
SonarWiz Quarterly Highlights - 2016 Q3

Revision 1.0, 10/26/2016

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1 2016 - Q3 - SonarWiz - Most Significant Enhancements

Functional Category	Enhancements Count
2.1 General Improvements	10
2.2 Bathymetry post-processing	6
2.3 Sub-bottom post-processing	5
2.4 Sidescan post-processing	3
2.5 Real-time data acquisition	1

2 Categorized SonarWiz Enhancements – 2016 Q3

Here are the highlights of SonarWiz enhancements for 2016 Q3 (July, August, September, 2016).

Highlights Summary Table (blue items have companion graphics)

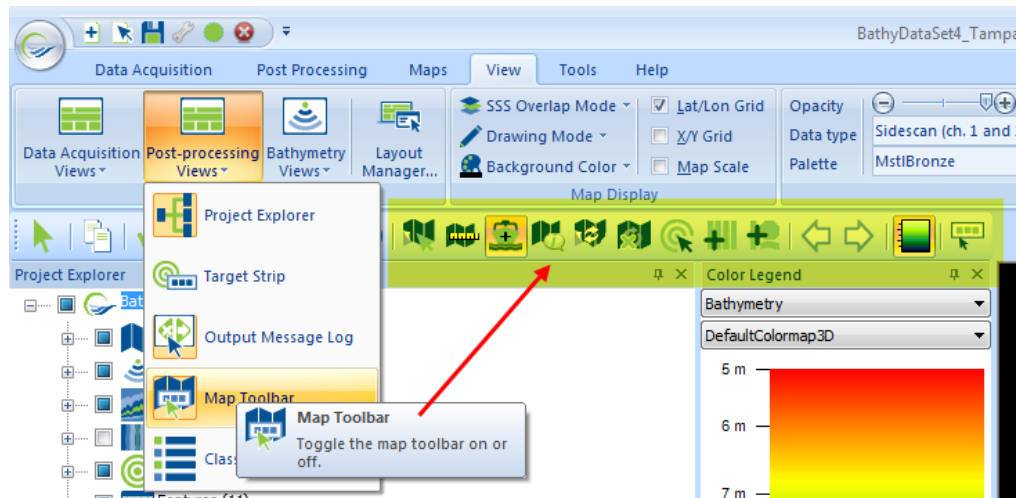
Section - Functional Category	Highlight Description
2.1 General Improvements	<ol style="list-style-type: none"> 1. We've added a toolbar button to toggle the color window tool, for easier access to this important new display control (Depth Scale tool renamed to Color Window). 2. We've created an option to apply NO SMOOTHING to imported sonar and mag data navigation. 3. A new CSF files export option for GPX file format is supported, giving you the option of importing your nav-track into other applications, in this widely-used file format.
2.2 Bathymetry post-processing	<ol style="list-style-type: none"> 1. Bathymetry grid-drawing had been sped up by a factor of x10, and new shaded-relief options are supported, and are easier to access! 2. Bathymetry point-drawing has also been sped up by a factor of x10!
2.3 Sub-bottom post-processing	<ol style="list-style-type: none"> 1. Reading unusually-formatted SEG files just got easier, with a new option to specify the CHANNEL number import location in the trace header 2. We've added a HD (high def) option for ODC file import, to support the new 800 samples/channel hardware options offered by the upgraded SyQwest product line - Stratabox HD, Hydrobox HD, and Bathy2010 HD echosounder models.
2.4 Sidescan post-processing	Bathymetry features have spilled over into sidescan processing! Now you can grid your sidescan CSF amplitude data, just like bathy backscatter data. All it needs is a sidescan post-processing license.
2.5 Real-time data acquisition	Your traditional 2D SS and SB real-time waterfall views now has a 3D option. Support for real-time waterfall view of both SS and SB data view in 3D has been added to our CTI3DViewer. Every data acquisition license supports this option now.

NOTE: Selected highlights items described above, are shown with graphic screenshots, below.

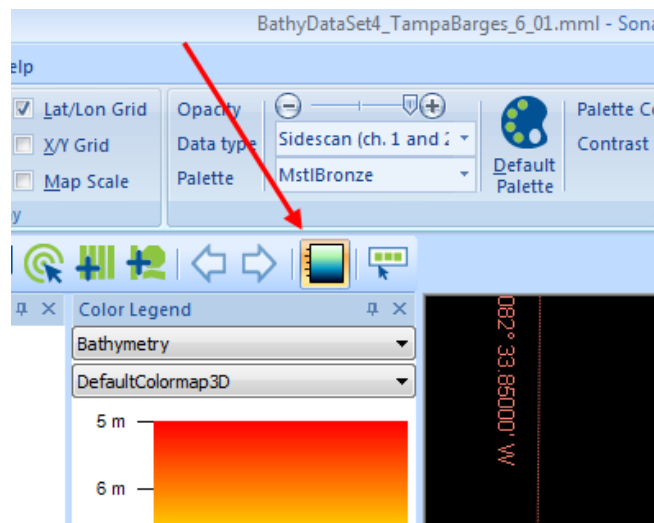
2.1 General Improvements affecting all functional categories

2.1.1 COLOR LEGEND - New name and Map Toolbar Access

To see this toolbar, select View -> Post-processing Views -> Map Toolbar.



The new item added to this toolbar is the COLOR LEGEND. It had been accessible, but called a DEPTH SCALE, in earlier versions of SonarWiz, under the VIEW -> Bathymetry post-processing choice. It is still there, but is now also available as a MAP TOOLBAR icon:

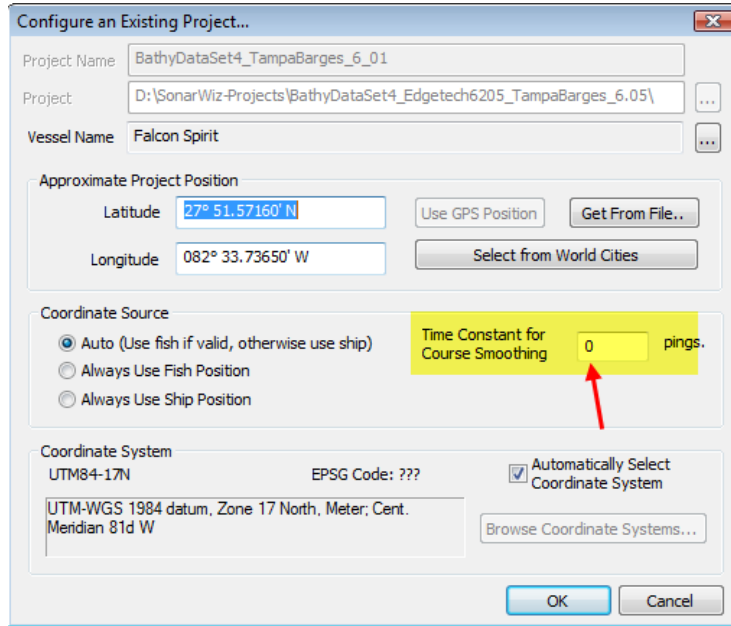


2.1.2 Import Navigation Smoothing - new option - NONE

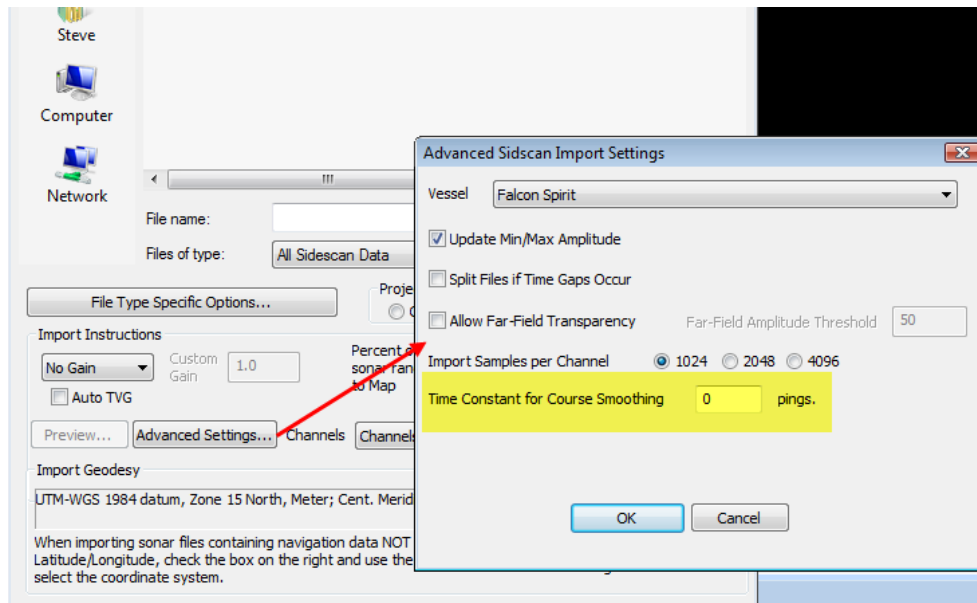
Several users requested this new capability to apply NO smoothing to imported navigation data. The control can be set in two places:

- (1) CREATE / CONFIGURE PROJECT or
- (2) Import OPEN dialog ADVANCED OPTIONS

Use a Time Constant for Course Smoothing value of ZERO (0) to select NO smoothing now:

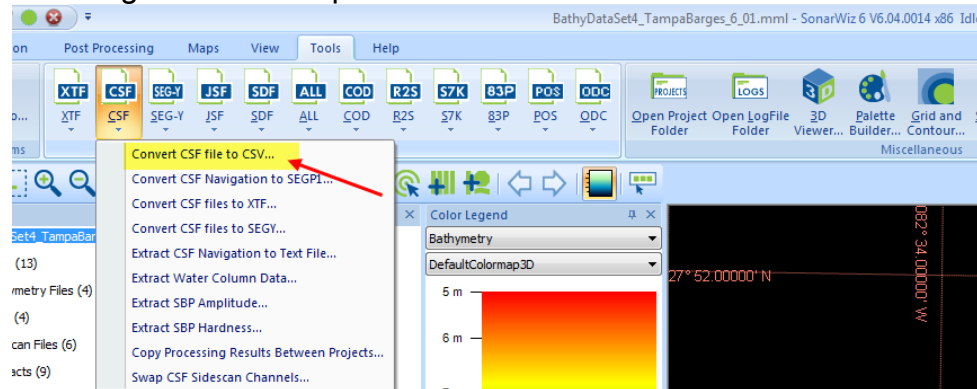


Errant values in the raw file will still be rejected, but the navigation will never be smoothed when Time Constant for Course Smoothing is set to zero. In sidescan projects, the option may be applied on a per-line basis using **ADVANCED OPTIONS**:

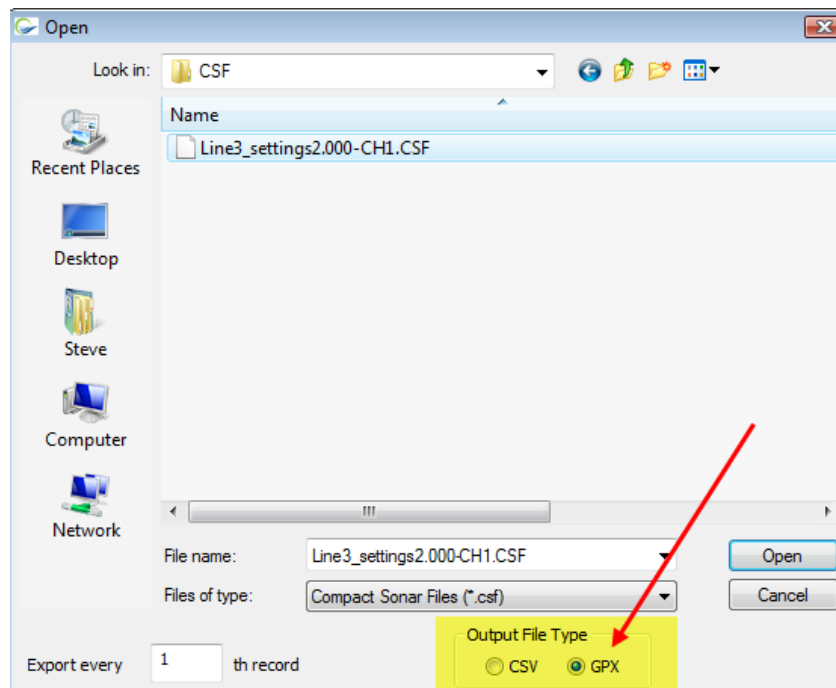


2.1.3 Export of CSF File Navigation Data in GPX Format

SonarWiz has long been able to provide the TOOLS -> CSF -> Convert CSF to CSV file:



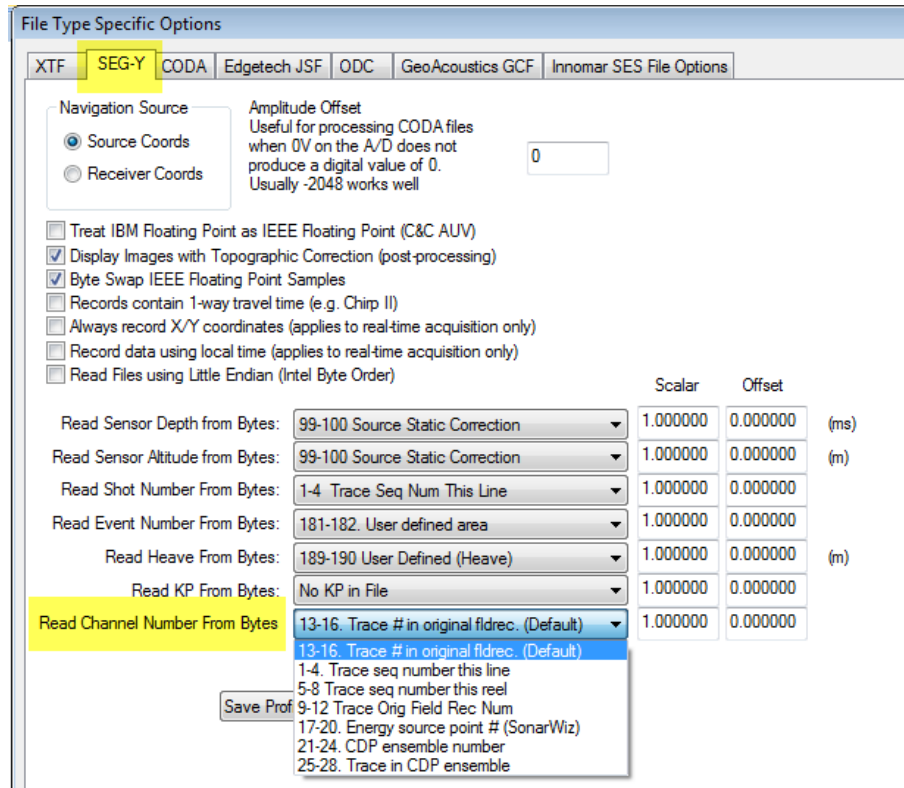
The new option is to enable saving the resulting data in a GPX file format, which may be useful for you to import into other applications. Just select the GPX radio-button to save the data in this format:



2.2 Sub-bottom-specific Enhancements

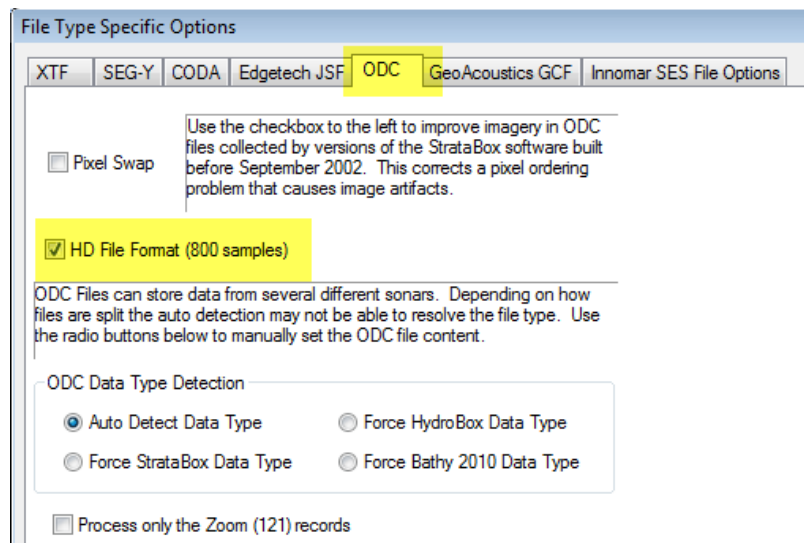
2.2.1 SEG-Y - Channel Number Select Option

To accommodate SEG-Y file format variety, we have added new options for selecting SEG-Y trace header values in the SEG-Y file type specific option dialog, for channel number location.



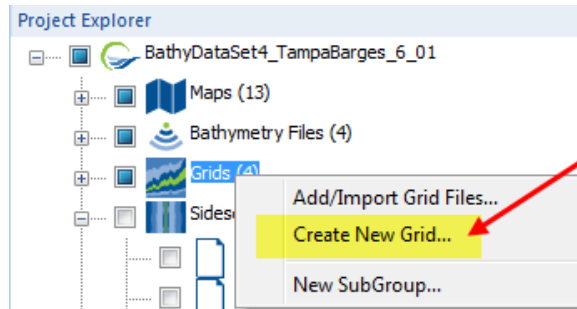
2.2.2 New ODC File Type Specific Option - Import HD Types

When you import a sub-bottom file, we've added a new HD (High-Definition) selector checkbox option, to the ODC file specific options dialog to force support for the newer ODC 800 sample/channel files:

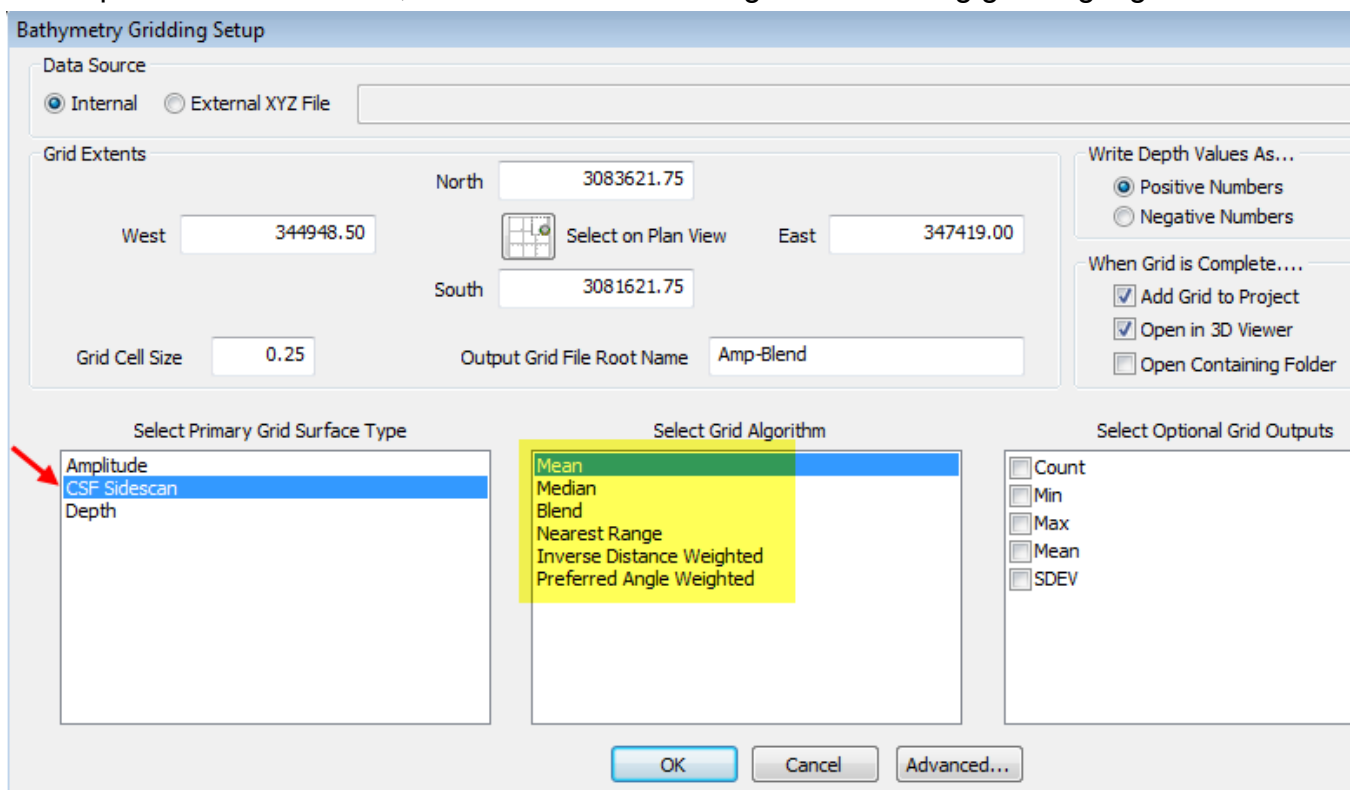


2.3 Sidescan-specific Enhancement - CSF file AMPLITUDE GRIDDING

Gridding has been a mainstay of bathymetry post-processing for backscatter and depth data in SONarWiz. Now this mathematical 2D smoothing can be applied to CSF sidescan data, using CREATE GRID, when you select CSF sidescan option. You first select to create a grid:



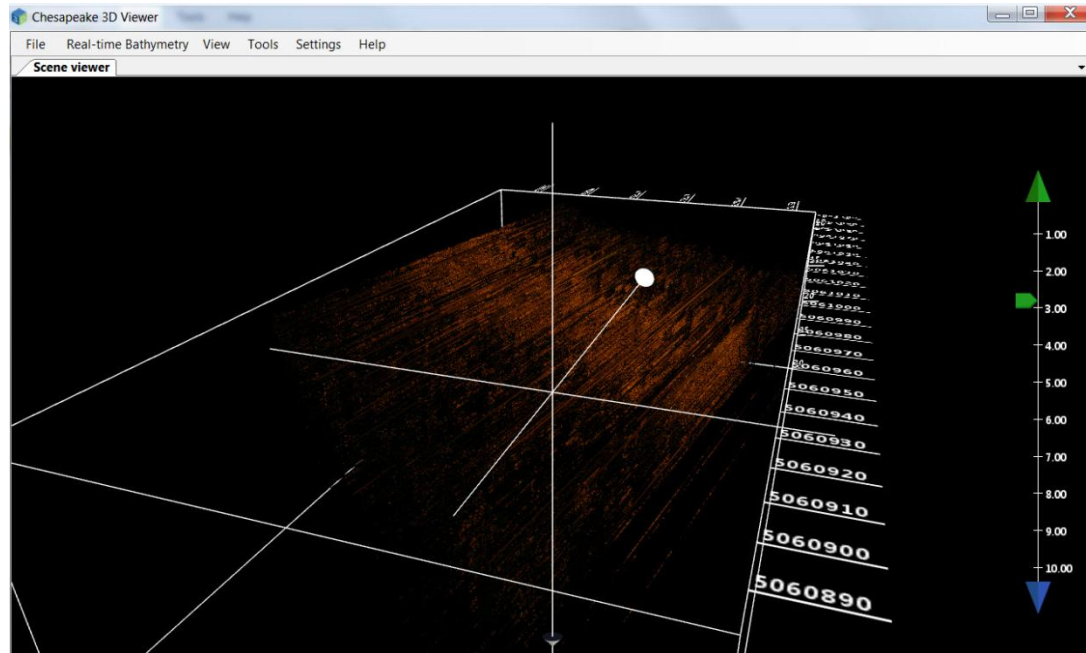
Then specific CSF sidescan, and choose from amongst the following gridding algorithms:



All the same options available from backscatter gridding previously, may now be applied to your sidescan amplitude data. Just enable those CSF files to display, which you would like included in the grid results, then make a grid.

2.4 Real-time Enhancements - 3DViewer real-time waterfall - coming soon!

Coming soon! We have added support of sidescan and subbottom data to the CTI 3D Viewer real-time view (beta). It is not available to customers yet, but is in the software and is being beta-tested:



This will enhance your real-time data viewing options, supplementing the existing viewing real-time options of sidescan and sub-bottom 2D waterfalls.