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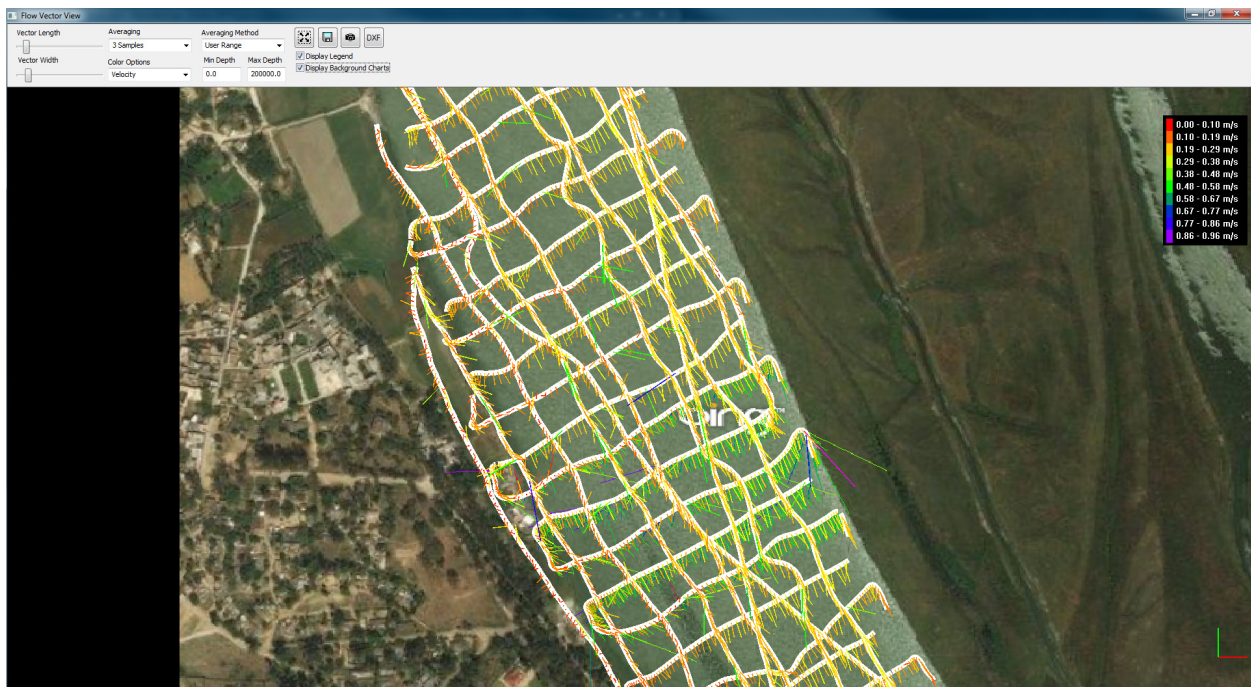
Viewing HydroSurveyor Data in SBMAX64

By Ken Aiken

With the addition of the SonTek HydroSurveyor device into HYPACK®, you've been able to log data with it as a multi-transducer while viewing current flows. It also logs the SonTek YDFF file during the survey.

With the release of 2017A, when loading the RAW data you collected with a HydroSurveyor, it will also load the YDFF files allowing you to view the flow vectors in SBMAX64 as well. Select VIEW-FLOW WINDOW. The tool bar includes several options to configure vector size, and averaging and coloring methods.

FIGURE 1. Viewing YDFF Vectors in the HYPACK® View Window



Averaging: You can select 5 different methods to create the vector for the sample using either the surface cells, middle cells the bottom cells, depth average or a user-defined depth range. The ranges for these correspond to the SonTek HydroSurveyor software:

- Surface = Surface to 10% of measured depth
- Middle = 40% to 60% of measured depth
- Bottom = 90% to 100% of measured depth
- Depth Average = Entire water column

You can then average these vectors together with other samples and, as the device only samples once per second, this also has the effect of creating one vector for the user-defined averaging interval (1-100 seconds).

Color Options: You can also choose the basis for color-coding the vectors: direction of the flow, survey line, compass error, and velocity.

Output Options:

You have 3 options for outputting this data as well:

- You can save it to an **XYZ file where the velocity is used for the depth**. This is useful since you can then move the data into TIN MODEL and export contours.
- You can save a screen capture of it as either a **BMP, Tiff or PNG**.
- Finally you can **export the vectors to DXF** and load them into a CAD program.

FIGURE 2. SonTek HydroSurveyor ADCP Vectors Drawn in CAD

