

Echoview 17 release notes

We're pleased to announce the release of Echoview 17, delivering broader capabilities for more powerful, flexible and connected analyses. This release expands how acoustic and supporting data can be used together, making it easier to add context to analyses, develop custom workflows, compare processing configurations, and work with a broader range of data sources.

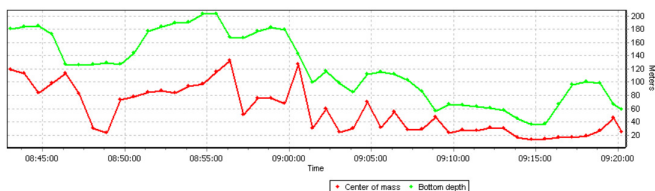
This release introduces major enhancements to time series workflows and expanded analysis capabilities. Echoview 17 also extends the power of the Code operator and adds new options for creating customized analytical workflows. Additional highlights include support for new data types, more flexible detection configurations, wideband processing enhancements, automation improvements, and a range of interface refinements designed to improve everyday efficiency.

Echoview 17 is available to all license holders with a current Maintenance and Technical Support (MATS) plan, subscription, or lease. To discuss your options for accessing the latest version, please contact info@echoview.com.

Expanded time series and Code operator features

Time series data can provide important context for interpreting acoustic observations. Environmental measurements, platform motion, derived metrics, and other supporting datasets can all help explain what is happening within an acoustic record. Echoview 17 introduces several new capabilities that make it easier to incorporate this information into your analysis workflows.

Echoview 17 supports displaying multiple time series on a single graph, making it easier to compare variables, investigate trends, identify relationships, and better understand changing conditions throughout a survey or deployment.



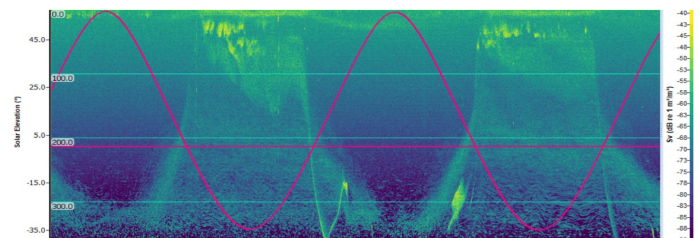
In this multiple time series graph, the relationship between bottom depth and center of mass is compared across time.

Existing line operators have been generalized to support time series data, enabling familiar operations such as arithmetic, cropping, and offset calculations to be applied directly to time series variables. The new Type conversion - Time series

operator also allows time series to participate more broadly in custom processing workflows.

We've added the ability to overlay time series directly on echograms. Rather than switching between and synchronizing multiple windows, you can now display supporting measurements directly on acoustic data, helping you maintain context while reviewing and interpreting observations.

A new Solar elevation at pings operator provides a biologically meaningful representation of time of day, allowing daylight-related information to be incorporated directly into visualization and analysis workflows. Solar elevation is calculated as a time series of elevation angles, and the resulting graph can be overlaid on echograms.



Solar elevation data (oscillating pink line) overlaid on Nortek Signature 100 data, providing context for diel vertical migration patterns in backscatter. The horizontal line marks 0° solar elevation, allowing day (above the line) and night (below the line) to be quickly confirmed.

A new Code - Time series operator allows time series outputs to be calculated from custom Python code.

Both the Code - Time series operator and standard Code operator now support configurable user-defined arguments through Variable Properties. This allows adjustable parameters within the Python script to be exposed directly within Echoview, improving script reuse and reducing configuration errors.

Code

Code settings

Python source file: C:\Temp\Code files\Thresholding technique.py

...

 Edit

Window size (pings): 1

Arguments

Name	Value
Threshold_factor_A	12.0
Threshold_factor_B	0.0089

Echoview now makes it easier to locate missing Python source files when projects reference relocated scripts.

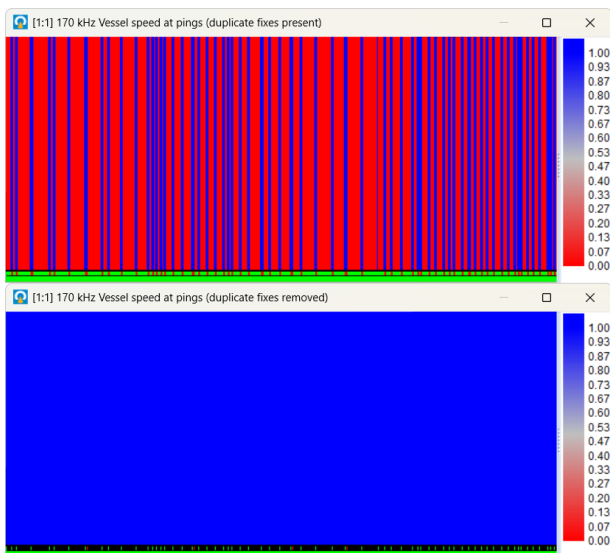
The embedded Python environment has also been updated to a newer version.

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Other operators

Additional improvements include new and improved support for Boolean input data in XxY statistic, XxYxZ statistic, and Resample (by distance interval, ping number and time interval) operators, together with support for multibeam data in the Crop Samples operator.

To improve data quality workflows, Echoview 17 introduces a Remove duplicate positions operator that can identify and ignore duplicate GPS fixes, helping reduce processing artefacts when duplicate fixes are present.



Scripting and automation

COM access to File Location settings in EV File Properties is now supported. Data file, calibration file, and Python source file locations can be modified in scripts using new `DataFileLocations`, `CalibrationFileLocations`, and `PythonFileLocations` properties that enable you to insert, replace, or remove file locations.

`MeasurementCount` has been added to `EvVariableBase` to allow querying the number of measurements in time series and other non-acoustic variables.

The command interface and console now support deprecated or alternative property names, making forward compatibility smoother.

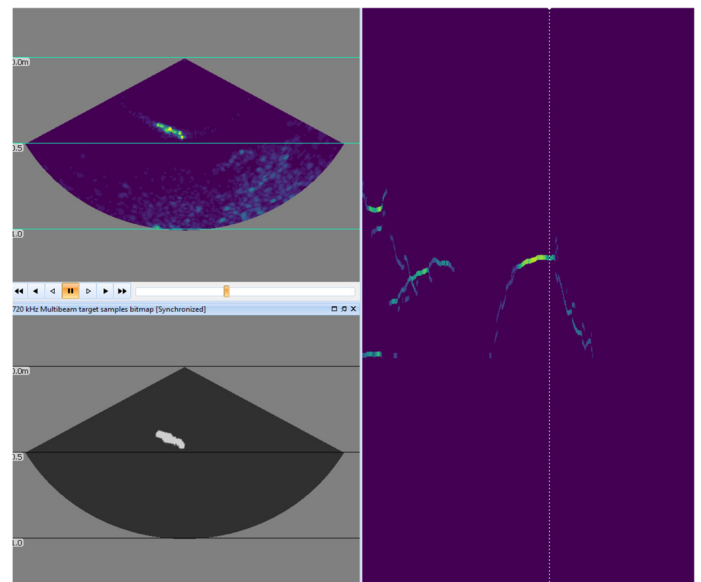
The Echoview scripting log file, useful for reviewing scripting history or troubleshooting problems, is now stored within the current Windows user's local application data folder rather than the shared Public Documents folder.

Wideband features

Wideband data processing tools continue to be updated through the addition of a frequency exclusion option for the Wideband frequency subset operator, enabling notch filtering, as well as updates to wideband frequency response algorithms.

Support for new data

Support has been added for Tritech Gemini (*.glf) imaging sonar files, extending compatibility with imaging sonar systems.



Tritech raw data is displayed in the top left panel, while the bottom left and right panels show the results of Echoview's built-in algorithms that can be used to delineate and track targets over time.

For Kongsberg EK80 data files, passive data is now automatically split into separate raw variables, rather than being combined with active pings from the same transducer.

Default EK80 raw variable names have been adjusted, making ping modes, data types, and advanced sequencing configurations more visible in the Dataflow and Filesets windows.

Echoview now supports single beam and multibeam Unspecified dB text data files in CSV format, and also allows different text-data types to be combined within a single fileset, instead of requiring them to be in separate filesets. Together these changes simplify the integration of supporting environmental, sensor, and derived datasets into EV files.

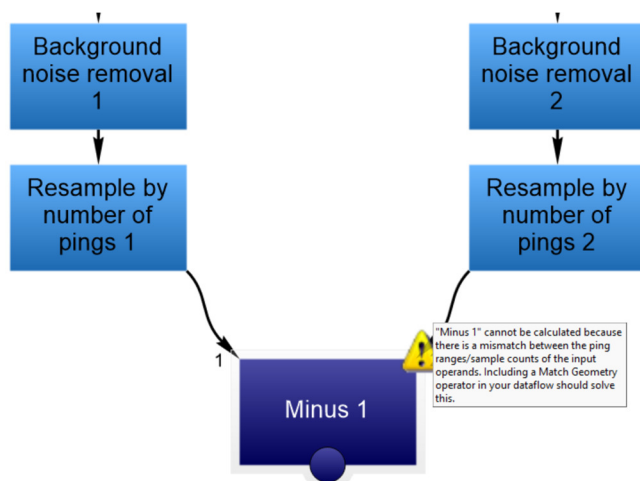
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Dataflow tools

Several enhancements have been made to the Dataflow window, the core of Echoview's data processing interface. As projects grow, processing chains become more complex and challenging to navigate. Echoview 17 introduces several improvements designed to make Dataflow workflows easier to organize, troubleshoot, and maintain.

New alignment grids make it easier to keep objects tidy in the Dataflow, with objects automatically snapping to the invisible grid. Hold down the SHIFT key to override this behavior. For existing EV files, select all objects and move them slightly to align them to the new grid.

We've made it easier to identify potential issues within a workflow. Variables that contain warnings are now visually marked in the Dataflow window, helping you locate and investigate problems more quickly.



The Dataflow Toolbox is docked directly within the Dataflow window for a more integrated approach to discovering and creating new objects. Use Ctrl+T to quickly show or hide the Toolbox.

Additional improvements include automatic scene creation from compatible selected objects.

Analysis updates

The Interval analysis operator, previously called Interval analysis - Sv, has been generalized to support calculations of metrics for other data types, including power, TS, linear, and unspecified dB. This substantially broadens the range of

variables that can be analyzed using existing Echoview analysis tools and exporters.

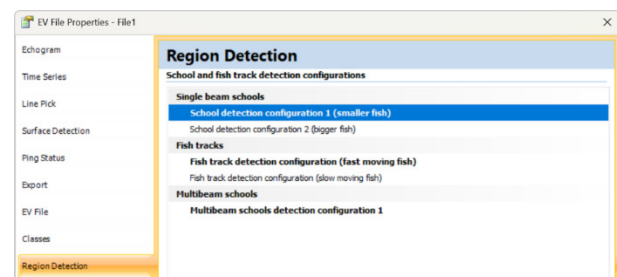
A new export variable named ECS_filename allows the calibration file in use to be included in analysis exports, improving workflow traceability.

Multiple detection configurations

Fine-tuning detection settings is a key part of generating reliable and repeatable acoustic analysis results. Different datasets, species, survey designs, and processing goals can all require different assumptions and parameter choices.

Echoview 17 includes multiple detection configurations for single beam and multibeam school and fish track detections, making it easier to define, manage, and revisit alternative detection settings within a workflow. This reduces the need for manual adjustments and helps you to compare approaches more efficiently and consistently.

Detection settings are managed from the new Region Detection page in EV File Properties, replacing the previous Schools and Fish Tracks pages. Access to all settings is available for scripting.



The Region Detection page in EV File Properties for configuring fish track and school detection parameter sets.

For fish track detections, the maximum allowable values for Minimum number of single targets in a track, Minimum number of pings in track, and Maximum gap between single targets have been increased from 100 to 100,000, making it easier to detect targets that persist for long periods.

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Performance and file management

File management capabilities have been expanded through support for storing EVI files in custom locations, which provides greater flexibility when organizing large projects or separating data and metadata storage.

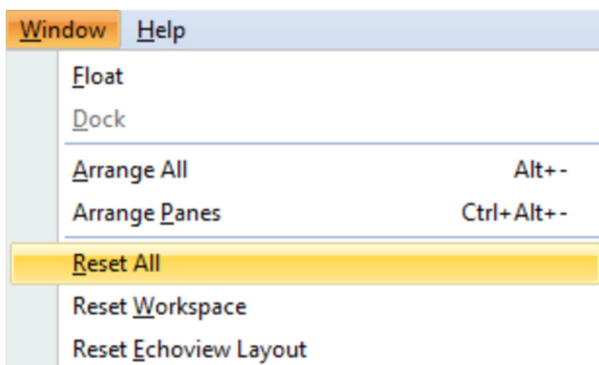
Performance improvements in file reading benefit data loading on cloud-hosted platforms such as Google Cloud Platform, reflecting increasing use of distributed storage and cloud-based processing environments.

Bug fixes

Echoview 17 includes bug fixes, stability improvements, and refinements across acoustic data formats, operators, exporters, visualization tools, automation functionality, Dataflow workflows and user-interface components. These changes improve reliability, performance, and consistency across a broad range of hydroacoustic processing applications.

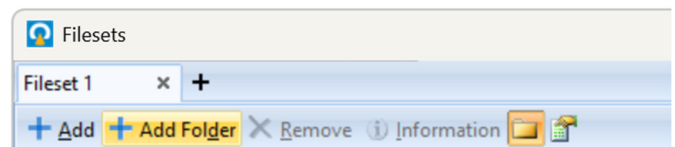
Other features

- Docking and window layouts are better preserved after minimizing and then restoring Echoview.
- Reset EV file and/or application layouts to their default state using new options in the Window menu.



- Dynamic names can be directly copied from the Properties Information dialog.
- Digital licenses may be activated directly within Echoview by entering a ticket number.
- 3D single target objects automatically inherit the color scheme in use by the single target variable from which they were created.

- The Filesets window now includes an Add Folder button that allows you to add files automatically from a selected folder (including its subfolders), reducing effort when working with large or complex directory structures.



- Time series interpolation modes are shown in the Details panel for relevant Dataflow objects.
- The Cruise Track window is simplified through removal of the scroll bar.
- The default analysis domain used by the Sv Integration exporter has changed from regions to cells.
- Some utilities (e.g., Echocheck) are no longer distributed.
- Windows 10 is no longer supported.

System requirements

Echoview 17 is compatible with 64-bit Windows 11.

Getting Echoview 17

You can download Echoview 17 from our [website](https://www.echoview.com).

A complete list of features and fixes can be found on the “New in Echoview 17” pages in the help file installed with Echoview 17.

Please contact support@echoview.com for further information.