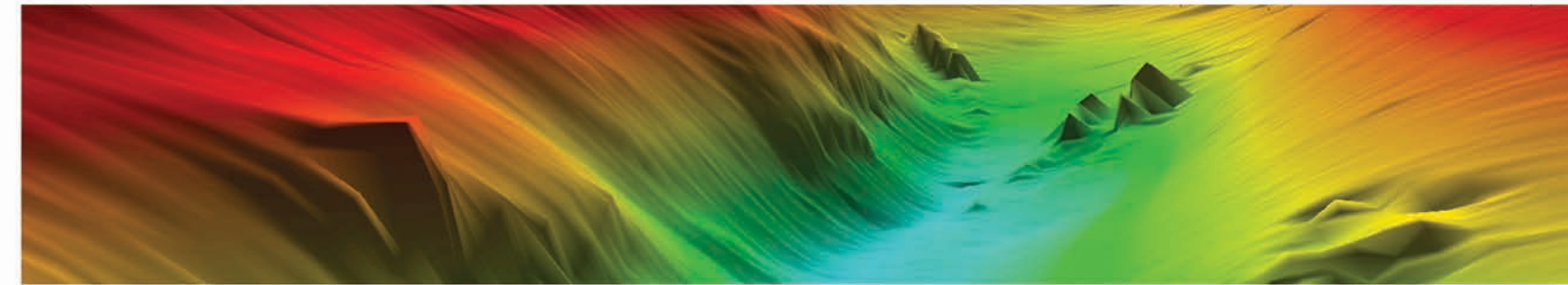# CleanSweep 3.5

Hydrographic Data Processing Software

CleanSweep version 3.5 is a complete hydrographic data processing package with a suite of tools with capabilities that improve control and enhance data. Designed to meet the dynamic needs of the marine surveying community, CleanSweep provides a fast, user-friendly environment for processing data from sidescan, multibeam, and swath interferometric systems.
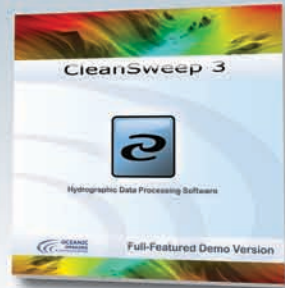
Full-Featured Demo Version

Contact us and ask for a copy of our full-featured CleanSweep 3.5 demo version and test it's capabilities for yourself. Sample projects include multibeam, sidescan, and interferometry datasets. **CleanSweep 3.5 is now available in English, Chinese, and Japanese!**

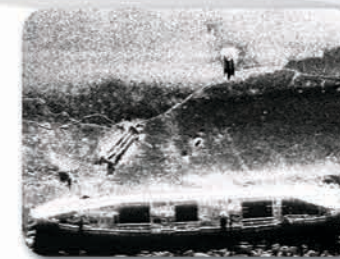Send an email to: info@oicinc.com

A key characteristic that makes CleanSweep a unique processing platform is the departure from time consuming, line-based interactivity typically required for processing survey data. Features such as track-to-track inheritance of processing parameters, user-defined quality filters, and automated calibration tools eliminate much of the time consuming elements of data processing. CleanSweep provides many advanced processing tools that help users control, preserve, and enhance data.
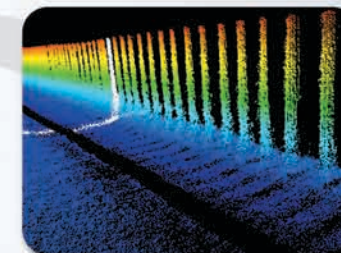
64-bit Version Now Available

High-quality sidescan processing for precise geocoding and targeting

Advanced multibeam and interferometry processing package

Feature-based navigation tools essential for AUV and towed surveys

Interactive GIS-like interface for intuitive processing and quality control

Language versions include English, Chinese, and Japanese
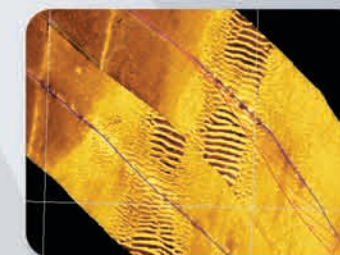
Oceanic Imaging Consultants, Inc.

Founded in 1993, OIC provides seafloor mapping software, systems and services to the world's military, government, commercial, and academic markets. With a solid understanding of the requirements of the hydrographic community and an emphasis on providing quality customer support, OIC should be your first stop for all of your seafloor mapping needs.
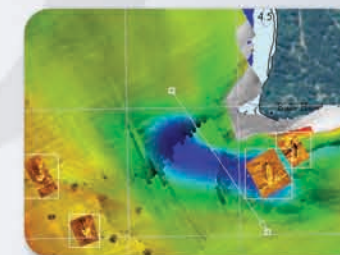
Accurate Positioning

- Automated bias and latency calibration tools
- Smoothing, de-spiking, and manual editing capabilities
- Feature-based navigation tools
- Versatile navigation settings provide support for all surveys, including AUV, deep towed, and submersibles
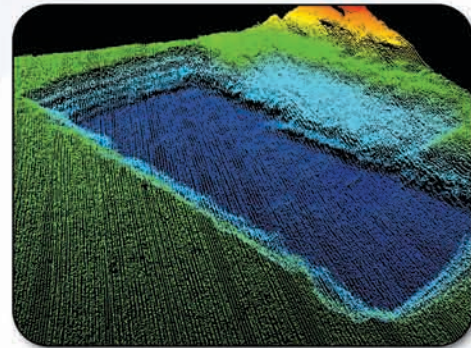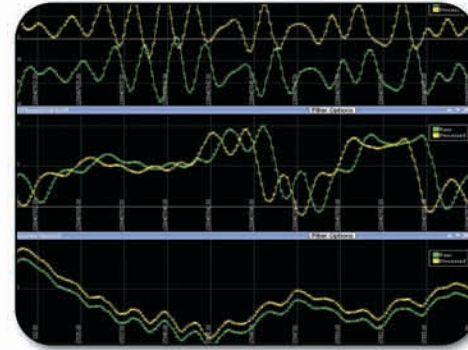
Seamless Processing

- Coupled 2D/3D data processing capability
- Attitude, tide and refraction corrections
- Full access to sensor quality flags

Superior Imagery

- Powerful processing tools make CleanSweep the benchmark for production of high-quality imagery
- Robust automatic bottom tracking algorithm
- Along- and across-track gain equalization tools

Innovative Tools

Dead Reckoning

CleanSweep's Re-NAV module is designed to correct errors in navigation associated with drift in a submerged platform's position estimation. Based on surface GPS fixes, the module automatically detects offsets in sensor position. Re-NAV gradually back-corrects the acquired navigation data between fixes.

Beam Angle Corrections

Under unique circumstances, a survey may result in data with along-track bathymetry artifacts in the outer beams; this is the result from insufficient sound velocity information or incorrect arrival angle measurements. CleanSweep's Beam Angle Correction tool uses the presumably accurate nadir data from one track to calculate angle corrections for an overlapping swath run at a perpendicular orientation.

Innovative Tools

InterNAV

CleanSweep's InterNAV tools allow users to adjust trackline navigation by identifying and matching features in overlapping swaths, or referencing to charted features with known positions. What makes InterNAV unique is that it progresses beyond static shifts of entire tracks, using the new information to recompute trackline navigation. This tool is ideally suited for AUV and towed surveys, or any time precise position information is not available.
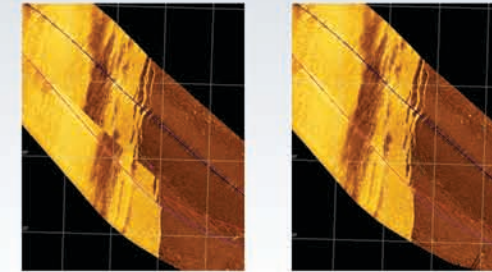
Imagery Normalization

The advanced sidescan processing capabilities available in CleanSweep provide unparalleled control for correction and management of sidescan sonar imagery. Powerful tools such as contrast enrichment, beam pattern correction, and hardware gain normalization allow users to rapidly produce high-quality final products.
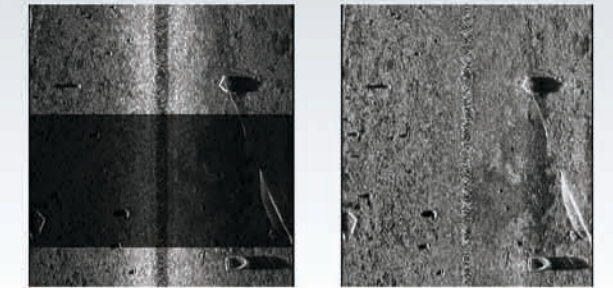
Advanced Targeting

- Target database provides an intuitive interface for mensuration, classification and organization
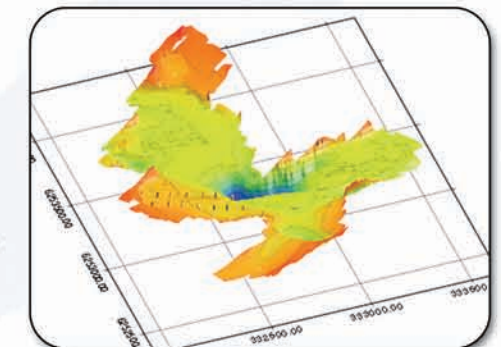- Export database to HTML document for inclusion in survey reports
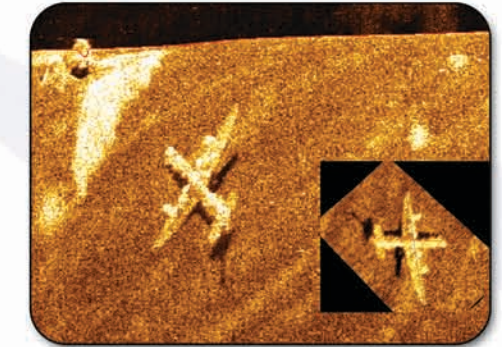
Integrated Solutions

- Bathymetry, sidescan, and spatial statistics display
- Direct link between processed mosaics and raw data
- Processed data interface supports a wide variety of background data types, e.g., DNC, BSB, JPEG, etc.
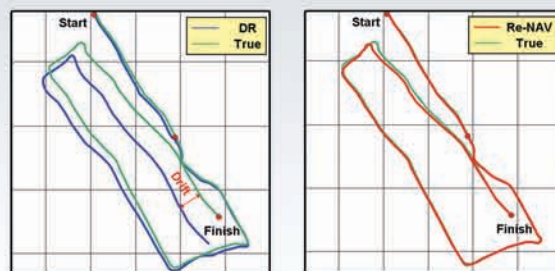
Multiple Outputs

- Export options include ASCII xyz, GeoTIFF (8 or 24 bit) GRD grid, OIC grid, printer ready PostScript files, HTML target report, ESRI-format grids and geodatabase

OCEANIC IMAGING CONSULTANTS