

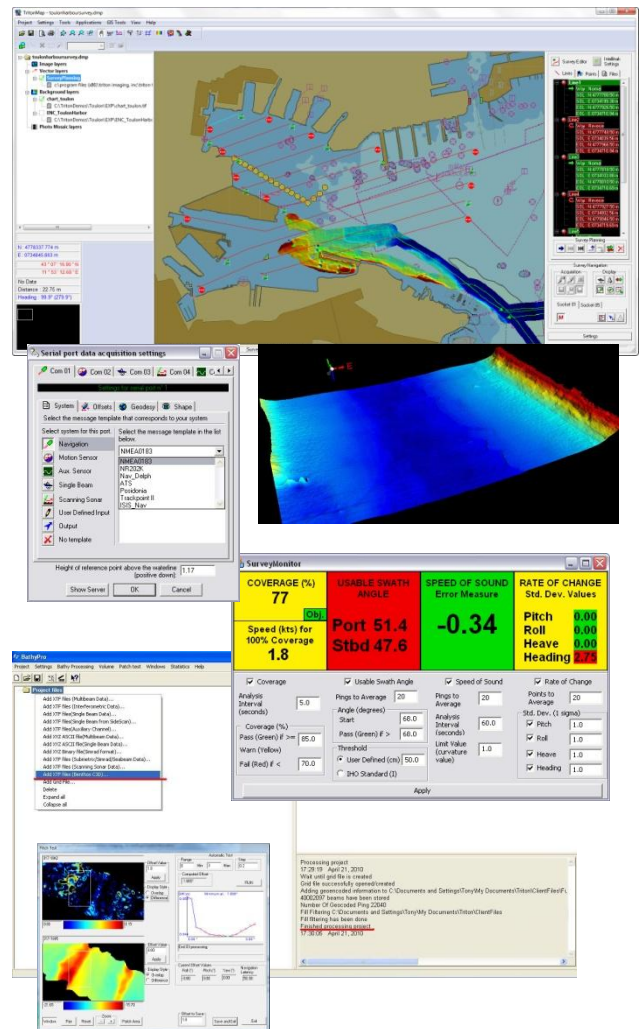
# Survey Pro-MBE™

Multibeam Survey Support and QC/Basic Processing

Triton's new SurveyPro-MBE package is an integrated collection of Triton software modules that supports the planning, execution, and real-time QC data processing for surveys conducted with multibeam or interferometric sonars. SurveyPro-MBE is designed to be used in conjunction with ISIS Offshore-MBE for data acquisition and provides everything needed to plan and conduct a high quality multibeam survey. This package provides data processing for both real-time QC analysis, and also for basic post-mission processing. SurveyPro-MBE includes Triton Nav, Real-Time Bathy, BathyPro, Triton Map, and 3DViz modules operating as an integrated unit with the following capabilities:

## SURVEY PLANNING AND REAL-TIME CONTROL

- Triton Nav**  
*Survey Planning*
  - Graphical survey line-plan creation
  - Map-based environment integrated with other geo-coded data (GeoTIFFs, DXF coastlines, Bathy DTMs)*Helmsman Display*
  - GPS and gyro input
  - Real-time display: distance to end of current line, start of next line, compass rose, distance and direction off line, course to waypoint, etc.
  - User-configurable alarms to monitor: GPS quality and age, vessel speed, and vessel attitude*Map Display*
  - Ship, fish position, heading and sonar range updated in real-time in Triton Map
- Real-Time Bathy**
  - Bathy data gridded and displayed in real-time during data acquisition
  - Bathy DTM continuously updated with vessel position



## BASIC BATHYMETRIC DATA PROCESSING

- BathyPro**
  - Off-line basic bathy processing module
  - Process bathymetric data from XTF or grid files
  - Patch Test Utility
  - Beam suppression
  - Tide and sound velocity processing
  - 2D swath editor for manual data cleaning
  - Grid file (DTM), contours, and soundings creation
- 3DViz**
  - 3D perspective viewing of bathymetry data
  - User-control of eye-point, sun illumination, etc.

- Triton Map**
  - Multi-layer, map-based display of bathy DTMs, contours, and soundings co-registered with other geo-coded survey data
  - Export DTMs as GeoTIFF images or xyz grid files

