User Guide to EriViz

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EriViz is software designed for plotting a number of geophysical sections together as so called fence diagrams (Figure 1). The fence diagram can be rotated and zoomed interactively using the mouse.
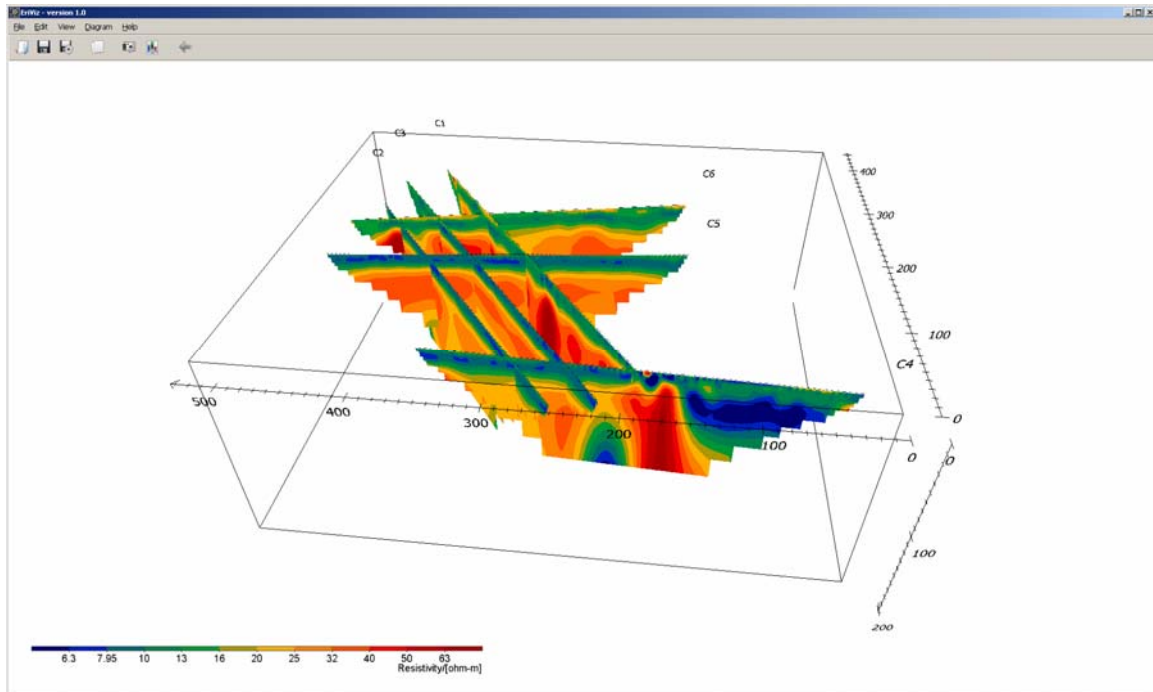

Figure 1.   Appearance of EriViz.

The sections must be plotted using other software and saved as image files in PNG format, without frames, labels etc. (see example in Figure 2). The name and location of the images files are then defined in a textfile with FNC as filename extension, along with the coordinates[1] of the end points of the diagrams (see example in Appendix 1). Optionally break points along the diagrams can be defined. It is also possible to add labels to be displayed along with the sections. The legend must similarly be saved as a PNG file (may be copied and saved from a regular section plotted with legend).
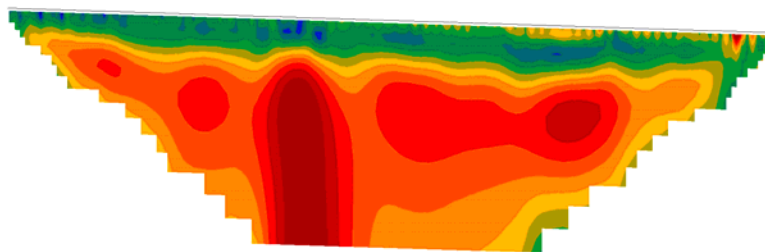

Figure 2.   Example section in a format suitable for EriViz (saved as PNG file).

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[1] It may be necessary to swap the position of the x and y coordinates in the FNC file in order not to get a fence diagram that is mirrored in comparison with reality. Check the orientation of the fence diagram carefully!

The mouse buttons are used for rotating, panning and zooming (Figure 3). The view and diagram settings can be modified via the respective menus (Figure 4). After these settings have been modified the present view can be saved using the "Save settings" button.
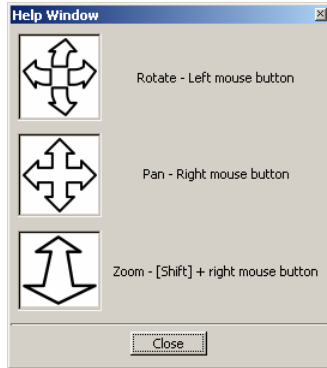

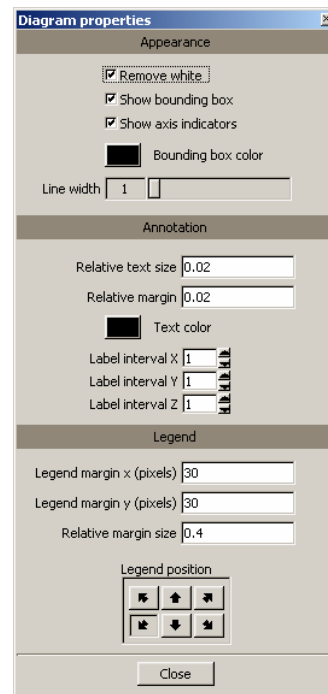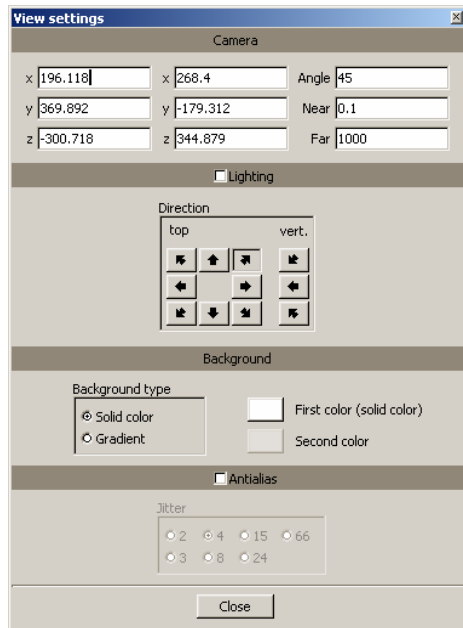*Figure 3.   Mouse button functions for rotating, panning and zooming.*

Figure 4.   a) Menu for modifying view settings. b) Menu for modifying diagram settings.

The fence diagrams can be saved either by copy to clipboard (copy button, "Edit/Copy" or <Ctrl> + <C>), or saving to PNG file. When saving to PNG a dialog box for image size will appear (Figure 5), and in the present version of the software (1.0.7) it is necessary to select 2 or higher to get it to actually save a PNG file. The save to PNG function may not work well on computers with low cost graphics cards which often have limited OpenGL functionality.
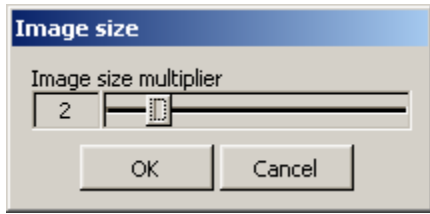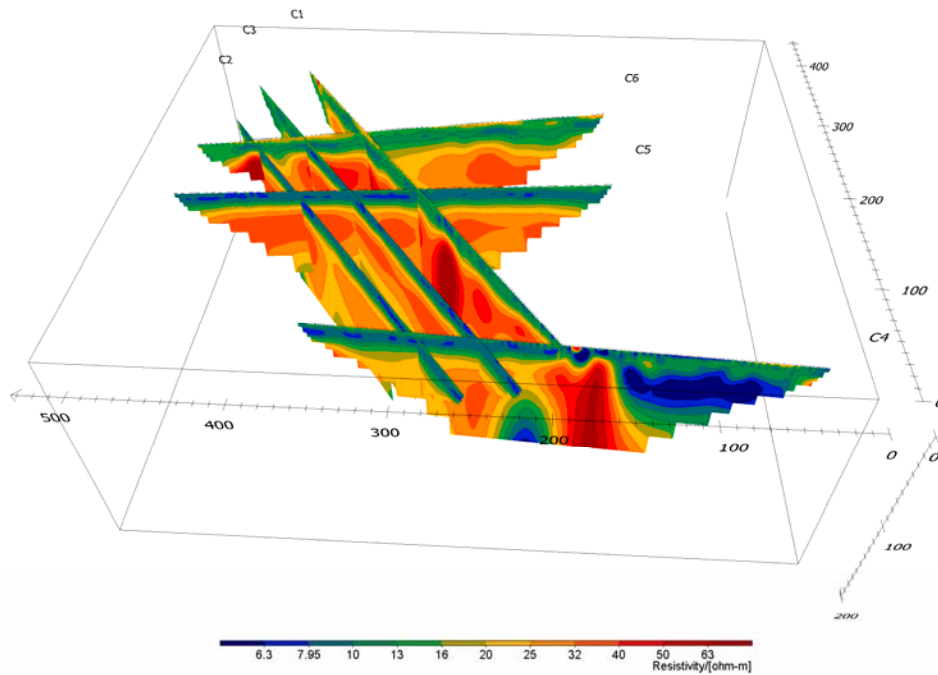
Figure 5.   Image size dialog box.

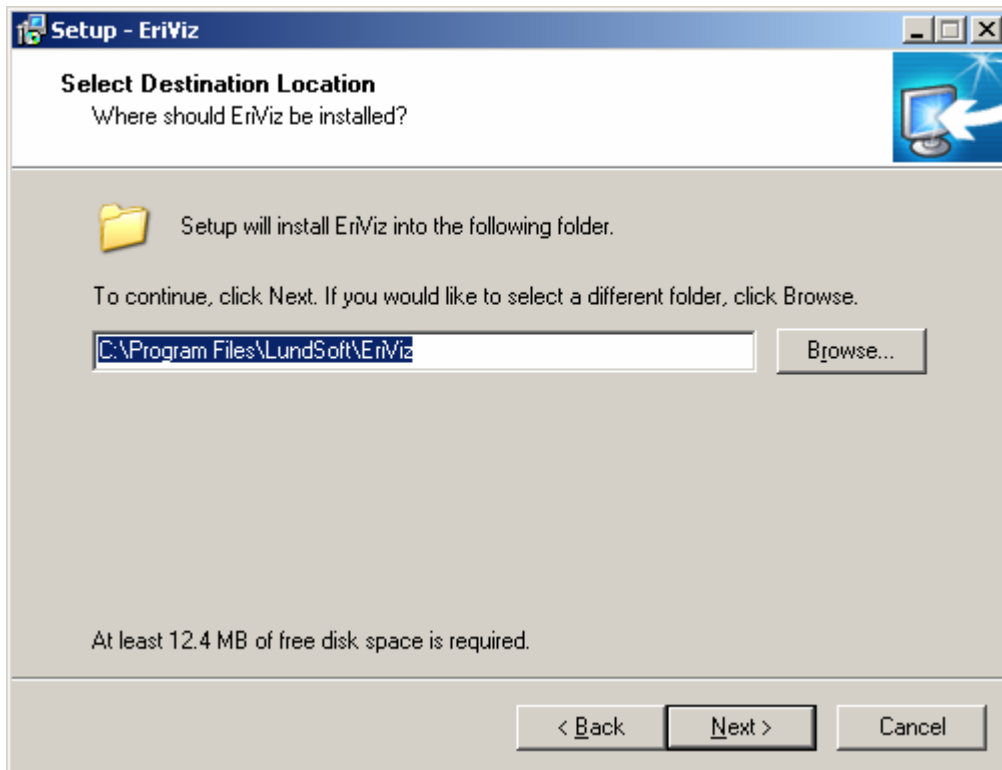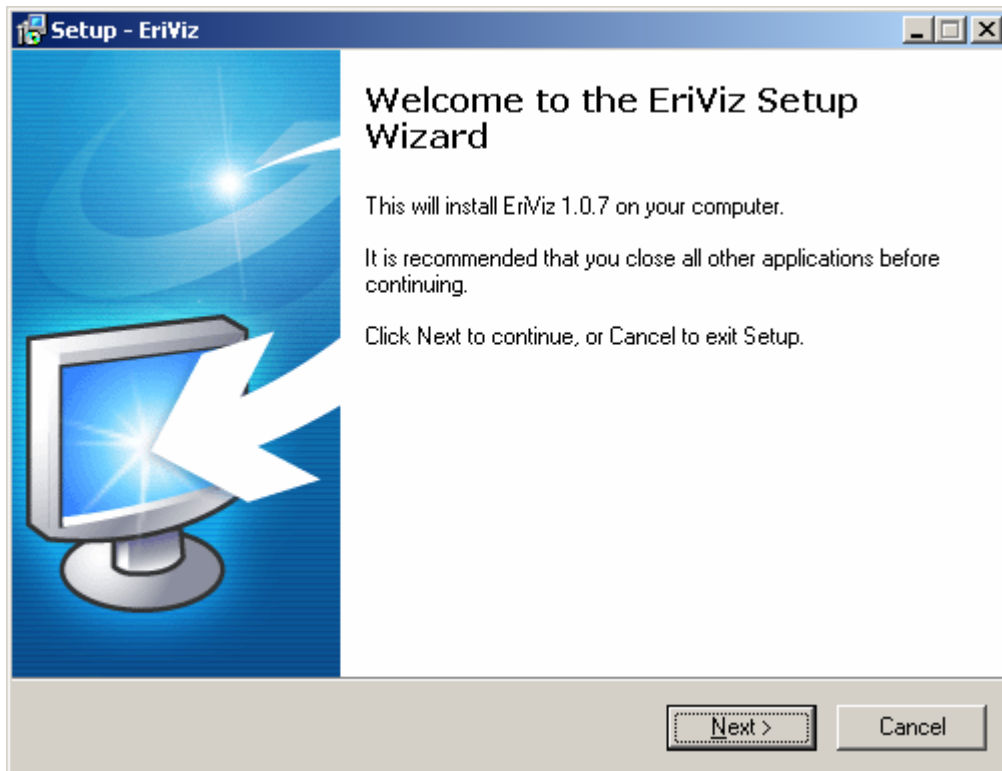*Figure 6.   Example of fence diagram exported from EriViz.*

It is often convenient to create the FNC file that defines the plot by modifying an example file. Sometimes the viewing parameters will end up not at all being compatible with the coordinates, in which case no fence diagram will be shown. In such a case select "View/Reset View" (or press <Home>) to bring the diagram into the viewing window.

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Appendix 1:   Example of FNC file defining a fence diagram.

```
#ERIVIZ1
6                                        // no of sections / images
2                                        // no of coordinates for 1st section / image
13 0 0                                   // x y z for 1st point
13 80 0                                  // x y z for 2nd point
images/D_A06-01.png                      // name and relative location of image file
A                                        // label
1                                        // label location flag (0 = start, 1 = end)
2                                        // no of coordinates for 2nd section / image
28 0 0                                   // etc
28 80 0
images/D_B06-01.png
B12
0 12 0
40 12 0
images/D_AA06-01.png
AA
1
2
0 33 0
40 33 0
images/D_BB06-01.png
BB
1
2
0 49 0
40 49 0
images/D_CC06-01.png
CC
1
2
0 72 0
40 72 0
images/D_DD06-01.png
DD
1
-35.1718 41.2509 104.157                 // viewing parameters
27.2045 -14.2619 36.9087                 // viewing parameters
45 0.1 1000                              // viewing parameters
images/Legend_Difference_-05-05.png      // name and location of legend image file
30 30                                    // legend position etc
1 0                                      // legend position etc
0.6                                      // legend position etc
```

Appendix 2. Installation

Run the installation software and just follow the steps through the installation procedure (examples of menus shown during the procedure shown below).

After the installation of EriViz installation of ImageMagic will follow. It is important to install also this software for full functionality of EriViz, unless the latest version of ImageMagic is already installed on the computer.