

Echoview 11 release notes

Get the power of Echoview 11! Echoview Software is committed to improving your hydroacoustic data processing capabilities and efficiency, and the features we have added to this latest release have been designed to simplify your workflow and significantly improve your processing speed.

Echoview 11 is available to all license holders with an up-to-date Maintenance and Technical Support (MATS) subscription. To find out if your MATS subscription is current please contact sales@echoview.com.

Performance turned up!

Echoview 11 includes a major boost in performance. We've seen excellent results across our comprehensive tests of the changes – in some cases, Echoview 11 is more than 10x faster than the previous version!

The improvements to Echoview 11 are a result of:

- Increased multithreading to maximize the utilization of all CPU cores
- Improved use of the computer's system memory for complex dataflows
- Improved efficiency of data flowing through virtual variables on the dataflow

Our performance adjustments cover many processor and time-intensive aspects of the software, for all data types and applications. Individual performance is dependent on hardware configuration and data storage location. If you are working with large volumes of data and/or computing-intensive workflow steps, we recommend having 16GB or more RAM, a very high-spec CPU, and data stored in a fast-access location.

Real-time data visualization and analysis for more file formats

Echoview now enables you to view and analyze data from even more echosounders and sonars: our utility program Echolog can read and broadcast data from BioSonics DT series, Sound Metrics ARIS and DIDSON, and Kongsberg Mesotech M3/Flexview systems in real time.

This support is in addition to our existing live viewing compatibility with data from selected Simrad systems.

Real-time data viewing is licensed with the Live Viewing module. Real-time data analysis is also possible by combining the capabilities of the Echoview Essentials and Live Viewing modules.



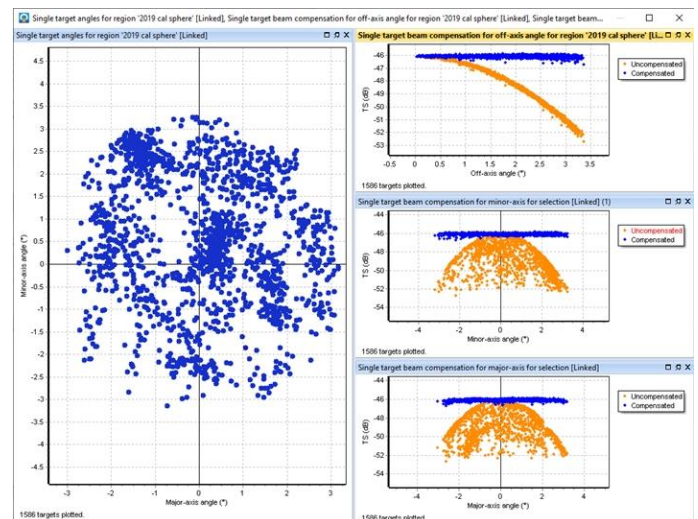
The Calibration Assistant

Calibration is a critical step for hydroacoustic data processing, and Echoview 11 adds a tool to make this process simple and transparent. Our new Calibration Assistant assists in the calculation of echosounder gain, the filter attenuation correction factor (e.g. Sa correction), and beam pattern characteristics for any single, split, or dual beam narrowband echosounder file format supported by Echoview.

The Calibration Assistant uses data containing field measurements of a calibration sphere to calculate and report Sa correction and transducer gain (for Simrad systems) or Sv and TS offsets (for data from other manufacturers) (dB); Minor and major axis angle offsets (°); Minor and major 3dB beam angles (°); Equivalent two-way beam angle, corrected for sound speed (dB re 1sr); and RMS error (dB), where appropriate.

With the inbuilt Calibration Assistant, Echoview 11 gives you complete transparency and control over the data being used to calculate calibration parameters.

To complement the Calibration Assistant, three new graphs have been added to Echoview 11 that enable the visualization of uncompensated TS and compensated TS vs off axis angle, minor axis angle, and major axis angle. These graphs provide an insight into the success of beam compensation and transducer performance.



The three new graphs are shown on the right for the calibration sphere detections plotted on the left.

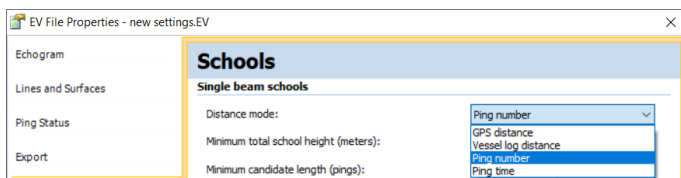
The use of the Calibration Assistant is licensed with the Echoview Essentials module.

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New ways to detect schools

Echoview 11 includes new options for the settings that define school detection on single, split and dual beam data, meaning that fish schools, gas plumes, or other aggregations can easily be detected, even if GPS positions were not recorded, or for data collected from a mooring or other fixed platform.

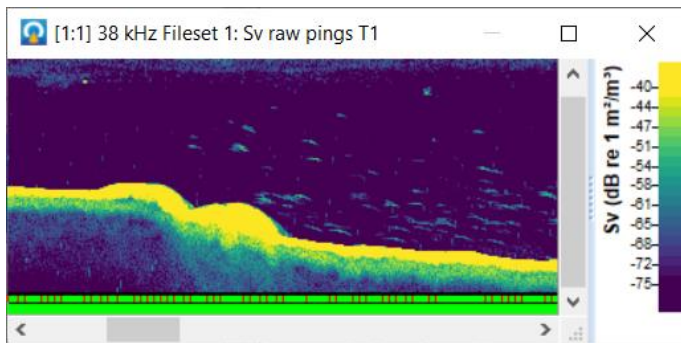
GPS fixes or vessel logs were required for school detection in Echoview 10 and older, and school candidates could only be defined using meter units. In Echoview 11, schools can also be detected using ping number or time to define the minimum school and candidate lengths and linking distances.



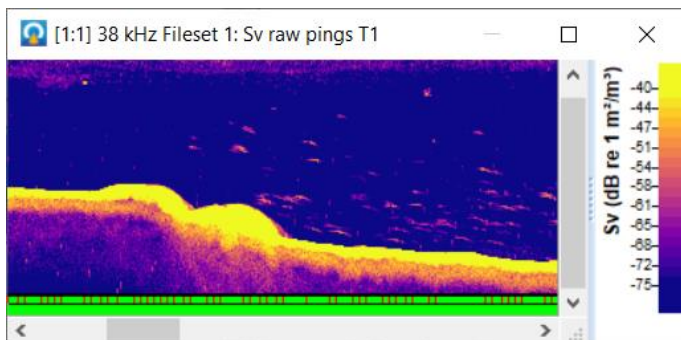
New options in EV File Properties for school detection.

More color schemes

We added new color schemes (Inferno, Magma, Plasma and Viridis) for better visualization of continuous scalar data.



Echogram with Viridis color scheme.

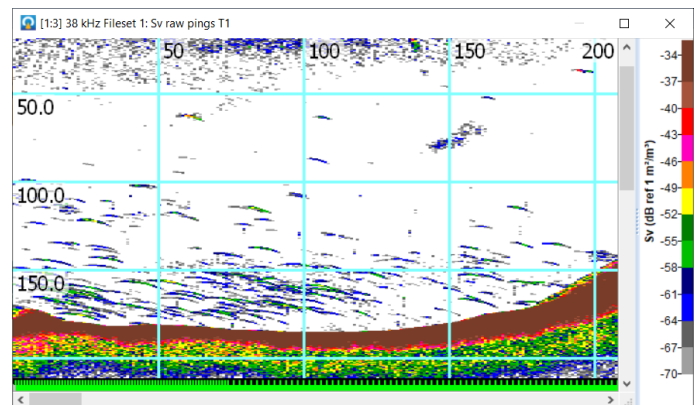


Echogram with Plasma color scheme.

Also shown in the images above, Echoview 11 can include data type and units in the color legend dialog box.

Custom grid lines, labels and legends

Echoview 11 makes it easier to take screenshots for use in presentations and publications. It includes the ability to customize the thickness and color of grid lines as well as the size and color of grid labels. These settings can be changed in the Variable Properties dialog box on the Grid page.



Custom grid line color and bigger font size for grid labels.

Other improvements and additions

- A depth-varying sound speed correction can be applied to variables from Simrad EK60 and EK80 narrowband data files
- Line and operand drop-down lists now offer a search filter and sorted list results to make it easier to find the variable you need
- Even more Variable Properties can be changed when multiple variables are selected in the Dataflow window
- Further extension of the Command Interface to support EV File Properties, and other improvements
- Multiple variables can now be exported to EVD format when using COM
- Improvements to the Details dialog box
- Whitespaces have been removed from headers and cells in exported CSV files

A full list of features can be found on the "New in Echoview 11" pages in the help file installed with Echoview 11.

Echoview 11 is compatible with Windows 7, Windows 8.1 and Windows 10, and can only be installed on 64-bit editions of these operating systems.