

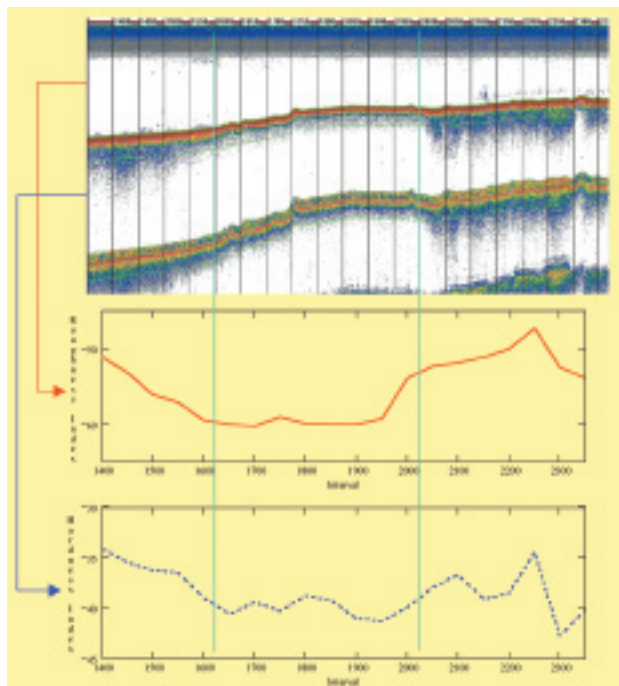
fish habitat

The task

Identify fish habitat and seabed types and link echograms to other classification data.

The solution

Define and automate the calculation of different indices from seabed backscatter and use them to classify bottom habitat or substrate type of the seabed. Use single or multiple frequency methods by employing a powerful suite of virtual echogram operators along with data filtering and thresholding. Import and view the results of other seabed acoustic classification systems (or classifications based on other data such as video and benthic grabs) along with your echograms for visual verification. Use Echoview's highly efficient visual environment to develop or verify seabed classification solutions and export data to Qester Tangent's Echo IMPACT seabed classification software.



The benefits

1. Visualization of all data and the results of analysis steps

- Tune and optimize your analysis viewing echograms and 2D graphs that automatically update as algorithm settings change
- Display seabed echo parameters such as hardness and roughness on a cruise track plot
- Verify your classification methods in the field. Monitor results in real-time to enable you to conduct sampling for algorithm verification (for example, acquire video or benthic grab samples for independent classifications)
- View echograms of data classified in other software packages

3. Flexible analyses methods

- Calculate measures of roughness and hardness
- Work with first and second bottom echoes
- Wide range of operators enable complex multiple frequency algorithms
- Filters based on convolution and image processing techniques can be applied
- Use templates and scripting tools to streamline your processing methods

4. Extract a rich set of data outputs

- Export integrated backscatter data for selected components of the seabed echoes and other calculated parameters for classification and other studies
- Export user-defined classifications with bathymetry and position data

2. Scrutinize and quality-control data

- Modify calibration parameters
- Use sounder detected bottom or Echoview's bottom detection algorithm
- Define bad data regions
- Define and edit lines and polygon regions at sample resolution
- Threshold data with a constant or time-varied threshold level

5. Provide data to other vendor's classifiers

- Echoview's logging modules and post processing support allow you to supply data to other vendor's seabed classification systems. Export data from Echoview to Qester Tangent's Echo IMPACT seabed classification software

