



Handling large data files

By Harold Orlinsky

The old adage, that collecting data is easy, processing is harder is not always the case. The tools that are in the HYSWEEP® EDITOR and SIDE SCAN TARGETING AND MOSAICKING make this task a bit easier. But there will be times when things just don't go right, and you need someone else to take a look at a data file. The problem now, is how to send HYPACK Support a 100MB file? And being on a boat with limited Internet makes it even more challenging to have these files sent.

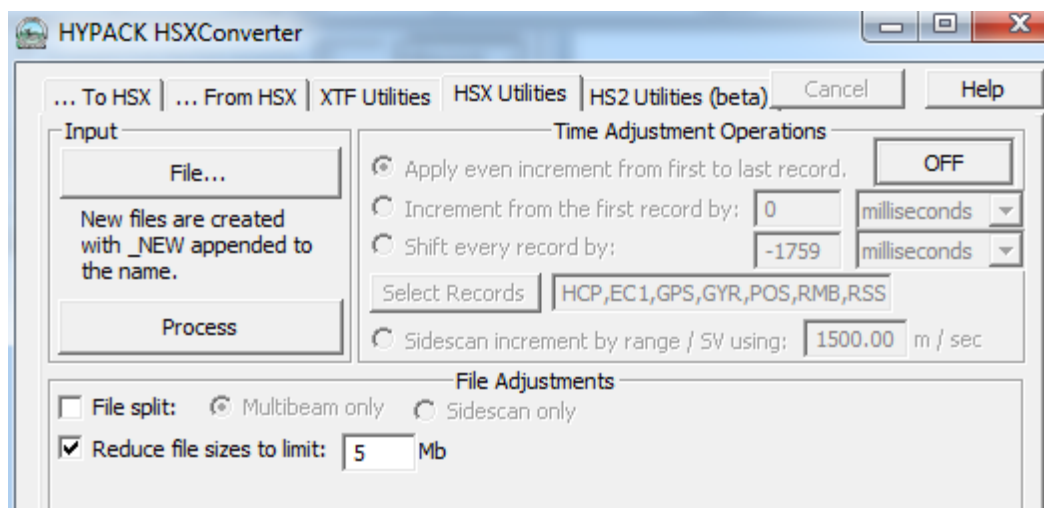
Inside the HSX CONVERTER program (SIDESCAN – SIDESCAN DATA REFORMATTER) there are a few utilities that can help. The program will work with both HSX and XTF data files, to reduce them to file sizes that are more manageable.

CREATING MULTIPLE FILES OF LIMITED SIZE

In the XTF Utilities or HSX Utilities tab (depending on which file type you want to input), load the input file, enter the user-defined file size and click [Process].

The original file will stay intact, and additional new files will be created at the smaller file size. An extension of _New(n) will be appended to each HSX file (_New1, _New2). The program works by keeping the header intact for each HSX file, followed by the data section holding the different portions of the line.

FIGURE 1. Reducing Large HSX Files to Multiple 5MB Files

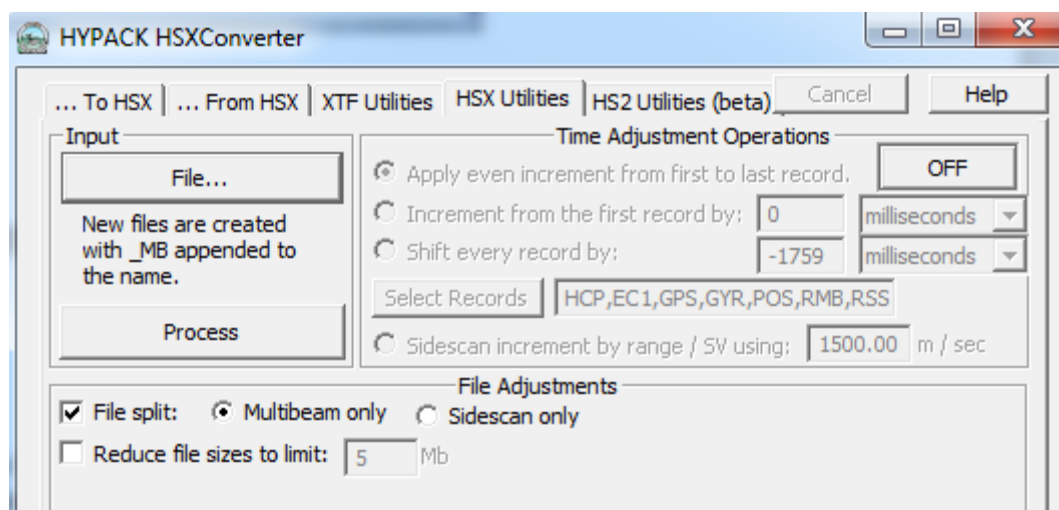


EXTRACTING SIDE SCAN OR MULTIBEAM DATA

Another feature that reduces the HSX file size is to generate an HSX file with only multibeam data or only sidescan data. Again, the header is intact, and the data section would hold only the information needed for that sensor (RMB or RSS records with position, gyro, etc.).

Just load your input data, check 'File Split' and select 'Multibeam Only' or 'Sidescan Only' and click [Process].

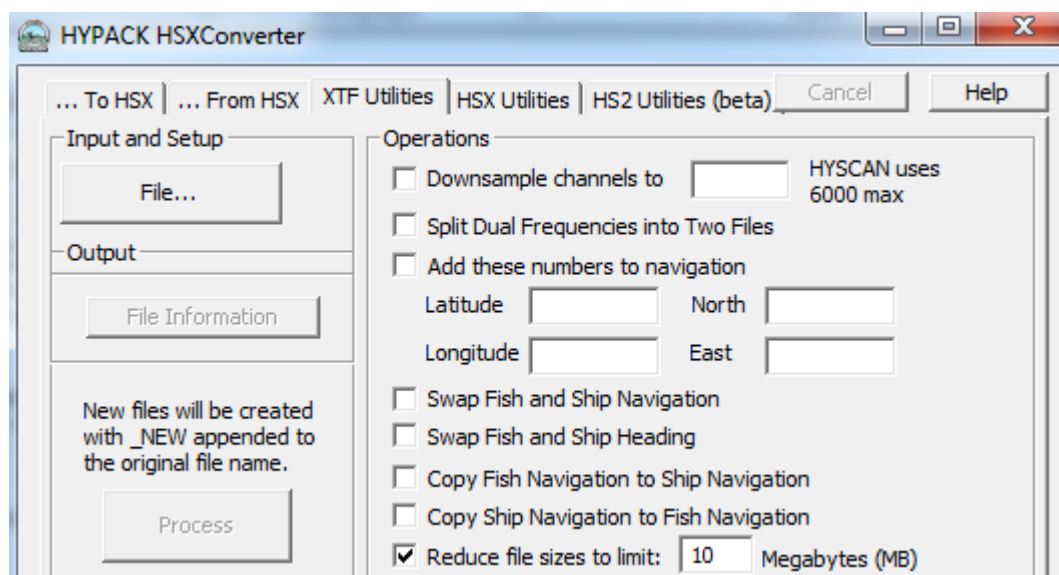
FIGURE 2. *Extracting the Multibeam Data*



There is a similar option to handle XTF files in the XTF Utilities Tab. Many sidescan sonars will create XTF files, and SIDE SCAN TARGETING AND MOSAICKING can make mosaics of this data. As a binary file, they are compressed more than the HYPACK® HSX files, but they still can be very large when working with high resolution side scan sonars.

Select the XTF file for input, and choose the option to 'Reduce file sizes to limit', with the user-defined size. The output will again append the _New(n) extension to the name.

FIGURE 3. *Reducing XTF Files*



All these options can be done on a single line, or with multiple lines for the input.

If you have any questions, or would like for me to look at one of your data files, let me know. -