



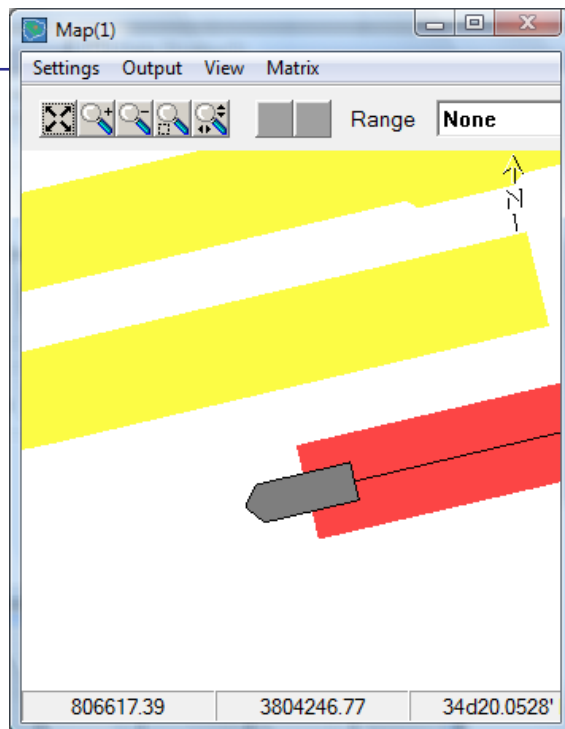
Coverage Driver in HYPACK® SURVEY

By Harold Orlinsky

In 2011, we revised the Coverage driver in HYPACK® HARDWARE to better show the extent and overlap of swath coverage in the SURVEY map window. This driver was first written a few years ago, providing the operator with a fixed swath coverage while running a survey line. It needed no matrix file, and displayed a coverage map in the Survey window. It was useful for side scan operations and surveys requiring a coverage map display for reference.

FIGURE 1. SURVEY Screen Showing the Swath Coverage

You can set the active color for the current line (red in this example), and the lines previously run (yellow).

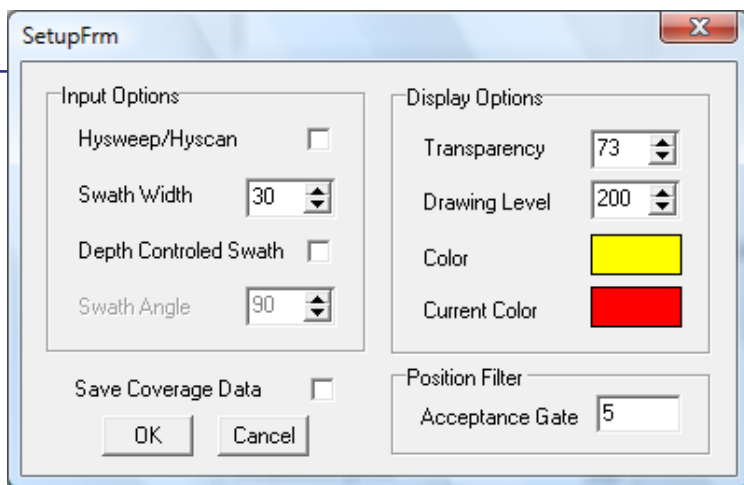


The driver setup enables you to enter the swath width or let SURVEY determine the swath extents based on the depth information and the Swath Angle.

FIGURE 2. Coverage Driver Setup Dialog

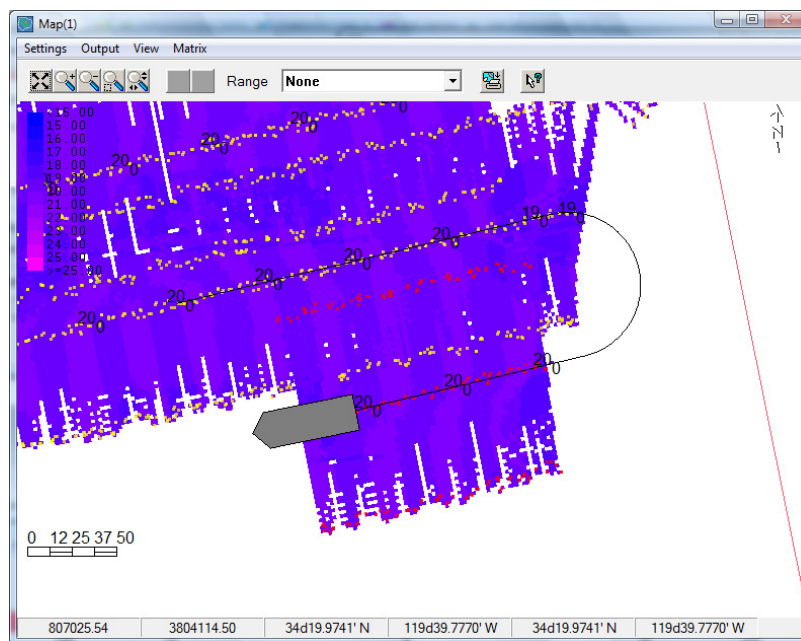
In the 2011 version, the Coverage.dll is now tied to the swath value generated by the multibeam system. Shared memory provides this information. In the driver setup in HYPACK® HARDWARE, select the HYSWEEP/HYSCAN option to activate this feature.

Add this driver to the position and Hysweep.dll drivers in HYPACK® HARDWARE. Similar to the Hysweep.dll, there is no connection needed for this driver.



While surveying, the Coverage.dll will display the outer-most point of the swath. This information can be overlaid on the existing matrix, providing the boat operator information on the amount of overlap. The coverage marks will be the swath limits, accounting for any user-defined criteria set in the HYSWEEP program (such as 45 degree angle limit, or 50 meter range limit).

FIGURE 3. HYSWEEP® Coverage Overlaid on Matrix in SURVEY



Another option with this driver is to display the coverage without a matrix. In this case, you would want to clear the 'Display Edges Only' option in the hardware set-up. The display will be a color-filled swath following the extents of the sonar data.

FIGURE 4. Running the Coverage.dll Without a Matrix, Showing the Full Swath

