



REMAP Replacement

By John Lindberg

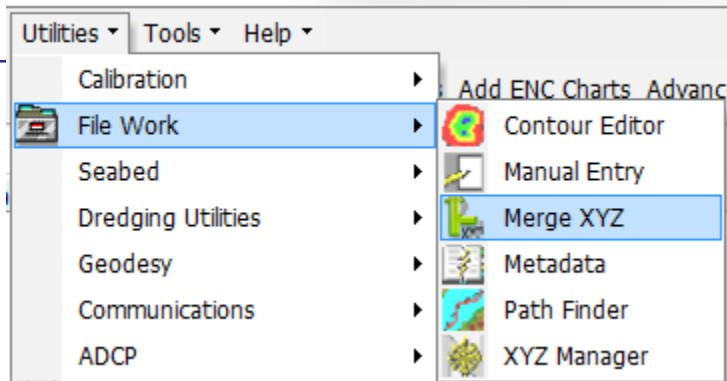
REMAP was a utility program last available in HYPACK® 2010. The idea of the program was to allow you to take any XYZ data set (from HYPACK® or any third-party software) and “map” the soundings to HYPACK® LNW (planned line) files. You could then compare cross sections with existing HYPACK® single beam data. The executive decision to remove the program seemed logical, because you could easily accomplish about the same thing by cutting sections in the TIN MODEL. The only difference is that TIN MODEL cuts sections out of the dataset along the planned line, whereas REMAP used the exact point location of the sounding. Neither method is wrong, but some maintain that using the exact point location will give better results. These days, TIN modeling seems to be more accepted for volume calculations, hence the reason for abandoning the REMAP program.

Of course, there was lots of backlash when we removed REMAP from the HYPACK® Utilities menu. I don’t think I’ve seen so much “anger” after a change which, at the time, seemed so trivial! After a few dozen “hate mails”, we gave in and included the REMAP executable in the HYPACK® distribution. It is still not accessible from the Utilities menu, but you can create a shortcut to it in the Tools menu.

After mulling over the possibility of a REMAP “replacement” over the past few years, we accidentally came up with a pleasant surprise: *the MERGE XYZ program accomplishes the exact same thing as the old REMAP program!* The MERGE XYZ program is accessible via HYPACK®’s UTILITIES – FILE WORK menu.

FIGURE 1. Launching the MERGE XYZ Program

The concept of MERGE XYZ is to take hydrographic data, edited and saved in the HYPACK® ALL format, and merge it with topographic XYZ data, then saving it all to an Edited ALL format file. Any XYZ topographic point within a user-defined distance of a planned hydro line is assigned to that file.



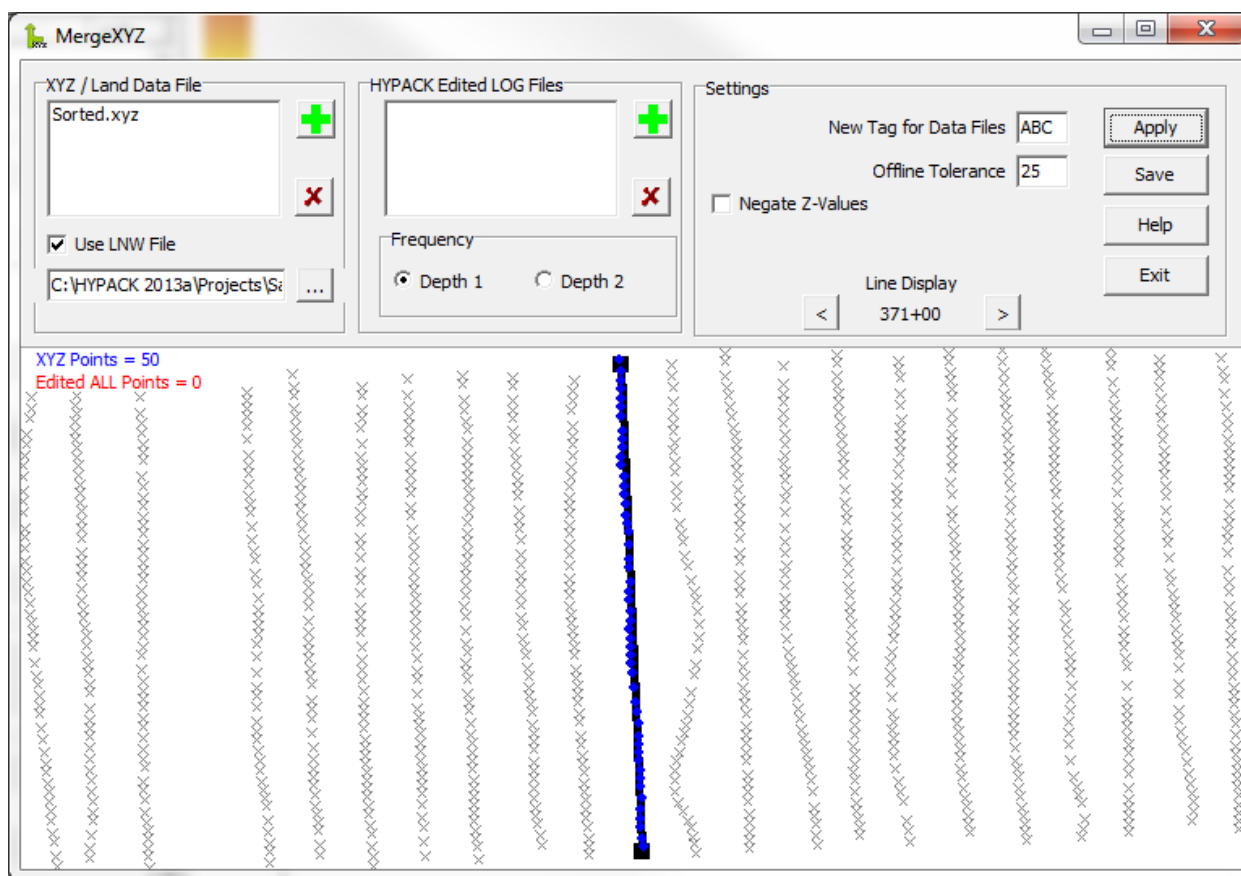
Soundings are re-sequenced from beginning to end of the newly created ALL file.

Little did we know that you can load XYZ data *only*, with the planned line file, into MERGE XYZ and it would behave just like REMAP! This is how to do it.:

1. **In the XYZ/Land Files section of MERGE XYZ, click on the plus (+) sign and add one or more XYZ files.**
2. **Check the “Use LNW File” box and select the planned line file (*.LNW) to which you want to remap your data.**
3. **Under the Settings section of MERGE XYZ, enter a new tag for the ALL files you are going to generate.**
4. **Enter an off line tolerance.** This value is the distance on each side of each planned line that MERGE XYZ will look for soundings and add them to the newly remapped file.

5. **Click [Apply]** and you will see the sounding points displayed on the screen. You can scroll through each line to see which points are mapped to each line.
6. **If satisfied, click [OK]** and MERGE XYZ will generate new ALL format files in your project Edit folder.

FIGURE 2. Mapping XYZ Data to ALL Format in the MERGE XYZ Program



You can now take these files into the CROSS SECTIONS AND VOLUMES program to view the sections, or calculate volumes. Or you can take them into TIN MODEL, view sections and compute volumes, and eliminate the remapping step altogether! ☺