000		
6	15.0000	74.4288	1.5000		_
7	20.0000	73.2032	1.5000		
8	30.0000	98.6774	1.5000		
9	40.0000	100.4991	1.5000		
10	40.0000	81.9302	7.6000		
11	50.0000	85.6237	7.6000		
12	70.0000	88.9993	7.6000		~
<					>
,					
ОК	Cancel				

Then identify the columns in the data. For this file, AB/2 is in column 2, Rho-A is in column 3 and MN is in column 4. There is no need to control the rows which are read because unreadable rows are automatically bypassed.



Finally press OK to import the data and see the sounding displayed in the sounding window.

Editing DC Resistivity Data

🛣 Apparent Resistivity Entry/Edit 🛛 🔀										
Da	Data Set Name: S6									
	Easting: 0.0000 Northing: 0.0000 Elevation: 0.0000									
Ļ	Azimuth:	0.0000	(deg) (0 is North)		Units: (meters)					
🔽 Us	e Masked Poin	its?		Schlur	mberger Array					
Point	AB/2	MN	Apparent Resistivity	Mask?	Open Geometry					
1	4.00	0.80	159.96		Save Geometry					
2	5.00	0.80	84.54		Saus Geometry As					
3	7.00	0.80	68.50		Save debilleny As					
4	10.00	0.80	61.61	Γ	Insert Cell					
5	10.00	1.50	58.02							
6	15.00	1.50	74.43	Γ	Delete Cell					
7	20.00	1.50	73.20							
8	30.00	1.50	98.68		Insert How					
9	40.00	1.50	100.50		Delete Row					
10	40.00	7.60	81.93							
11	50.00	7.60	85.62		Column Math:					
12	70.00	7.60	89.00		Add To					
13	100.00	7.60	94.11		Multiply By					
14	150.00	7.60	69.71							
15	200.00	7.60	49.59		OK Cancel					

You may want to edit the data after import, since the location, elevation and other header information is not imported and thus not correct. Use Edit/Data or press III to access the editing spreadsheet.



For DC Resistivity with IP, there is an additional selection for the type of IP Data. All IP data are treated basically alike, but this does control the name of the IP parameter.

🛣 Flat File Colu	imns				
Column for AB	1/2: 2 🕂 Column	n for Resistivity	4 🗧		
Column for N	4N: 3		Col	umn for IP Data: 🕞	1
		_			J
🔲 Start Reading a	at Row: 2	🛨 🗔 Stop F	Reading at Row:	3099 🛨	
DATASET:	Test IP Data		NORTH:	0.00 EAST:	~
NUMBER	AB/2	MN	RESISTIVITY	IP VALUE	
1	2.600	0.260	18.975	2.660	
2	3.810	0.381	22.189	4.067	
3	5.610	0.561	26.455	5.701	
4	8.240	0.824	30.352	6.635	
5	12.100	1.210	33.970	8.165	
6	17.800	1.780	38.941	9.446	
7	26.000	2.600	34.861	11.537	
8	38.100	3.810	34.193	15.256	
9	56.100	5.610	24.151	21.512	
10	82.400	8.240	14.258	23.951	
11	121.000	12.100	9.236	20.134	
12	178.000	17.800	6.645	6.647	
13	260.000	26.000	5.729	2.177	
14	381.000	38.100	5.485	2.015	
15	561.000	56.100	5.781	1.959	
16	824.000	82.400	5.631	2.039	~
<					>
ОК	Cancel				

For DC Resistivity with IP, there is an additional column used to read the IP values. Note that the MN and Rho-A columns are switched compared to the previous example.



Finally press OK to import the data and see the graph in the sounding window. Note there are now two graphs for both data and model.

Editing DC Resistivity/IP Data

3	🛣 Apparent Resistivity/IP Entry/Edit 🛛 🔀								
	Data Set Name: TestIP								
		Easting:		0.0000	Northi (dea) (0 i	ning: 0.0000			Elevation: 0.0000
	Vs 🔽	e Maskeo	l d Points?	0.0000		snonnj	Schlu	mbe	rger Array
	Point	AB/2	MN	Rho-A	Mask?	pfe	Mask?	^	Open Geometry
	1	2.60	0.26	18.98	Γ	2.66		-	Save Geometry
	2	3.81	0.38	22.19	Γ	4.07			Sava Geometru As
	3	5.61	0.56	26.45		5.70			Jave debilledy As
	4	8.24	0.82	30.35		6.64			Insert Cell
	5	12.10	1.21	33.97		8.16			
	6	17.80	1.78	38.94		9.45			Delete Cell
	7	26.00	2.60	34.86		11.54			
	8	38.10	3.81	34.19		15.26			Insert How
	9	56.10	5.61	24.15		21.51			Delete Bow
	10	82.40	8.24	14.26		23.95			
	11	121.00	12.10	9.24	Γ	20.13			Column Math:
	12	178.00	17.80	6.64		6.65			Add To
	13	260.00	26.00	5.73	Γ	2.18			Multiplu Bu
	14	381.00	38.10	5.49		2.02			matapy by
	15	561.00	56.10	5.78	Г	1.96	Γ	~	OK Cancel

You may want to edit the data after import, since the location, elevation and other header information is not imported and thus not correct. Use Edit/Data or press III to access the editing spreadsheet.

Import Frequency EM Data



Soundings can be made vs. frequency, spacing or instrument height. Frequency soundings are the most common.

For Frequency soundings, the coil spacing and height from the ground need to be entered.

For Geometric soundings, the constant frequency and height must be entered.

For height soundings, the frequency and spacing are required.

Frequency EM data are best imported as profiles from an XYZ file, but a single sounding can be imported if desired. Here we need to choose coil orientation, sounding type, length and data units. The sample is from the MaxMin instrument.

Import Frequency EM Data

🛣 Flat File Columns	
Column for Freq: 🚺 🛨 Column for In-Phase: 🛛 2 🛨	
Column for Quad: 3 ≑	
🔽 Start Reading at Row: 2 🐳 🗖 Stop Reading at Row: 3099 🐳	
110 1 .2 220 1.3 1.9 440 2.5 3.8 880 5.8 5.7 1760 16.3 4.7 3520 28.7 -13.4 7040 19.2 -55.3 14080 -50.4 -86.5	
	>
OK Cancel Set Start Row Set Stop Row	

Then identify the columns in the data. For this file, Frequency is in column 1, in-phase in 2 and quadrature in column 3. There is no need to control the rows which are read because unreadable rows are automatically bypassed.

Import Frequency EM Data



Finally press OK to import the data and see the graph in the sounding window. Note both data curves are plotted on a single graph.

Editing Frequency EM Data

🛣 Fre	equency E	M Data Entr	y/Edit			×				
Data	Data Set Name: FLATMM Spacing:									
Easti	Easting: 0.0000 Northing: 0.0000 Elevation: 0.0000 60.000									
Azir	Azimuth: 0.0000 (deg) (0 is North) Units: [meters] Height:									
🔽 Us	e Masked Po	oints?		Horizontal	Coplanar	0.0000				
No.	Freq (Hz)	InPhase (%)	Mask?	Quad (%)	Mask? 🔼	Open Geometry				
1	110.00	1.0000	Г	0.20000		Save Geometry				
2	220.00	1.3000	Γ	1.9000		Save Geometry As				
3	440.00	2.5000	Γ	3.8000						
4	880.00	5.8000	Γ	5.7000		Insert Cell				
5	1760.0	16.300		4.7000						
6	3520.0	28.700		-13.400		Delete Cell				
7	7040.0	19.200		-55.300		Incest Days				
8	14080.	-50,400		-86.500						
9						Delete Row				
10						Column Math:				
11										
12			Γ							
13			Г			Multiply By				
14			Г		✓					
						UK Cancel				

You may want to edit the data after import, since the location, elevation and other header information is not imported and thus not correct. Use Edit/Data or press III to access the editing spreadsheet.

Import Magnetotelluric (MT) Data

🛣 Flat File Column	S			×					
Column for Freq or Perio	id: Column I	for Resistivity: 3	Column for R	esistivity Error: 👘 🗧					
2 ÷ Period Column for Phase: 4 ÷ Column for Phase Error: 0 ÷									
Start Reading at Ro	ow: 2	🗧 🗔 Stop Reading	g at Row:	3099 🗧					
DATASET:	TestMT		NORTH:	0.00 EAST: 🔨					
NUMBER	FREQUENCY	RESISTIVITY	PHASE	RES ERROR J					
1	384.615	9.855	55.590						
2	285.714	8.670	55.538						
3	192.308	7.671	53.668						
4	144.928	7.306	48.903						
5	96.154	7.432	44.550						
6	71.942	8.195	41.004						
7	48.077	8.977	38.632						
8	35.971	10.344	38.713						
9	23.981	11.215	41.656						
10	17.986	11.376	43.564						
11	12.005	11.802	48.980						
12	9.001	11.380	48.272						
13	5.999	10.380	51.970						
14	4.500	9.642	53.732						
15	3.000	8.900	52.807						
16	2.250	8.268	53.577	✓					
<				>					
ОК	Cancel	Set Start Row	Set Stop F	łow					

For MT data, there are no options to choose before importing and the first dialog after selecting the file is the column selection. If phase or error bars are not available, set the appropriate column to 0. If the abscissa is period instead of frequency, check the "Period" check box.

Import Magnetotelluric (MT) Data



Finally press OK to import the data and see the graph in the sounding window. Note two graphs for data but only one for the model.

Editing Magnetotelluric (MT) Data

🛣 Magnetotelluric Data Entry/Edit 🛛 🔀									
Dal	Data Set Name: MTTest								Statics:
East	ting: 0.(0000 No	orthing:	0.00	100 Ele	vation:	0.000)0	Mode: xy TE
Az	imuth:	0.0000	(deg) (l	D is North)		Magne	totellu	ric Data
V U	lse Masked I	Points?	R	otation:					Units: (meters)
	Reference:								Open Geometry
No.	Freq (Hz)	Resist	+/-	Mask?	Phase	+/-	Mask?	^	Save Geometry
1	384.61	9.8550	0.0000	Γ	55.590	0.0000			Save Geometry As
2	285.71	8.6700	0.0000		55.538	0.0000			
3	192.31	7.6710	0.0000		53.668	0.0000			Insert Cell
4	144.93	7.3060	0.0000		48.903	0.0000			
5	96.154	7.4320	0.0000		44.550	0.0000			Delete Cell
6	71.942	8.1950	0.0000		41.004	0.0000			Insert Bow
7	48.077	8.9770	0.0000		38.632	0.0000			
8	35.971	10.344	0.0000	Γ	38.713	0.0000			Delete Row
9	23.981	11.215	0.0000	Γ	41.656	0.0000	Γ		Column Math:
10	17.986	11.376	0.0000	Г	43.564	0.0000	Γ		Add To
11	12.005	11.802	0.0000	Γ	48.980	0.0000	Γ		
12	9.0010	11.380	0.0000	Γ	48.272	0.0000			Multiply By
13	5.9990	10.380	0.0000		51.970	0.0000	Γ	~	OK Cancel

You may want to edit the data after import, since the location, elevation and other header information is not imported and thus not correct. Note additional parameters for MT: Rotation, Reference, Mode, Statics. Press

Import EM Conductivity Data

5	🕇 Flat	File Columns				
	Col	lumn for Freq:	3 🗧	Column for Height:	Column for HMD:	5 🗧
	Columr	n for Spacing:	2 ÷	4 🛨	Column for VMD:	6 🕂
	🔲 Star	t Reading at Row:		🔲 🗆 Stop Reading a	at Row: 0 ≑	
	ASET: ER	Test EMS Dat SPACING	ta FREQUENCY	NORTH: HEIGHT	0.00 EAST: HMD	0. I 🛆 VMD
	1	6400.000	10.000	0.000	26.000	28.000
	2	400.000	40.000	0.000	44.000	48.000
	<					>
		ок с	ancel	Set Start Row	Set Stop Row	

For EM Conductivity data, there are no options to choose before importing and the first dialog after selecting the file is the column selection. If HMD or VMD data are not available, set the appropriate column to 0.

Import EM Conductivity Data



Finally press OK to import the data and see the graph in the sounding window. Note both data curves are plotted on a single graph.

Editing EM Conductivity Data

🛣 EM Conductivity Data Entry/Edit 🛛 🔀										
	Data	a Set Name:	HMD + VMD							
	Easti	ng: 0.0	HMD ONLY							
	Azir	nuth:		O VMD ONLY						
	Use Masked Points? EM Conductivity Data									Geonics Specs
	No.	Freq (Hz)	Spacing	Height	HMD	Mask?	VMD	Mask?	~	Open Geometry
[1	10.000	6400.0	0.0000	26.000	Γ	28.000		-	Save Geometry
	2	20.000	1600.0	0.0000	44.000		48.000			Save Geometru As
	3	40.000	400.00	0.0000	71.000	Γ	70.000			Save decinedy As
	4									Insert Cell
	5									
	6									Delete Cell
	7									Insert Row
	8									Delete Bow
	9									
	10					_				Column Math:
-	11					_				Add To
	12									Multiplu Bu
	13					_				manpy by
L	14									OK Cancel

You may want to edit the data after import, since the location, elevation and other header information is not imported and thus not correct. Note the radio buttons for selecting VMD, HMD or both orientations. Press

Import TEM Data



Central loop soundings utilize a small receiver coil inside a large Transmitter loop.

Coincident loop soundings often utilize the same loop for Transmitter and Receiver. Alternatively, separate loops are used but they are coincident or nearly so

Fixed loop soundings utilize a small receiver coil and a large Transmitter loop. The coil can be placed most anywhere, inside or outside the Transmitter loop.

TEM data require the selection of array type, voltage units, time units and length units.

Import TEM Data

🛣 Flat File Colun	nns				×
Column for Time	2 🕂	Column for Voltage	: 3 🕂	🔲 Log San	nple, pts/dec:
Start Reading at I	Row: 2	🕂 🔲 Stop Readir	ng at Row:	0 🕂	15 🗧
DATASE NUMBER	T: Test TEM I TIME	ata RESISTIVITY	NORTH:	0.00	EAST: 🔨
1	0.007	62570.031			
2	0.009	64299.547			
3	0.012	64213.844			
4	0.016	64212.609			
5	0.020	63986.047			_
6	0.026	62949.016			
7	0.033	60283.211			
8	0.042	55510.402			
9	0.054	47852.547			
10	0.068	39374.977			
11	0.084	31676.523			
12	0.104	24201.920			
13	0.135	16577.209			
14	0.172	11085.970			
15	0.214	7375.253			
16	0.275	4365.925			~
<					>
ОК	Cancel	Set Start Row	Set Sto	p Row	

Then identify the columns in the data. For this file, Time is in column 2 and Voltage is in column 3. A new sweep starts when time decreases. There is an option to log sample the file for cases where the data are linearly sampled time series with many points.

Editing TEM Data

3	🛣 TEM Time/Voltage Entry/Edit 🛛 🛛 🔀												
	Data Set Name: TEMTest Units: (meters)										Units: (meters)		
	Easting: 0. Northing: 0. Elevation: 0. Easting: North										Easting: Northing:		
	Azimuth: 0.0000 (deg) (0 is North) 🔽 Use Masked Points? Loop Size: 0.0000 0.0000												
Fixed Loop TEM Receiver Coil Position: 0.0000 0.0									n: 0.0000 0.0000				
	Swe	ер	Freq (H	łz)	Ramp	(uS)	Coil Area (m*	*2)	Current	(A)	Tx Turns	<u>></u>	Open Timebase
		1	1.0	000	1.	0000	1.0	000	1.0	000	1		Save Timebase
		2	1.0	000			1.0	000	1.0	1.0000			Save Timebase As
		_					1						Insert Cell
	No.	Т	Sw1	V	/ Sw 1	Masi	k TSw2	1	/ Sw 2	Ma	sk TS	^	Delete Cell
	1 2	7.	000E-03	Б.2 С /	257E+04		0.175 3.8		3.842E+05		_		
	2 3	1	200E-03	6.4	121F+04	-	0.210	1.0	1.610E±05		_		Insert Row
	4	1.	600E-02	6.4	121E+04	_	0.351	0.351 9.689E+0		_			Delete Row
	5	2.000E-02 6.399E+04		Γ	0.438	0.438 5.740E+04					Column Math:		
	6	2.1	600E-02	6.2	295E+04	Γ	0.558	3.1	02E+04				Add To
	7	3.3	300E-02	6.0)28E+04		0.702	1.6	678E+04				
	8	4.3	200E-02	5.5	551E+04		0.858	9.5	553E+03			~	Multiply By
	<										>		OK Cancel

The editor for TEM data is more elaborate than the others.

The loop size cannot be zero.

If the receiver coil position is zero, this is the same as a central loop sounding.

For each sweep, there are 3 columns in the lower grid and one row in the upper grid. The upper grid contains sweep parameters: Repetition frequency, Ramp turn-off, Receiver coil area, Current and number of turns in the Tx loop.

When TEM data are imported from a flat ASCII file, the editor is automatically invoked after the data are read. Whenever the time value decreases, a new sweep is created. The spreadsheets in the TEM editor scroll horizontally.

Import TEM Data



When finished editing, press OK to view the TEM data. Notice the different sweeps are shown in different colors.

Entering Data into IX1D from Field Notes

To enter data from written field notes, select File/New Sounding and the type of data. This will bring up a dialog similar to the Import Data as appropriate. DC Resistivity and IP data, Frequency EM data and TEM data have this dialog as shown on previous slides. EM Conductivity and MT soundings do not have this dialog.

The file selection and column specification dialogs will not appear as they do in the File/Import/ASCII Data File sequence.

Instead, you will immediately go to the data editor where you will enter all data from the written field notes using the keyboard.

Importing Data from XYZ files

🛣 Interpex Limited 1-D Interpretation								
File Edit View	Create Profile Batch Help							
New I Open	1 🖶 📼 🔶 🖻 🩎							
Save Save_As Load IXR files	_							
Import 🛛	ASCII Data File 🔸							
Export 🕨	ASCII Model File							
Print	XYZ Data File Frequency EM Data							
Exit	USF Data File							
	Station locations							
	Well Log File							

Data in the XYZ file consist of Easting (X), Northing (Y) and Elevation (Z) coordinates, Station or Profile coordinate and data.

Columns can be separated by blanks, commas or tabs. Two commas do not constitute a skipped value.

Columns can be skipped if additional data columns are interspersed with data.

Unknown values are represented by a series of one or more asterisks ("****")

Data can be imported from XYZ files which contain one sounding per line of data. At present, only Frequency EM and EM Conductivity data can be imported in this manner. Select File/Import/XYZ Data File and then either Frequency EM Data or EM Conductivity Data.

Import Frequency EM Data from XYZ file



At present, only Frequency EM soundings made vs. frequency can be imported from an XYZ file.

Coil orientations can be Horizontal Coplanar, Vertical Coplanar or Vertical Coaxial.

Data units are in percent of primary field (Apex MaxMin) or ppm of the primary field (GEM-2)

Height and Spacing are read from the header in the XYZ file.

Frequency EM data can be imported as profiles from an XYZ file. The first dialog allows the user to select the coil configuration, the data units and the length units. Height and Spacing are read from the header in the XYZ file.

Import Frequency EM Data from XYZ file

🛣 XYZ File Columns 🛛 🛛 🔀
Column for Easting: 🚺 🛨 Column for Elevation: 0 🕂 Column for Data: 3 🕂
Column for Northing: 2 🗧 Column for Profile: 2 🗧 Columns to skip: 0 🗧 🔿 Percent
🗆 Start Reading at Row: 🛛 2 🛨 🗖 Stop Reading at Row: 🚺 1000 🛨 🔎 ppm
/COIL SEPARATION: 1.66 METERS /FREQUENCIES: 1050 2010 4170 8010 12090 15990 21030 LINE GEM-2-1 X Y 1050Hz_I 1050Hz_Q 2010Hz_I 2010Hz_Q 4170Hz_I 4170Hz_Q 8010Hz_I 8010H;
1,0,780.22,6472.2,2029.9,11942,6000.3,22303,14298,36992,24725,50705,34205,58487,46729,69 1,1,760.08,6295.3,1937.1,11441,5581.8,21909,13872,37477,23249,49391,33408,59306,45117,67 1,2,701.58,6066.3,1850.5,11258,5276.1,20981,13200,35596,22262,48539,31547,57211,42012,66 1,3,694.7,5774.8,1748.6,10542,4967.5,20672,12165,34037,20854,46086,29158,56367,40004,638
1,4,661.39,5590.7,1699.3,10229,4726,19281,11720,32633,19457,45504,27997,53756,37999,6362 1,5,596.69,5108,1502.9,9364.2,4130.4,17338,10004,30646,16808,40991,24223,48882,33900,586 1,6,572.97,4886.6,1451.9,8713.8,3898.4,16437,9441.4,28334,15844,38848,22246,47614,31214,5 1,7,531,13,4537,4,1367,3,8273,6,3603,8,15645,8470,9,26983,14554,36684,20010,44054,28227,5
1,8,516.46,4170.5,1272.8,7398.4,3416.6,14450,8026.1,24608,13133,32968,18496,41067,25042,4 1,9,493.15,3760.7,1213.3,6848.2,3179.4,13005,7189,22480,12058,30739,16601,36974,22337,438 1,10,463.5,3466.4,1127.7,6074.6,2885.2,11550,6449.7,19913,10597,26623,14846,32864,19737,3
OK Cancel Set Start Row Set Stop Row

Easting and Northing are map coordinates. If column is 0, all values set to 0.

Profile coordinate (or Station) is distance along profile line. If column is 0, distance is calculated from map.

If elevation column is 0, elevation values 0.

Column for data is first data value. Columns to skip is nonzero if other data are interspersed with in-phase and quadrature values.

Header information begins with slash ("/") and gives coil separation and frequency values. LINE keyword starts and names profiles. File can contain multiple profile lines, each having its own LINE keyword.

Import Frequency EM Data from XYZ file

🛣 Interpex 1-D Sounding Inversion [GEM-2A	1 - 🗆 🛛
<u> E</u> ile <u>E</u> dit <u>V</u> iew Create <u>P</u> rofile <u>B</u> atch Help	
112 2 3 8 8 5 2 2	
no sounding selected	la tanan
no profile selected	Interpez



When finished editing, press OK to view the profile line on the map display. Point at the profile and click to display data.

Import EM conductivity Data from XYZ file



EM Conductivity import from XYZ file requires selection of coil orientations and which orientation comes first in the data listing. VMD is horizontal coplanar coils (Vertical Magnetic Dipole), HMD is vertical coplanar coils (Horizontal Magnetic Dipole).

Import EM conductivity Data from XYZ file

🛣 XYZ File Columns	×
Column for Easting: 🚺 🛨 Column for Elevation: 4 🛨 Column for Data: 5 🛨	
Column for Northing: 2 🗧 Column for Profile: 3 🛨 Columns to skip: 0 🛨	
🗆 Start Reading at Row: 1 🛨 🗖 Stop Reading at Row: 1 🛨	
/ SPACINGS : 10.00 20.00 40.00 / FREQUENCIES : 6400.0 1600.0 400.0 / HEIGHTS, VMD : 1.000 1.000 1.000 / HEIGHTS, HMD : 0.300 0.300 0.300 / CLIENT : Denver SE / COUNTY : Adams County, Colorado / PROJECT : Demonstration EM-34 Data / AZIMUTH : EAST-WEST / LOCATION : Parker Test Site LINE DEFAULT 6400.0 1600.0 400.0 -200.0 0.0 -200.0 1805.2 25.0 19.0 28.0 30.0 56.0 49.0 -190.0 0.0 -190.0 1805.3 27.0 23.0 33.0 30.0 **************************	
OK Cancel Set Start Row Set Stop Row	

Easting and Northing are map coordinates. If column is 0, all values set to 0.

Profile coordinate (or Station) is distance along profile line. If column is 0, distance is calculated from map.

If elevation column is 0, elevation values 0.

Column for data is first data value. Columns to skip is nonzero if other data are interspersed with in-phase and quadrature values.

Header information begins with slash ("/") and gives spacings, frequency values and instrument heights. LINE keyword starts and names profiles. File can contain multiple profile lines, each having its own LINE keyword.

Import EM conductivity Data from XYZ file

Interpei

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DEFAULT00033



When finished editing, press OK to view the profile line on the map display. Point at the profile and click to display data.

Import Station Locations from Flat ASCII File

🛣 Flat File	Columns				
Column for Da	ata Set Name:	1:	Column for Easting:	2 ÷	
Column for N	orthing:	3÷	Column for Elevation:	4 🕂	
🔲 Start Read	ding at Row:	0 🕂	Stop Reading at R	iow: 0 🕂	
Data Set	Easting	Northing	Elevation		^
Set-01	2300	10	534		
Set-02	2301	20	532		
Set-03	2298	30	530		
Set-04	2302	40	527		
Set-05	2302	50	525		
Set-06	2301	60	526		
Set-07	2299	70	528		
Set-08	2300	80	530		
Set-09	2301	90	532		
Set-10	2302	100	534		
Set-11	2300	110	535		
Set-12	2298	120	536		
Set-13	2300	130	537		
Set-14	2301	140	539		
Set-15	2301	150	540		
Set-16	2300	160	541		~
<					>
OK	Can	cel			

Easting and Northing are map coordinates. If column is 0, no data are imported and existing values are used.

If elevation column is 0, no elevation values are imported and existing values are used.

After import, statistics are shown in a dialog indicating number of values assigned, not assigned, duplicates and not matched.

Values assigned should equal number of soundings, other values should be 0.

Each line in station location file is read and matched up with the data set name in the current database. When matched, new data read replace existing data.