

RESISTIVITY SOFTWARE NOTES

RES2DINV:

RES2DINV CANNOT use topography (at least in the version we are running)

1) reads "dat" files.

2) HIGH SURFACE RESISTIVITY - reduce cell width to one half the unit electrode spacing
to do this : INVERSION -> MODEL DISCRETIZATION -> USSE MODEL REFINEMENT
pick the option to use cell width of half the electrode spacing and re-read the data

3) EDIT - can edit file within res2dinv to remove bad points
EDIT -> eliminate bad data points

4) CHANGE SETTINGS

INVERSION DAMPING -> for noisy damping use large damping factor (0.3)

for reasonable data can use the default (0.1)

NOTE: damping factor is normally increased (by 1.05)
with each depth layer

USE OPTIMIZE DAMPING FACTOR - this uses more iterations and more computer time -

MESH PARAMETERS FINITE MESH GRID - by default 2 nodes per electrode are used
you can set to 4 for more resolution (but more computer time)

USE FINITE ELEMENT - by default program uses finite difference - which is fine if no
topography

MESH REFINEMENT - apparent resistive calculated is better with a finer grid, BUT this
gives good results when low resistivity layer lies BELOW a high resistivity
layer - but manual mentions that this is useful when a resistivity
contrast of 20:1 or greater exists

5) change display settings -> DISPLAY-> show inversion results - new window this get you to the
change display settings window. Read the data and do one inversion first.

6) use print - save as bmp file type too save to screen

EARTHIMAGER2:

1) Install software from "earthimager" zip file.

2) Reads stg files

3) Make a "terrain file"

Example (1st column is location, 2nd column is elevation):

-4 -3

0 -4

4 -5

8 -7

16 -8

Read the terrain file from File->read terrain"