



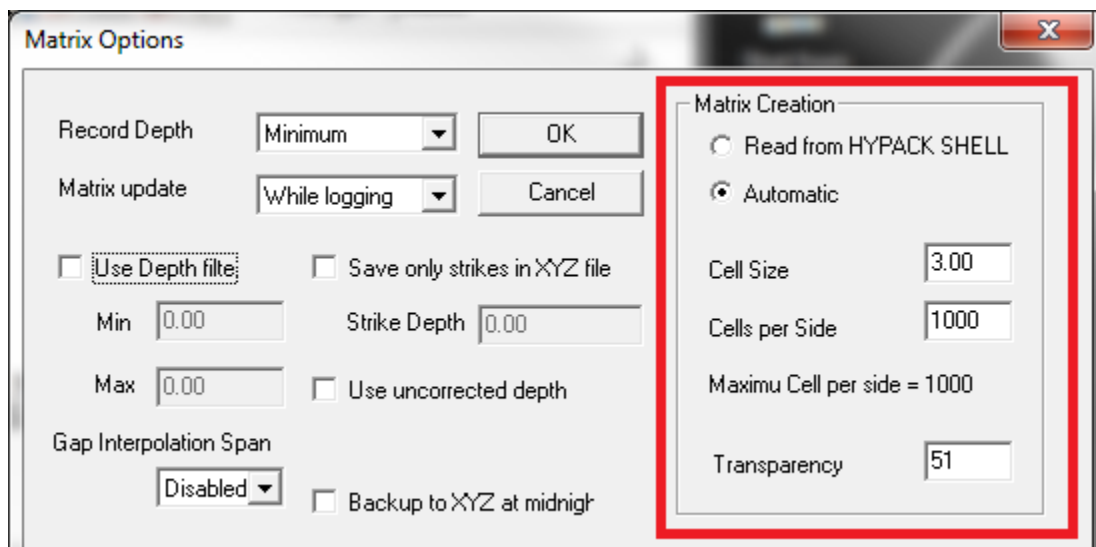
Automatrix in HYPACK® SURVEY

By John Lindberg

One of the new features coming out in HYPACK® 2014 is for HYPACK® SURVEY to generate a colored matrix on-the-fly. This new option eliminates the need to “size” a matrix over your survey area when using the MATRIX EDITOR. While this option will still be available, the automatrix option can save considerable time, especially when looking for a good patch test area.

To activate the automatrix option in HYPACK® SURVEY, select MATRIX – OPTIONS. You will see a dialog that looks like this:

FIGURE 1. *Matrix Options Dialog*



You will see the two options under MATRIX CREATION as highlighted Figure 1. If you choose **Read From HYPACK® Shell**, you must manually create your matrix in the MATRIX EDITOR (the old way).

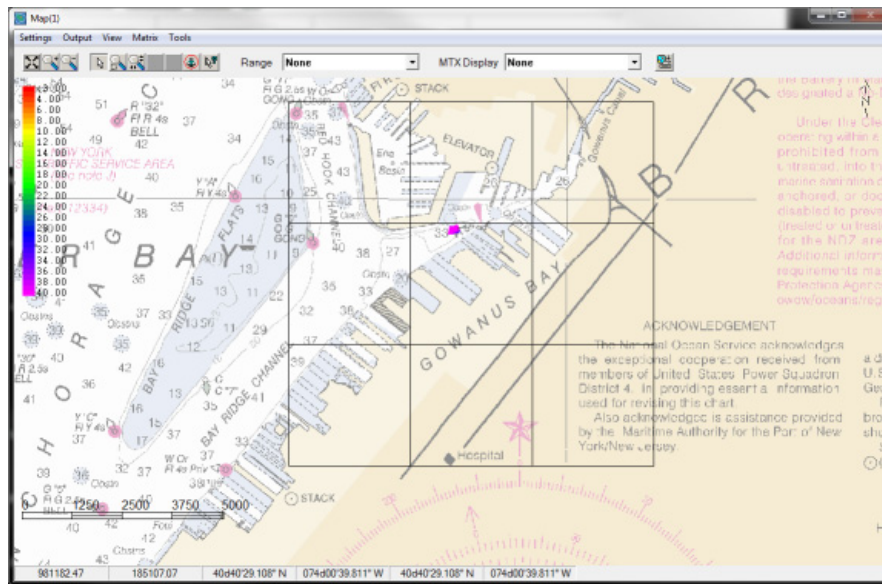
The **Automatic** option is where all the excitement begins! If you choose that option you will have two additional options – Cell Size and Cells Per Side.

The **Cell Size** option is self-explanatory. How big would you like for each matrix cell to be sized.

Cells Per Side tells the program how big each matrix “block” needs to be. Instead of generating a matrix length and width like in the MATRIX EDITOR, the automatrix option creates the matrices based on number of cells per side (I’ll explain more once we see what happens in SURVEY).

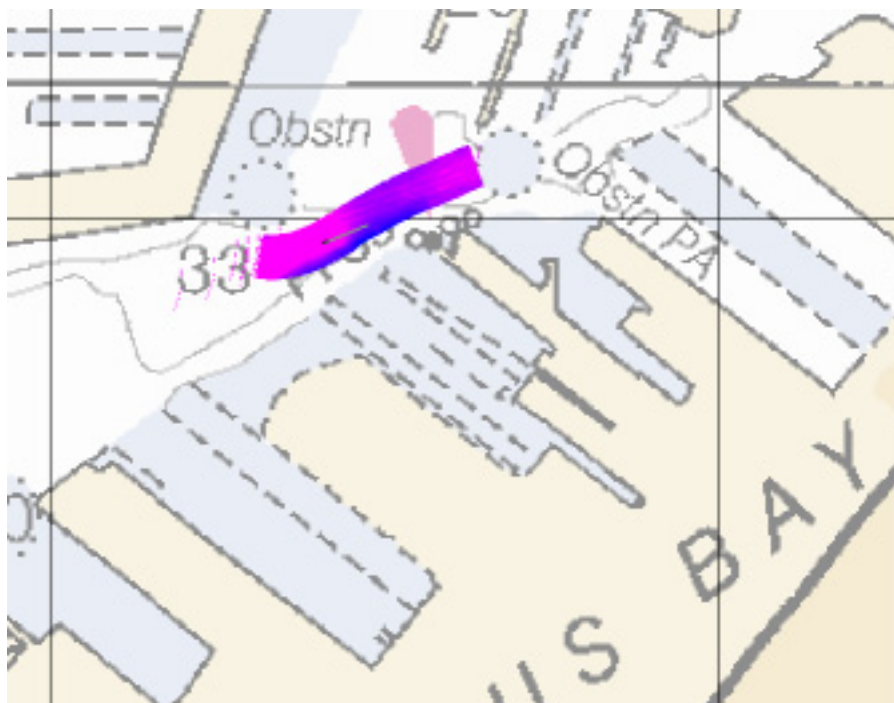
Once HYPACK® SURVEY starts to paint, a series of matrix blocks appears on the Map screen as shown in Figure 2.

FIGURE 2. Matrix Blocks in 2014 HYPACK® SURVEY



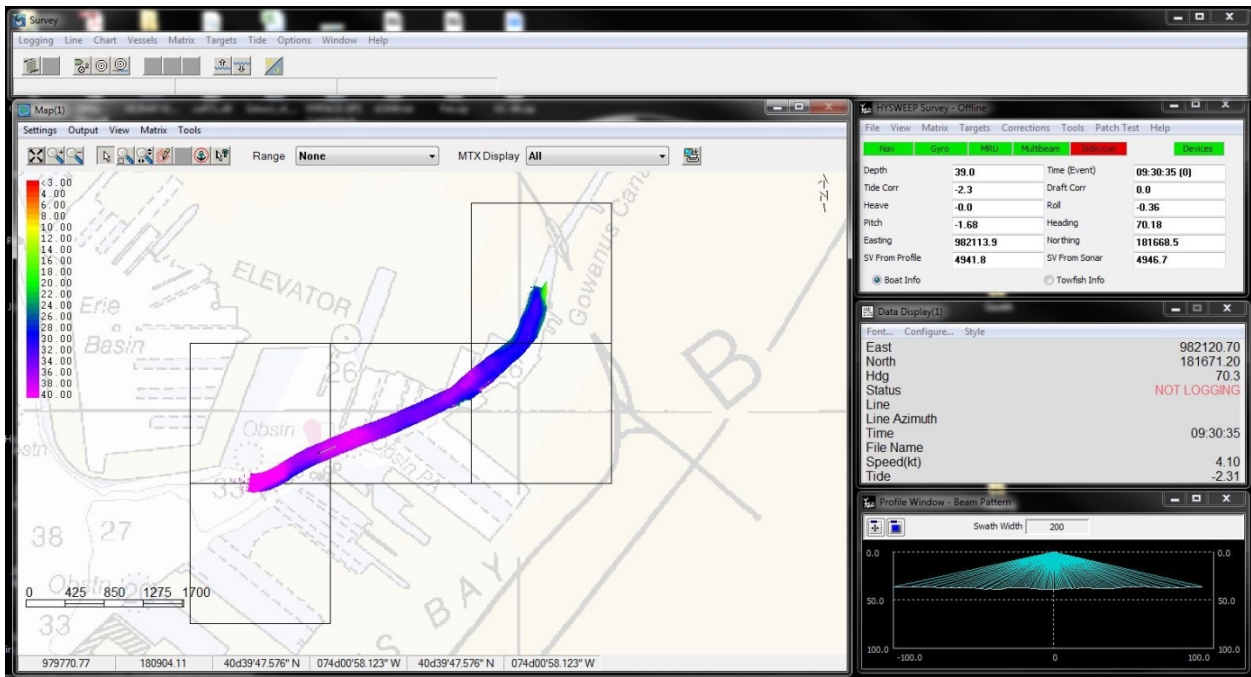
As you can see HYPACK® SURVEY starts with a 3x3 matrix block pattern. As you cross into an adjacent block the current block will start to be filled.

FIGURE 3. Filling the Cells in the Matrix Block



As you move toward the edge of the 3x3 cluster the HYPACK® SURVEY program adds additional blocks, as seen in Figure 4:

FIGURE 4. HYPACK® SURVEY adds Matrix Blocks On-the-fly



The Matrix Display drop-down box in the HYPACK® SURVEY Map windows lets you choose which blocks to display. This option is only available *when you are not logging*.

Now to explain what is going on behind the scenes: The matrix blocks you see in HYPACK® SURVEY are not actually *.MTX files. They are binary files created in a “automtx” subfolder located in your project folder. Once you exit HYPACK® SURVEY, the program generates *.MTX files from these binary files, so you can display them on your HYPACK® screen.

FIGURE 5. The Finished MTX File in the HYPACK® Map Window

