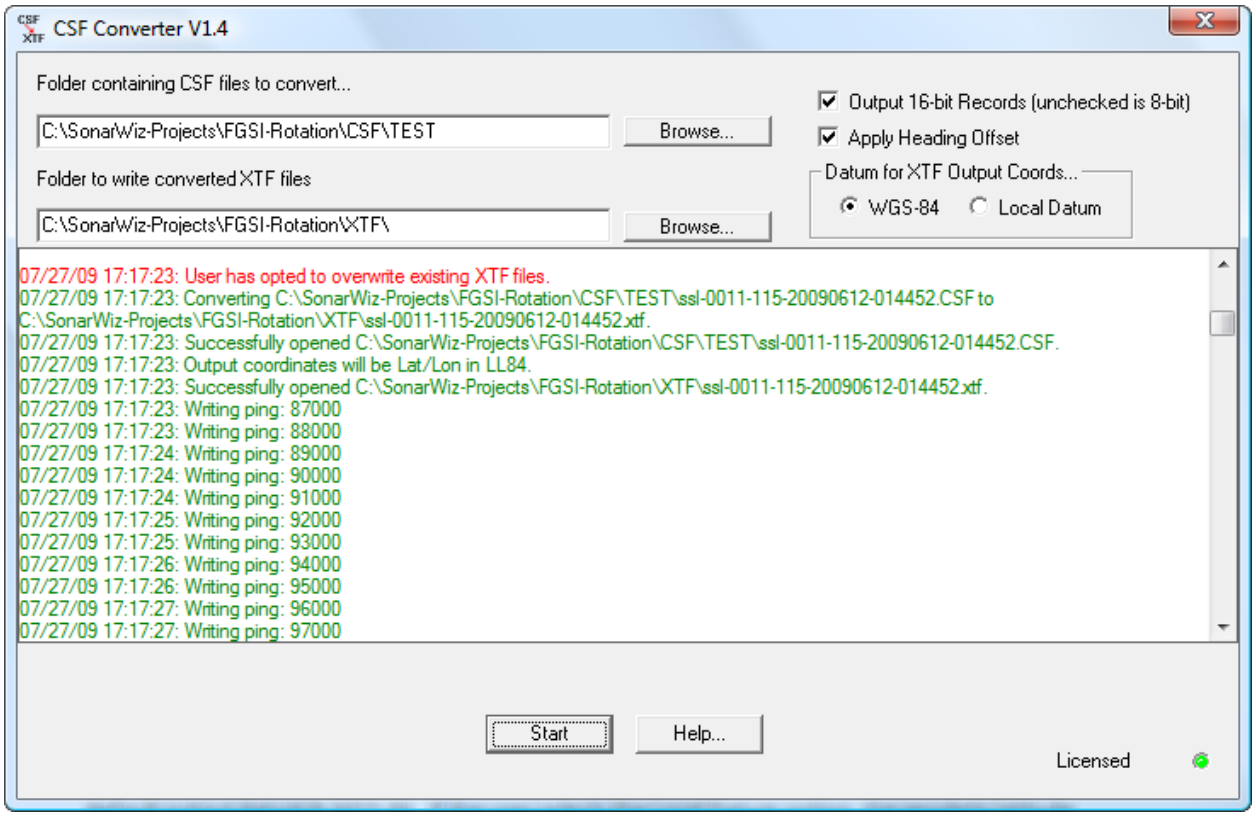
Chesapeake Technology CSF Converter

July 27, 2009



The CSF Converter application is a special utility for converting SonarWiz.MAP CSF files standard XTF files.

File Type

The converter consists of a simple dialog application which accepts inputs from the user that defines the locations of the input files and output files. The utility can currently convert only CSF to XTF but SEGY conversion is also planned.

While the CSF Converter application will prompt you when it detects that you are overwriting existing XTF files, we strongly recommend that you back up your original XTF files before starting this process to avoid an unpleasant experience.

Coordinates

The converter always writes XTF files with coordinates in geographic format, that is, latitude longitude in decimal degrees. The user may select the output datum of the geographic coordinate system. The default output datum is WGS-84. If the user selects the Local Datum option, the geodetic latitude longitude will be output with reference to the local datum of the CSF file.

Output 16-bit Records

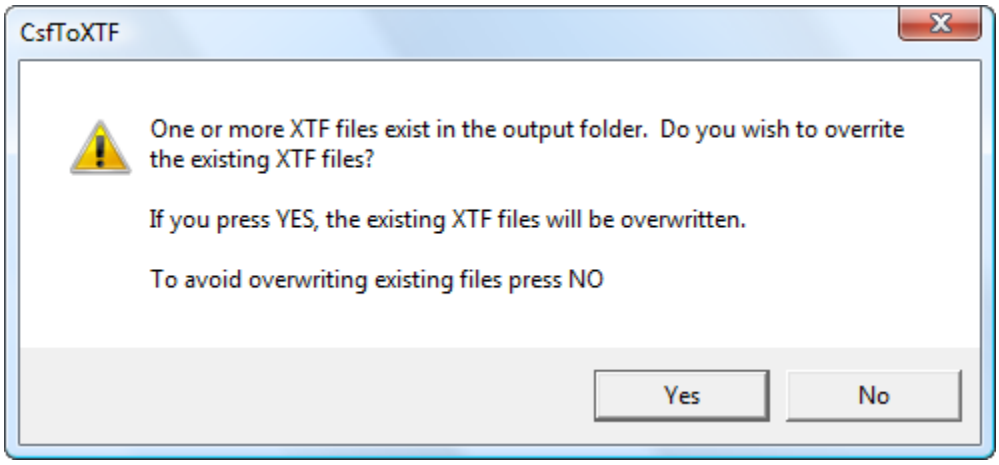
Currently, CSF files store data with a sample resolution of 8-bits (1 byte/sample). The XTF format supports either 8 or 16 bit samples. The 16-bit output option is supplied for those applications that require 16-bit samples in the XTF file. NOTE: that while the sample size is 16-bits with this option the resolution is the same as the 8-bit XTF.

Apply Heading Offset

SonarWiz.MAP provides the ability to rotate the transducer projection angle to account for misalignment of the side scan sonar transducers with the axis of the platform on which they are mounted. When this option is checked, the output file will consist of XTF ping records that have been corrected for the angular offset of the transducers. When this option is checked the converter builds up a single XTF ping from multiple CSF records depending on the amount of angular rotation contained in the CSF file. The resulting XTF file should then represent the sonar data as if there were no misalignment error.

Warning Messages

The conversion utility will present the warning dialog box if the destination folder already contains at least one XTF files that would be overwritten by the conversion process.



When using the Apply Heading Offset option the converter will reject some pings at the start or the end of the file depending on the magnitude and direction of the rotation angle. The converter was designed to reject any ping that could not be fully populated with sonar samples.

07/27/09 17:17:32: Writing ping: 107000
07/27/09 17:17:33: Writing ping: 108000
07/27/09 17:17:33: Writing ping: 109000
07/27/09 17:17:34: Writing ping: 110000
07/27/09 17:17:34: Writing ping: 111000
07/27/09 17:17:35: Writing ping: 112000
07/27/09 17:17:35: Skipping ping:112275 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112276 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112277 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112278 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112279 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112280 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112281 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112282 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112283 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112284 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112285 because it cannot be fully populated
07/27/09 17:17:35: Skipping ping:112286 because it cannot be fully populated