

# Importing TEM Data into IX1D v 3 using PROTIX– A Tutorial

**Version 1.1**

© 2011 Interpex Limited

All rights reserved

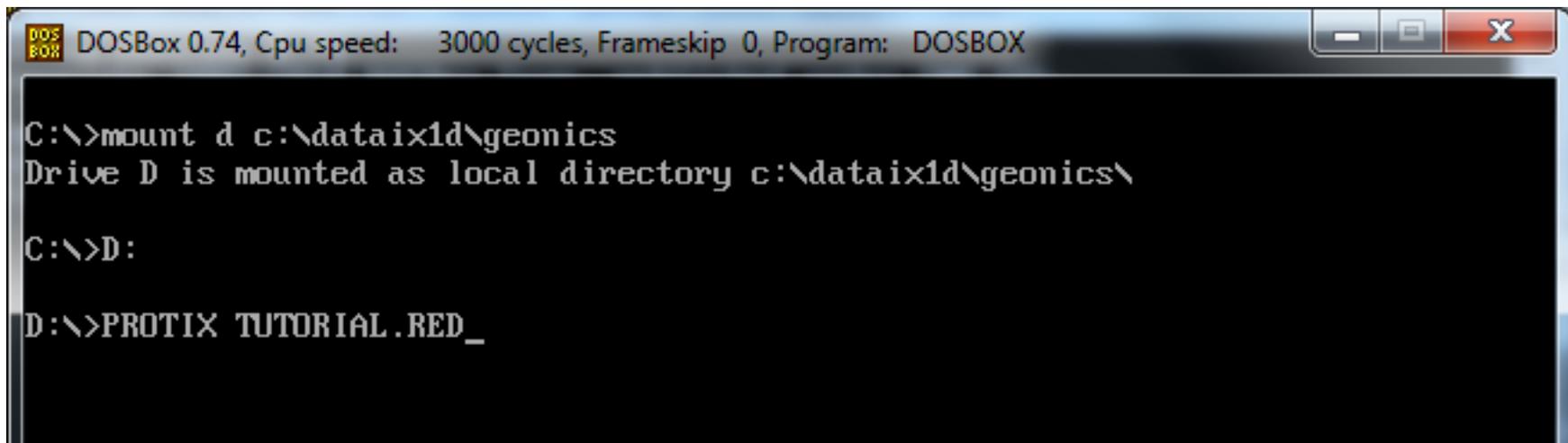
# First list and read the PROTIX Help File

```
Exporting for Ix1D
* Press <Pg> to scroll through decays
* Mark some decays to export with +
  M<Ent> marks all.
  Msss<Ent> marks stations beginning sss;
  - unmarks; MU<Ent> unmarks all.
* Press C<Ent> to combine & copy marked
  decays (adding to end of list).
  You can then unmark all (MU),
  and mark and copy more decays.

  <Adjacent measurements at same station
  will be averaged. Press *sss<Ent><Ent>
  to change the current station to sss. >
* Press <Esc> to write the copied soundings
  in a .USF file for interpreting with
  Interpex's Ix1d.
```

Now with this in mind, we execute PROTIX inside of DOSBOX ([dosbox.sourceforge.net](http://dosbox.sourceforge.net)).

## Next Run PROTIX with file name

A screenshot of a DOSBox 0.74 window. The title bar shows 'DOS BOX' and 'DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX'. The command prompt shows the following sequence of commands and output:

```
C:\>mount d c:\data\1d\geonics
Drive D is mounted as local directory c:\data\1d\geonics\
C:\>D:
D:\>PROTIX TUTORIAL.RED_
```

First, run DOSBOX and mount the directory containing your data and the PROTIX program as a drive.

Next, switch to that drive and run PROTIX with the name of the file you wish to convert to USF FORMAT.

# PROTIX Loads the Data

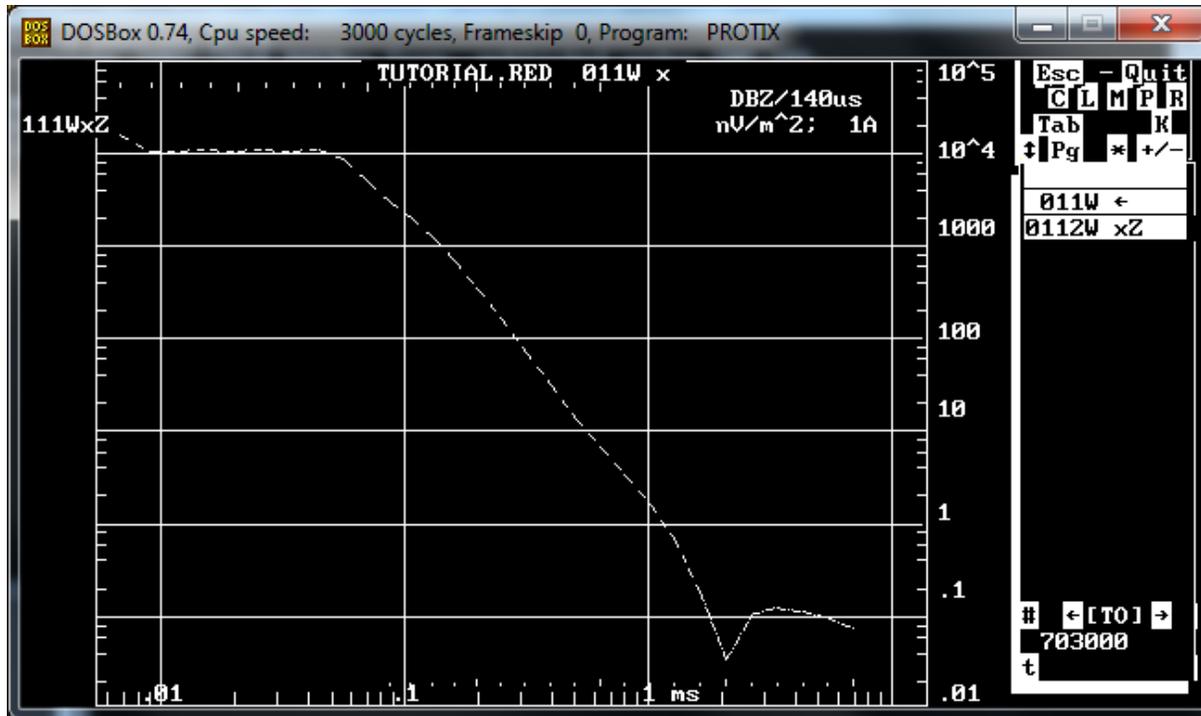
```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: PROTIX

** AltS switches sound **
G
D A T E M
GEONICS TEM Data Editing & Reduction
Feb /00
N0 = 640

Data from TUTORIAL.RED
Esc-stop read show Headers No
Day Station Mode Fr Start TUTORIAL.RED 011W 011W ( 4 )
Using Data Cmp Sync N Ti Logger Rec# Status
2311 011W 0130WZ OPR XTL x 4a 5+ #00330 50 Using Data
2311 011W 0130WZ OPR XTL H 4a 5+ #00331 51 Using Data r
2311 011W 0131WZ OPR XTL x 4a 5+ #00332 52 Using Data
2311 011W 0131WZ OPR XTL H 4a 5+ #00333 53 Using Data r
2311 011W 0131WZ OPR XTL x 4a 5+ #00334 54 Using Data
2311 011W 0131WZ OPR XTL H 4a 5+ #00335 55 Using Data
XXXXXX 56 Data reductions started.#00327 47 Using Data
2311 011W 0129WZ OPR XTL x 4a 5+ #00328 48 Using Data
.14 1W 0129WZ OPR XTL H 4a 5+ #00329 49 60000 ta
```

PROTIX will generate some noises and scrolling text as it loads the data.

# The DOS Graphics Shows Data



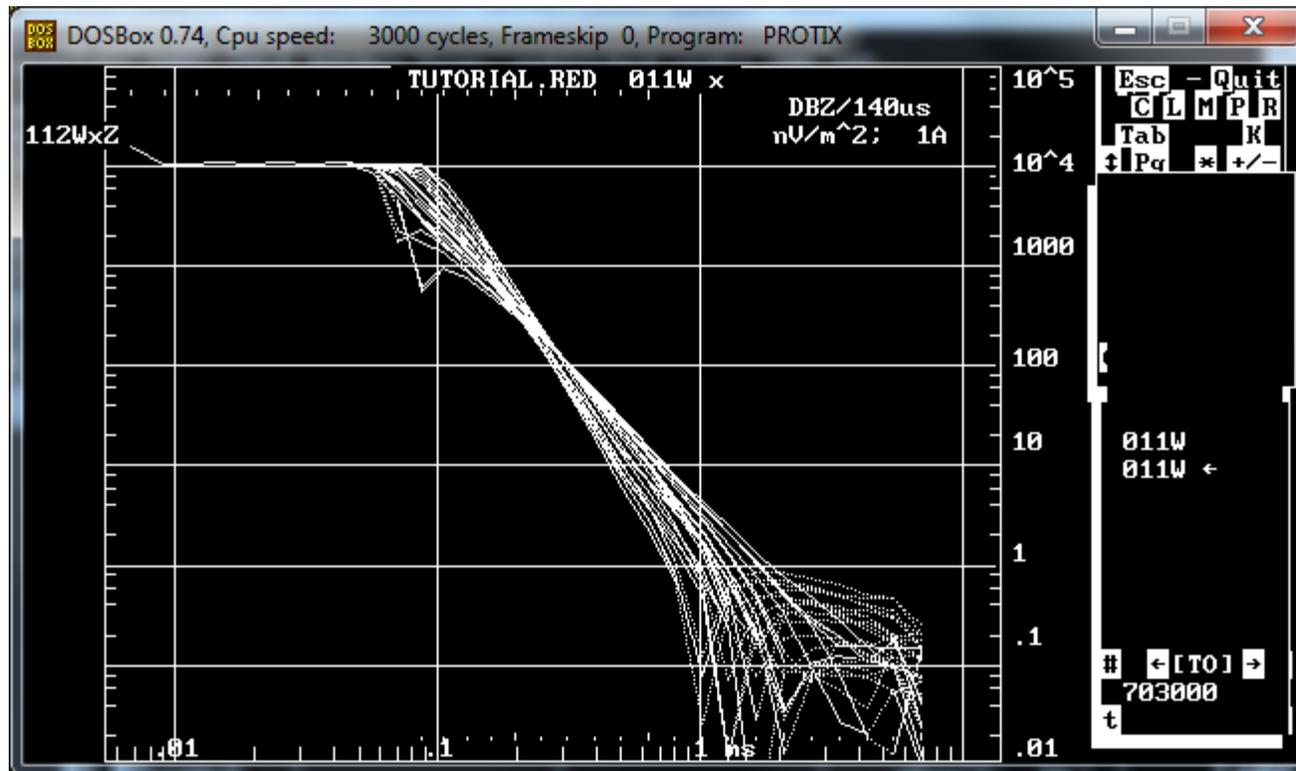
Press "M" to bring up a menu:



Press <enter> to mark all soundings and continue.

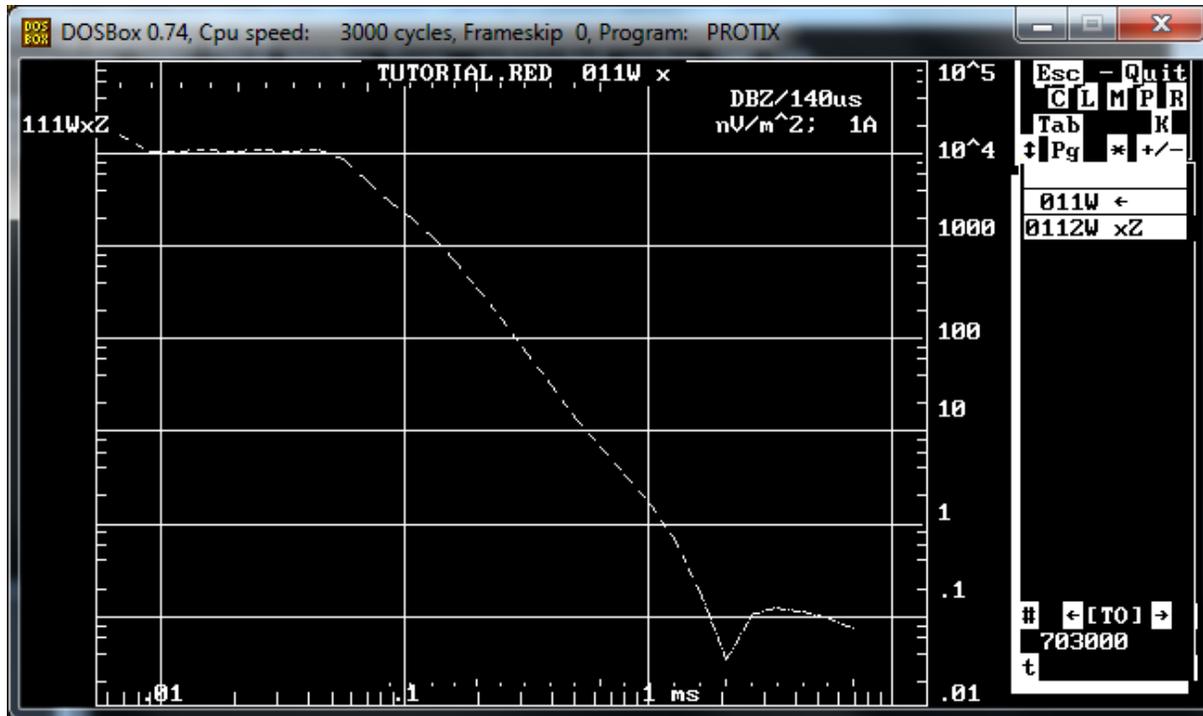
The DOS graphics screen shows the data and a menu. The file is identified in the lower right corner of the screen. Menu may be at the top or right side of the screen.

# Now, The DOS Graphics Shows All Data



The DOS graphics screen shows all data and one of them will be selected (flashing).

# Combine Like Data Sets



Press "C" to bring up a menu:



Press <enter> to average and copy marked data and continue.

The DOS graphics screen shows the data and a menu. The file is identified in the lower right corner of the screen. Menu may be at the top or right side of the screen.

# Output the Data

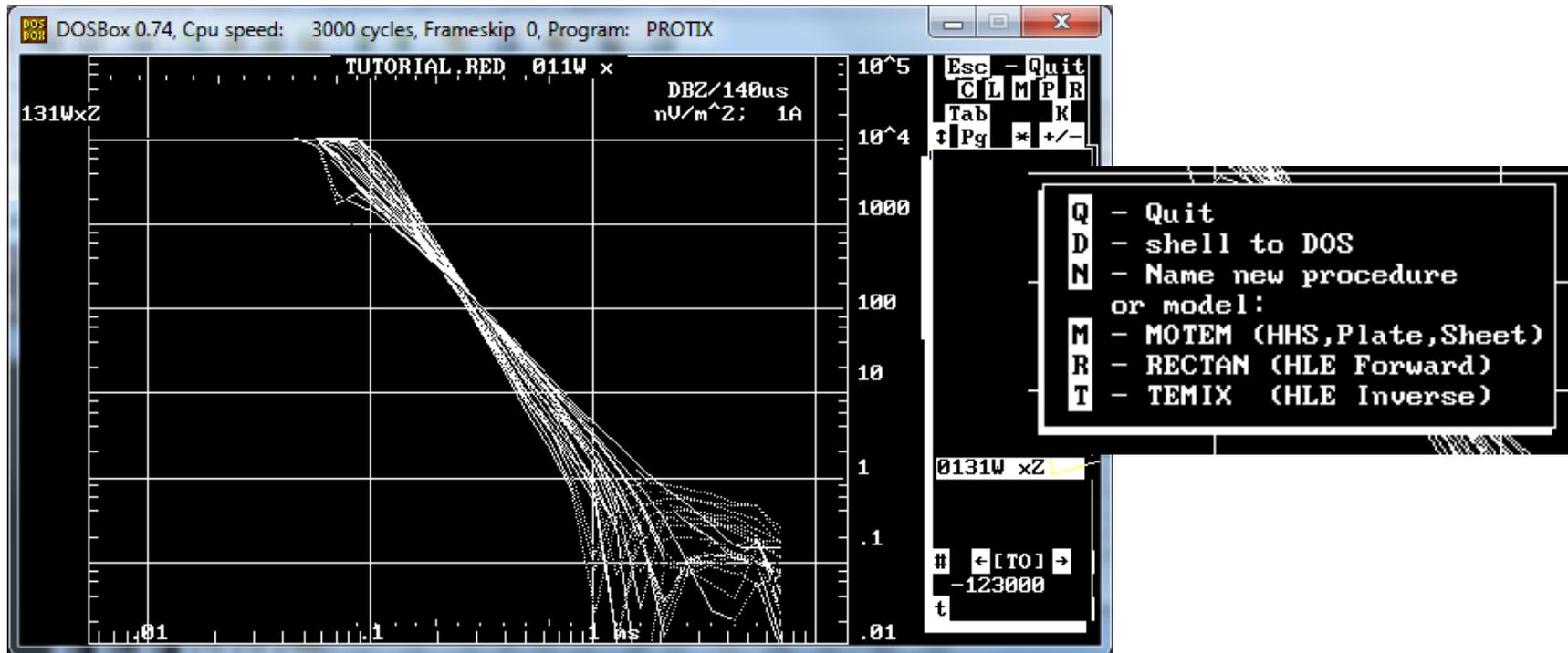
```
New Data Sets:
Name of file to store data ? 
(Default .USF = Universal Sounding Format)
.XYZ - output in PGW GEOSOFT format
```

```
New Data Sets:
Name of file to store data ? TUTORIAL
(Default .USF = Universal Sounding Format)
.XYZ - output in PGW GEOSOFT format
```

Press <esc> to bring up the file output menu. Enter the name of the file and press <enter>. Here we will name the file Tutorial.USF. When the menu pops up, press <enter> again to finalize the output to TUTORIAL.US0.

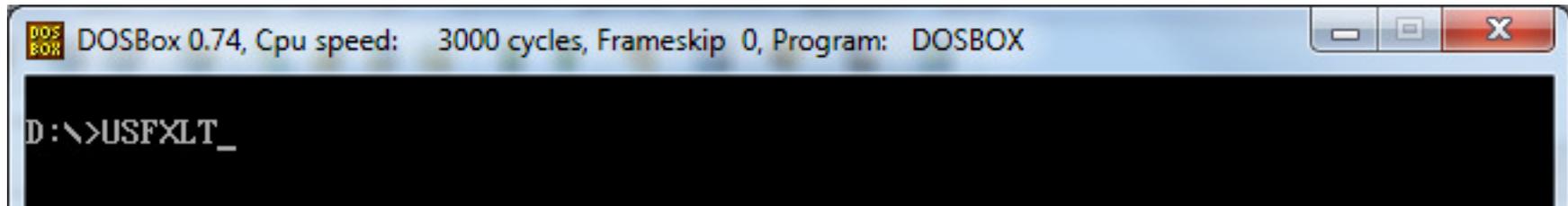
```
DOS
BOX DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program:
EM58 data from TUTORIAL.RED: dBZ/dt; nV/Am^2
Esc - abort C - close file
else output to TUTORIAL.US0
New Data Sets:
dBZ/dt; nV/Am^2
```

# Revert to Main Screen



Press "Q" to Quit, press "Q" again to select mode of Quitting.

# Finally, Run USFXLT to Finish Conversion



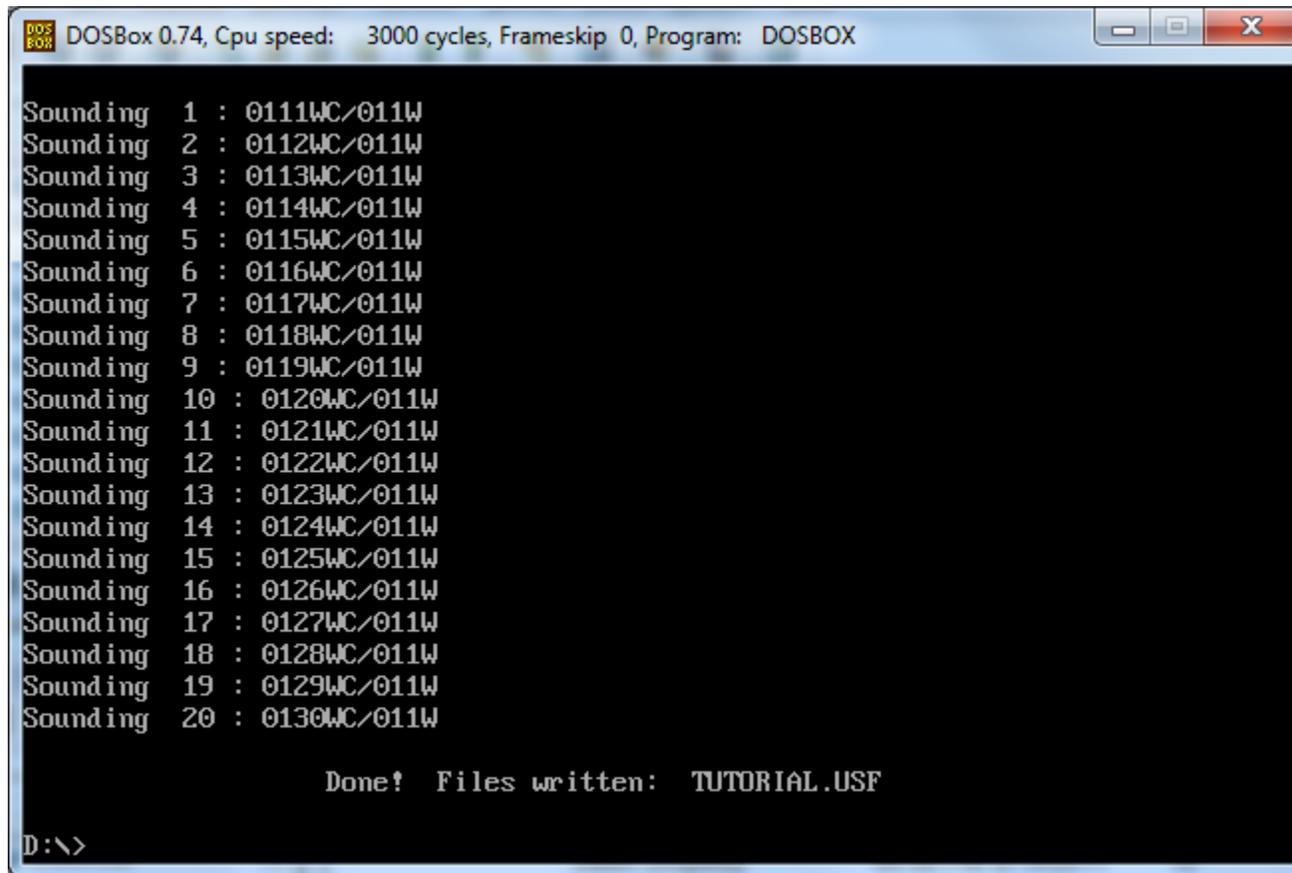
```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
D:\>USFXLT_
```

```
Writing data to file TUTORIAL.USF
Press 5 for 50Hz frequencies
```

```
Assigning Tx dimensions 200, 300
Enter: Rx offset from Tx center (X,Y)
'Cssss' if center at station ssss;
'A' to ask at each sounding
?
```

After exiting PROTIX, run USFXLT to finalize conversion of intermediate file to USF format. Press “5” if you have 50 Hz power line frequencies. Select Tx position or Ask at each sounding.

# Finished!



```
DOSBOX DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
Sounding 1 : 0111WC/011W
Sounding 2 : 0112WC/011W
Sounding 3 : 0113WC/011W
Sounding 4 : 0114WC/011W
Sounding 5 : 0115WC/011W
Sounding 6 : 0116WC/011W
Sounding 7 : 0117WC/011W
Sounding 8 : 0118WC/011W
Sounding 9 : 0119WC/011W
Sounding 10 : 0120WC/011W
Sounding 11 : 0121WC/011W
Sounding 12 : 0122WC/011W
Sounding 13 : 0123WC/011W
Sounding 14 : 0124WC/011W
Sounding 15 : 0125WC/011W
Sounding 16 : 0126WC/011W
Sounding 17 : 0127WC/011W
Sounding 18 : 0128WC/011W
Sounding 19 : 0129WC/011W
Sounding 20 : 0130WC/011W
Done! Files written: TUTORIAL.USF
D:\>
```

Sounding numbers and names scroll by as the conversion is completed..