



HYPACK
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Sounding Better!

HYPACK® Shell in 3D

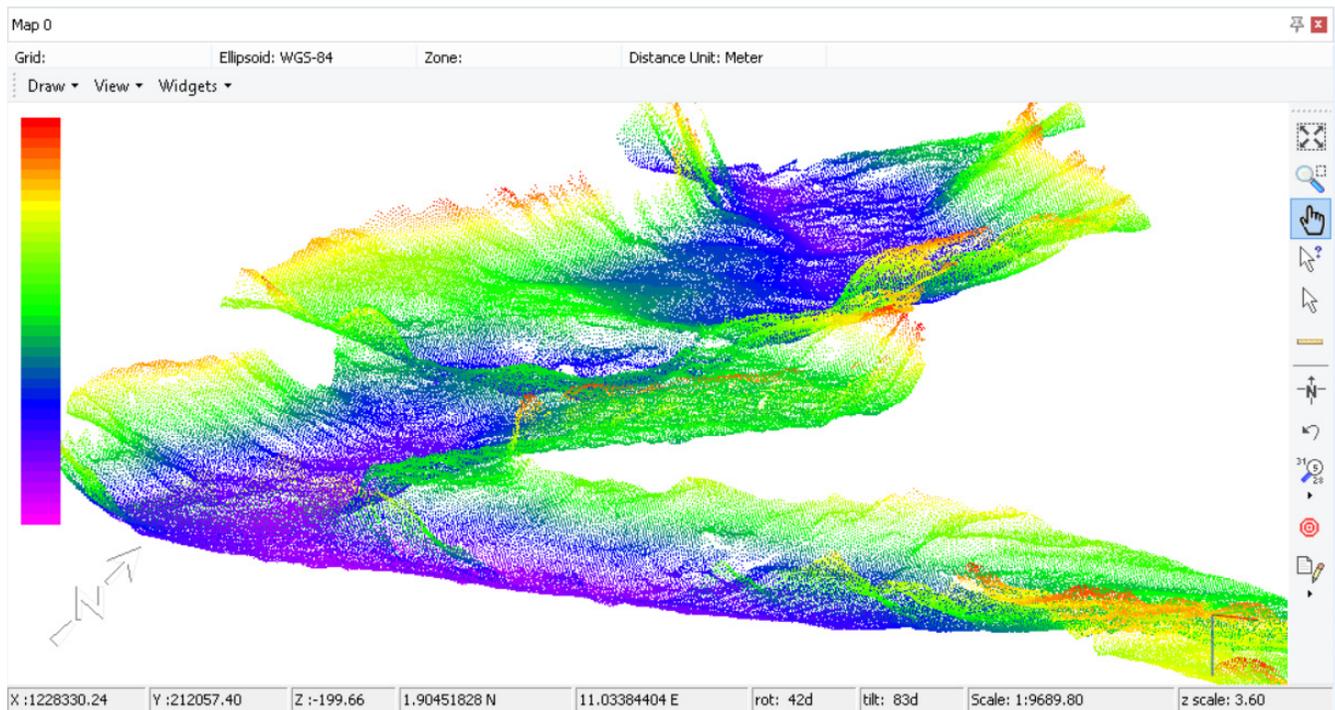
By Bill Bergmann

The 2018 release of HYPACK® will allow viewing your projects data in 3D! We have made the user interface very simple and intuitive to use. It was a lot of work for the programmers, but it makes working in 3D a breeze.

Figure 1 is a display of sounding data from Portsmouth NH. This view is rotated 42 degrees about Z and tilted 83 degrees about X. The depth component has been exaggerated to make the 3D effect more apparent. Achieving this was easy using the enhanced map tools as described below.

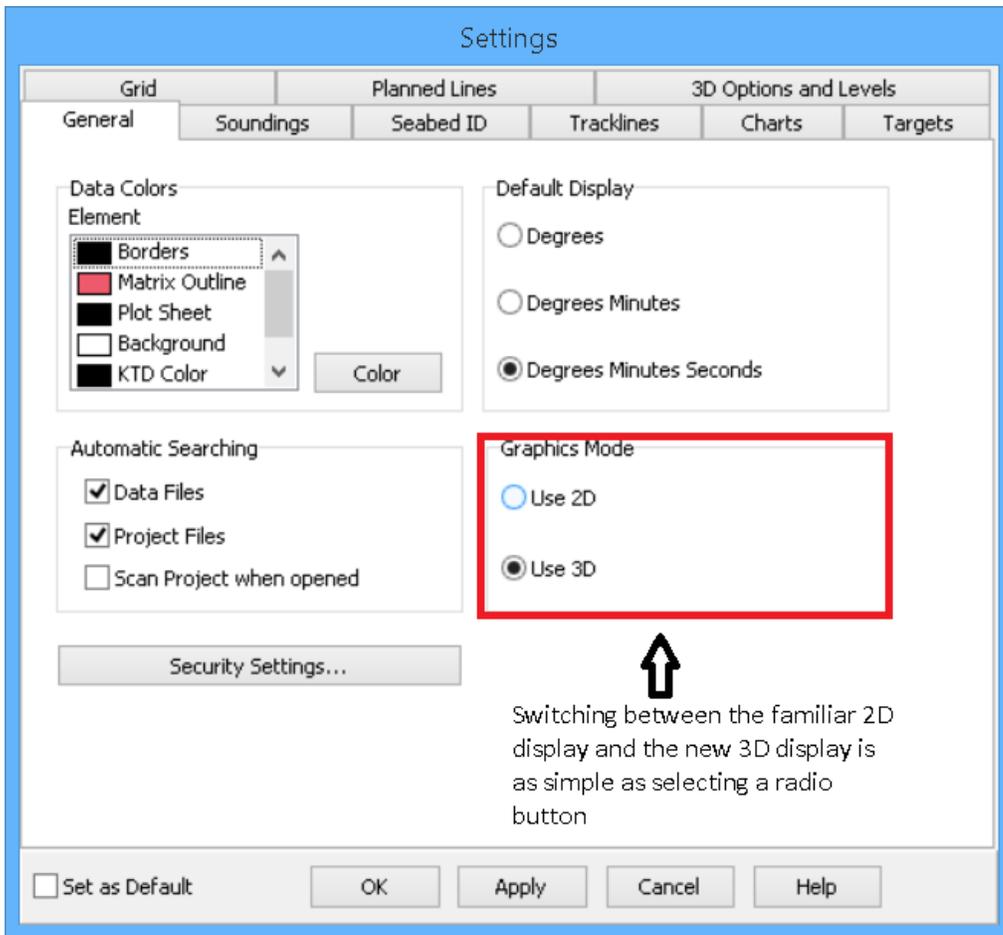
If you look in the lower right corner of the map window you will see a Trihedron widget. With just a glance, you always know your orientation as you're rotating in 3 dimensions. A larger axis orientation tool appears only as you tilt and rotate with the mouse; similar to the behavior of our CLOUD program.

FIGURE 1. HYPACK® Map Window in 3D



If you prefer the classic 2D display it's still fully supported. Just select the Use 2D option in the Settings dialog and your done!

FIGURE 2. *Choosing your Area Map Display Mode*



MAP WINDOW TOOL CHANGES

There are a couple of ways to adjust 3D view angles:

Pan and Rotate Tool: We have added a new Pan and Rotate icon to the map window tool bar. With this tool active, right-click and drag to pan or left click and drag to tilt and rotate the display.

Most all tools also honor right-click and drag to pan, which comes in handy for editing when zoomed in tightly.

Mouse Wheel: Roll the mouse wheel to zoom in and out about the cursor position. Click the mouse wheel to center the map. Also, with any tool active, pressing shift while rolling the mouse wheel will rotate only, while pressing Ctrl and rolling the mouse wheel will tilt only. These are useful for fine viewing control.

We say good bye to the Zoom in/out and Pan specific tools as they are redundant.

North Tool: The North tool has been extended to not only reset rotation to 0 degrees but tilt as well. This is the quickest way to return to the familiar bird's eye map view.

Status Bar: In 3D display mode additional information is available on the status bar. This includes the depth of an object and an additional axis of rotation. Also we display how much exaggeration of Depth has been applied to the data globally.



2018 Shell Map window Tool bar

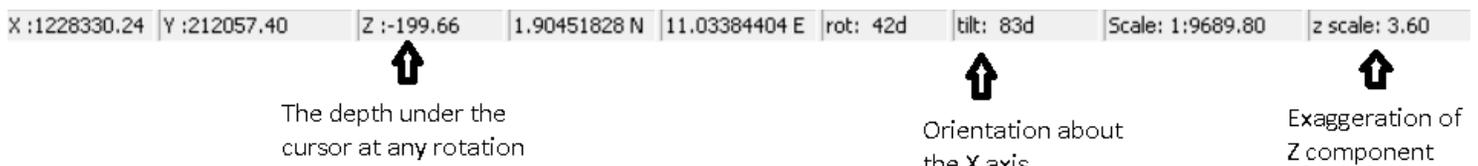


New Pan / Rotate Tool
Left mouse drag = Tilt/Rotate
Right mouse drag = Pan



North Arrow - Reset rotation and Tilt to bird's eye view

FIGURE 3. Updated Status Bar



This quick primer should have you comfortable and off in 3D display space comfortably. Future articles will keep you abreast of enhancements in this area. Stay tuned!