www.geomatrix.co.uk
sales@geomatrix.co.uk
Tel: 01525 383438

Reflex3DScan Data Sheet

The program Reflex 3D-Scan allows to import and to analyse automatically rectangular 3-dimensional GPR- or seismic data which have been acquired along 2D-parallel lines in one or two perpendicular directions. The program is free for Reflex 3D-data interpretation users but it can also be ordered as a low cost standalone processing tool (see order button).
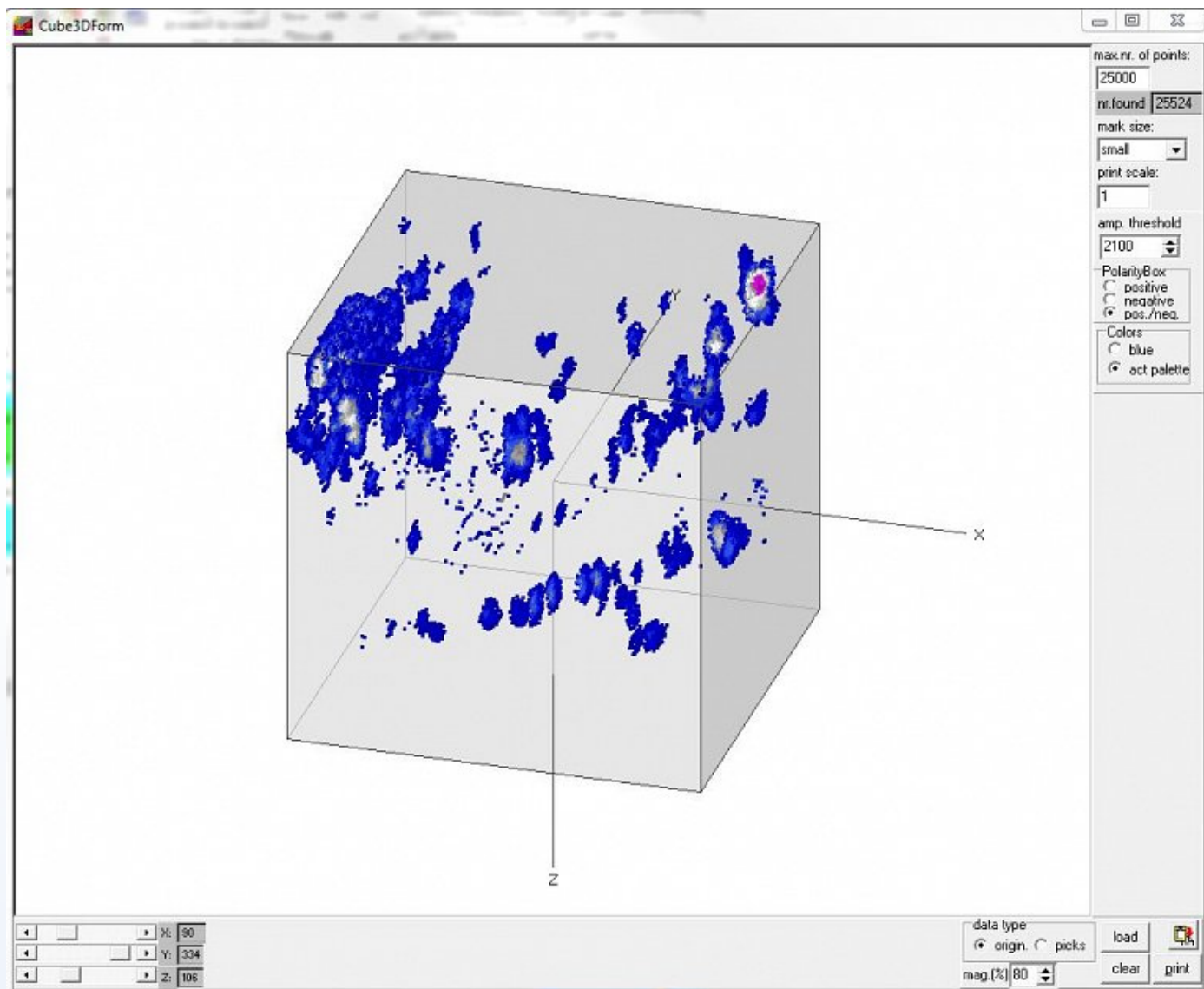
3D amplitude display.

Precondition is that the data have been acquired along equidistant parallel 2D-lines on a regular rectangular grid. This means that the trace increment in one direction (x or y), the start position of the 2D-lines and the scan increment between the 2D-lines must be equal. The data may have been stored on individual 2D-files or within a 3D-file. If stored within a 3D-file the end-positions of the internal 2D-lines must be identical in addition as well as the number of traces into profile direction. The trace increment must be given within the original data.

In addition if the data have been acquired in two perpendicular directions (crossing lines) the trace increment must be equal for all 2D-lines but the scan increment between the parallel lines does not need to equal the trace increment if

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the option interpolate scan to trace increment is active. In this case an automatic interpolation will be done. If these preconditions are satisfied the 3D-scan program allows a very fast interpretation of your 3D-data.

Different data formats are supported. The original data may be stored on individual 2D-files or on one 3D-file with the 2D-lines sequentially stored. With 2D-files acquired an automatic interpolation filter allows a resampling of the data in the direction of each line if the number of traces slightly differ in each 2D-line. A meandering data acquisition of the 2D-lines is supported.

Optionally some filter steps are automatically performed. They are: flip every 2. scan, compress, subtract DC-shift, dewow, static correction, time cut, background removal, bandpass butter worth, subtracting average, migration (2D and 3D) and gain in time direction. The processing of the x- and y-scans may be done independently and the c-scans also may be built independently chosing the envelope of the original data.