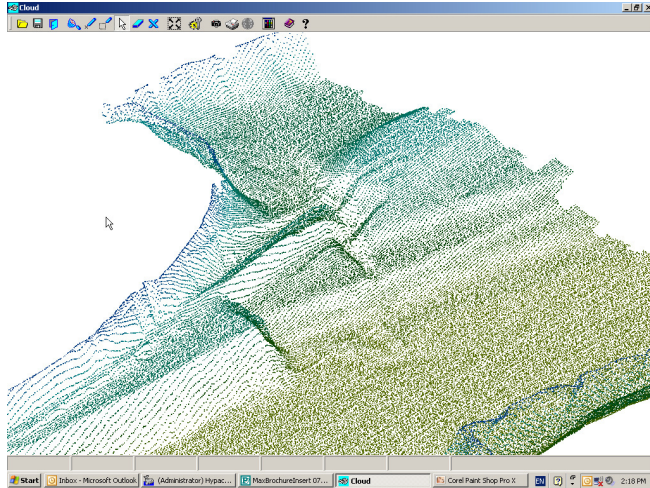


CLOUD Utility Program

by Lazar Pevac

HYPACK's new CLOUD program allows you to quickly view and edit your XYZ data sets. Input can be any combination of xyz, mtx, hs2 or log files. Catalog files can contain any list of "Edited All format" (edited single beam) or hs2 files (edited multibeam). Edited files can be stored in their original format or xyz format.

The best way to describe the program functionality is to explain the meaning of every icon in the tool box.



Input/output operations:



- Open input files



- Save files



- Save files under a different name



- Save all input files to one xyz file

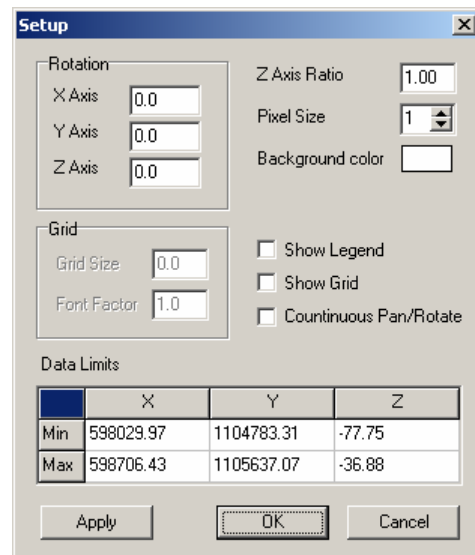


- Exit program

Viewing data:

When the data set has been loaded, you can start to navigate through your data set using mouse or keyboard as described in the "mouse and keyboard help" .

Additionally, you can click  that will bring up the setup dialog. You can edit viewing parameters such as axis rotations, z-scale ratio and pixel size. You can change background color (black by default) or you can select to show color bar or grid. Default value for the grid size is 0.0, flagging the program to size the grid automatically. If

A screenshot of the 'Setup' dialog box. It contains several sections: 'Rotation' with input fields for X Axis (0.0), Y Axis (0.0), and Z Axis (0.0); 'Z Axis Ratio' (1.00) and 'Pixel Size' (1) with spinners; 'Background color' with a color selection box; 'Grid' with 'Grid Size' (0.0) and 'Font Factor' (1.0) input fields, and checkboxes for 'Show Legend', 'Show Grid', and 'Continuous Pan/Rotate'; and 'Data Limits' with a table showing Min and Max values for X, Y, and Z coordinates. At the bottom are 'Apply', 'OK', and 'Cancel' buttons.

	X	Y	Z
Min	598029.97	1104783.31	-77.75
Max	598706.43	1105637.07	-36.88

Continuous Pan/Rotate is selected, the model continues to rotate/translate even after rotate/pan command was terminated. You can stop the movement by pressing Esc key.

The bottom part of the dialog shows your data limits.

You can adjust the color-coding of pixels (based on depth) by pressing .

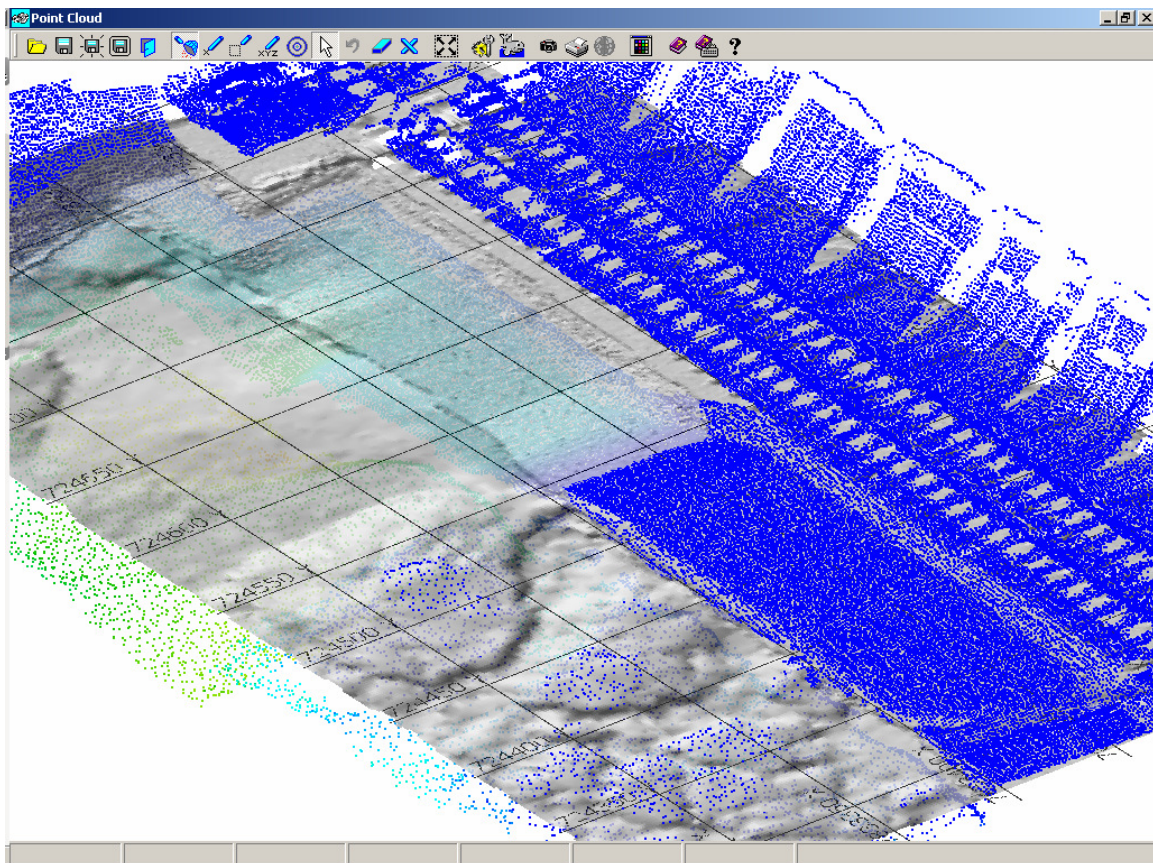
The rotation pivot point is in the middle of the data set by default. You can change it by selecting . The next mouse click position will be new pivot point.

If the model is out of view,  returns the model to position by zooming the extents.

A special cursor,  allows you to track the cursor world position in the status bar window.

 This group of icons exports the model to a bitmap file, printer or geo tiff file. The Geo tiff icon is only active when all rotation angles equal zero.

 Enables you to combine your data with the current project background files. The program creates a horizontal plane at the $(zmin+zmax)/2$ level and inserts selected project background files.



The picture above shows Bonneville Dam data set combined with a geo-tiff and grid with 20% transparency.

Editing Data

Editing data involves two steps.

1. Select the points you wish to remove.
2. Erase the points.

Selecting Points

Selecting points is often a combination of selecting and deselecting points and areas of your data set.

To select points:

1. **Set the “fishing net” orientation** to  (keep the fish in the net).
2. **Choose a selection tool.** You have tool two choices.
 - Group point selection 
 - Individual point selection .
3. **Use the cursor to mark data points for deletion.** Selected points will be painted in bold red.

To deselect points:

1. **Change the “fishing net” orientation** from  (keep the fish in the net) to  (dump the fish out of the net).
2. **Use a selection tool to mark those points for deselection.**

Alternatively, you can deselect all points with .

After several selections/deselections your screen might look like the picture below.

Erasing Selected Data Points

Once you have selected your points, erase (delete) the points using .

If you delete something by mistake no harm is done. You have an unlimited number of undo operations .

Deleted points are treated differently based on your data format. Deleted points that belong to xyz and mtx file will not be saved. Deleted points that belong to hs2 or “all format” file will be saved with a “deleted flag”.

