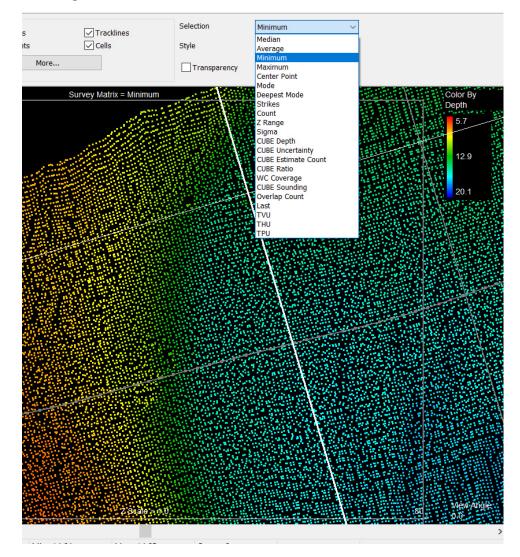


Saving One Point per Cell XYZ in the 64-bit HYSWEEP Editor By Mike Kalmbach

SURVEY MATRIX (ONE POINT PER CELL) QUICK REVIEW

The main display of MBMAX64 does not show every sounding. That would be slow and often wouldn't show the useful output from editing. Rather, it shows gridded (matrix cell) data. In the following example image, cell minimum soundings have been selected. Let's keep that in mind when saving.



SAVE TO XYZ

The following image shows the relevant settings when saving one point per cell. In this example, it makes sense to save the minimum sounding of each cell to XYZ format.

| Save Survey | | | \times |
|--|--|--|----------|
| File Format HS2x - HYSWEEP Edit 64 Bit MTX - HYSWEEP Matrix LAS Append to File Names | HS2 - HYSWEEP Edit 32 Bit Export BAG - Bathymetric Attributed Gr | GSF id Save Reminder / Auto Save HS2x | |
| XYZ Options Save All Points Save One Point per Cell eHydro Naming _A Suffix _FULL Suffix | Use Actual XY (Where Possible) Use Cell Center XY | Save Zoom Area Only One File Per Survey Line Use Project Rounding Rules Append Golden Soundings | |
| MTX Selection Minimum Minimum # Points for Average 1 | XYZ Selection XYZ Strike Level 0.0 | Export Selection Water Column Data Z Multiplier 1.000 | ~ |
| Default Values | Save All Files | Save Selected Files Close | 9 |

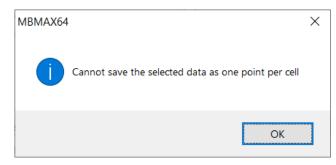
When we look closer at the XYZ Selection options, things become less clear.

| ITX Selection | XYZ Selection | E |
|--------------------------------|-----------------|-----|
| Minimum | ✓ XYZ | ~ \ |
| Ainimum # Points for Average | XYZ | z |
| All mann # Follics for Average | LAT, LONG, Z | - |
| 1 | XY, Intensity | |
| | XYZ, Intensity | L |
| | XY, Surface SV | |
| | XYZ, RGB | |
| Default Values | XYZ, TVU THU | Sa |
| | XYZ, Beam Angle | |
| | XYZ, Timetag | 1.1 |
| | XYZ, Epoch | |
| | XY, THU | |
| | ΧΥ, ΤΥυ | |

For example, while we are able to save "XY, Intensity" for every sounding, we are not able to save that as a gridded value. Would we save average? Minimum? MBMAX64 does not have provisions for those. In "Save One Point per Cell" mode, it can only output XYZ or LAT, LONG, Z, with Z being the MTX Selection.

Previous MBMAX64 versions would accept any XYZ selection, then pop up the Save Dialog for users to enter the file name and folder before showing the error message "Invalid Save XYZ Option". It was annoying to go through multiple steps prior to receiving an error message.

The HYPACK® 2025 release is a little friendlier as the following error message is shown before the file selection step if an incompatible option is chosen.



If you've read this far you might be wondering why we don't limit the XYZ selection list to the valid selections. Definitely a good point, we are working on it!