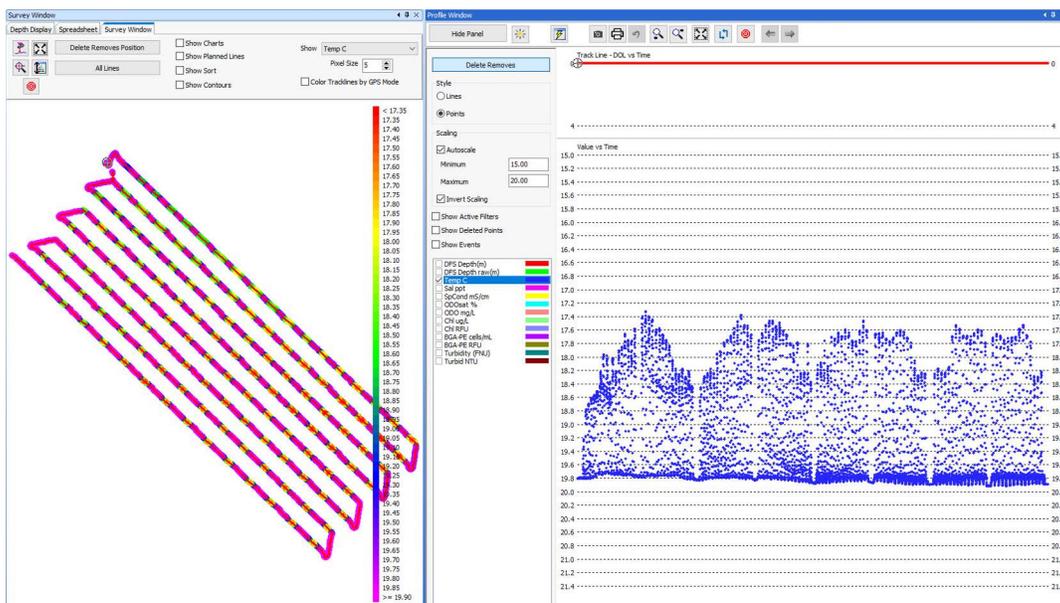# Undulating Sensor Display in the Environmental Editor
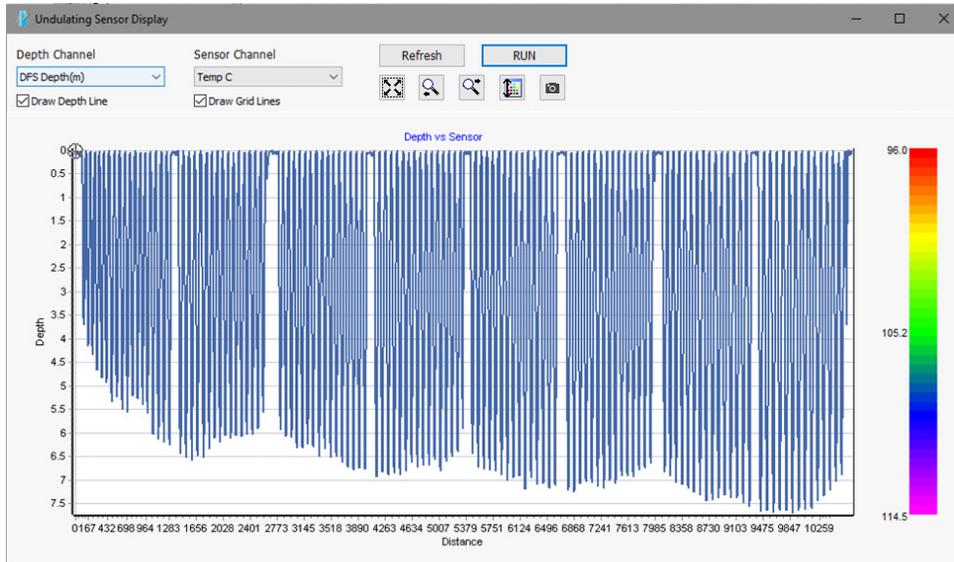
By Ken Aiken

A new feature was recently added to the Environmental Editor for the vertical profiling of water quality surveys. The survey is run while slowly lowering and raising a water quality sensor and logging things like conductivity, temperature, pH, and device depth. These are logged as SMI records in the RAW and loaded into the Environmental Editor. After you go through and edit the data for any anomalous data, you can open this new display in the Tools menu.

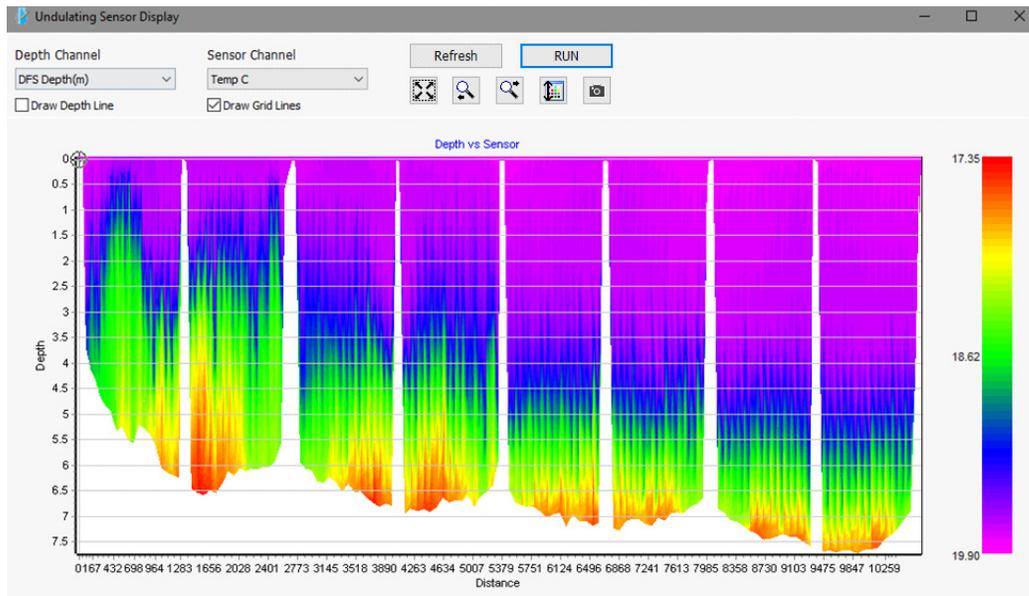**FIGURE 1.** *Example Survey with Undulating Sensor Data*

After loading it up, the first step is to select the correct depth value in the drop down. This will then update the chart line with the Depth vs. the Distance traveled. Note this isn't using a true DBL as some surveys, such as the one displayed, are run as a single line. Instead, it uses the distance between points.

FIGURE 2. *Undulating Sensor Display Window Showing Device Depth*

FIGURE 2. *Undulating Sensor Display Window Showing Device Depth*

Once you have the correct depth selected, select which sensor you wish to view first and hit [RUN]. This will create a surface connecting all points of the line and color them by the sensor value and color table. At this point you may want to disable the depth line to better see your data. There is also an auto-scale button for the color table if the data doesn't fit it.

FIGURE 3. *Example Vertical Profile of Water Temperature at Different Depths vs Distance*

FIGURE 3. *Example Vertical Profile of Water Temperature at Different Depths vs Distance*

The chart also supports zooming in with the mouse wheel or by right-clicking and dragging between 2 points. You can pan left and right by left-clicking and dragging or with the left and right pan buttons. To reset the chart, click the zoom extents button. Once you have it displayed how you like, you can save a screen shot of the chart.