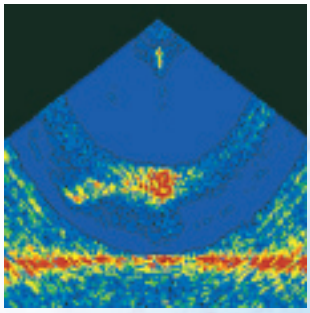
echoview 4

# echoview®

multibeam





## The task

Improve biomass estimates, study fish behavior and identify species using multibeam sonars.

## The solution

Multibeam (swath) sonar systems and Echoview 3D visualization and analysis are the future of acoustic surveys for fisheries applications. Use advanced multibeam data processing and visualization tools and analyze split beam echosounder data in a single integrated package. Work with water column data from most multibeam sonars, scanning sonars and the DIDSON acoustic camera to extend your research capabilities. Exploit the opportunity to influence the design and content of Echoview's multibeam functionality as development continues.

## The benefits

### 1. Advanced 2D and 3D visualization tools

- See what you are doing at every step of the analysis
- 2D and 3D visualization tools for seabed and water column backscatter
- View beam formed data as sonar plot and individual beams as echograms

### 2. Scrutinize and quality-control data

- Apply calibration parameters
- Detect bottom surfaces for mapping survey area
- Exclude unwanted data from your analyses

### 3. Detect fish schools in 3D

- Use image processing to smooth and filter data and define schools
- Detect and display fish schools in 3D in relationship to the seabed
- Extract a rich set of fish school parameters for species classification

### 4. Study fish behavior

- Vessel avoidance reactions and fish behavior can be studied from fixed and mobile transducer installations

### 5. Improve biomass estimates

- Use fish school volumes estimated from 3D measurements and densities measured from conventional echosounder to calculate school-based biomass
- Multibeam swaths substantially increase sampled volumes
- Compensate for vessel avoidance reactions

### 6. Flexible licensing

- Economic module for stationary applications, including DIDSON
- 2D and 3D sonar modules for mobile and advanced applications

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August 2007