



MBMAX64 SPEEDUP

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- Problems with sluggish draw response with big data sets are now fixed.
- What used to take multiple seconds is now instantaneous.
- The fix is a better mix of low and high resolution drawing.

Manual editing in MBMAX64 relies on mouse actions and fast redraw. It works well as long as the dataset isn't too large. For example, a matrix of one million cells or a point cloud of one million soundings has never been a problem. But when cell or cloud count gets into tens of millions, display and redraw gets painfully slow. It was a limitation.

Much better now. Not with faster drawing, there are hardware limits on that, but with a better mix of low and high resolution drawing. The figures below illustrate it. Low resolution redraw shown in figure 1 is immediate and gives the proper feedback to mouse zoom, pan, rotate, etc. Dots are drawn larger because there are less of them. High resolution drawing of figure 2 uses computer idle time and will not appear on screen until complete. If a second mouse action interrupts the first the high res redraw is restarted under the changed conditions.

Lastly, the Survey Window is a matrix display containing the entire survey gridded into cells. In the example there are 35 million cells, 10.2 million populated. Something to note is the style selection (upper right, outlined in red). Dots are the fastest drawing option. Makes sense because only a single vertex (dot) is shown for each point. By contrast the solid and color model styles, while nice visually, require 3 vertices + shading calculations per point and take longer to render. Numeric display is the slowest. So if draw speed is an issue use the dots.

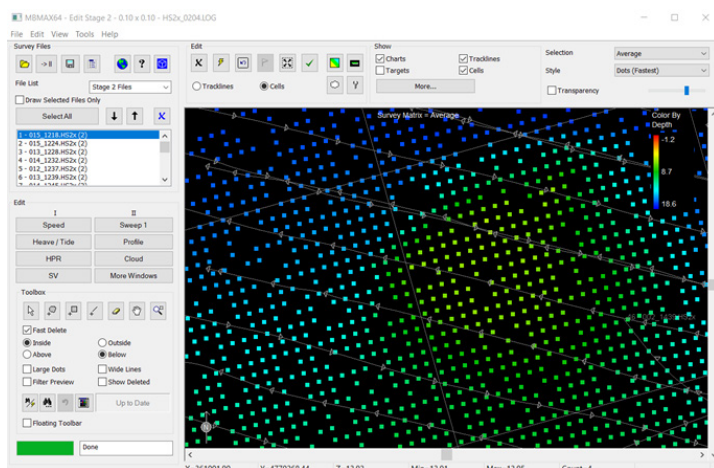


FIGURE 1. Low resolution drawing is immediate.

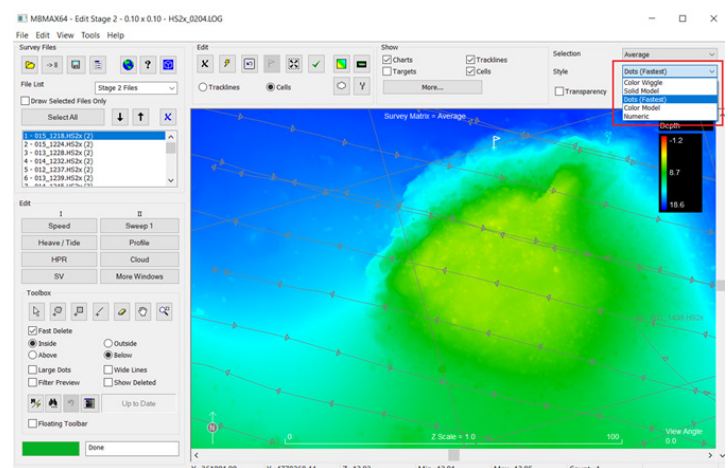


FIGURE 2. High resolution (finished) drawing. Note that dot style draws fastest.