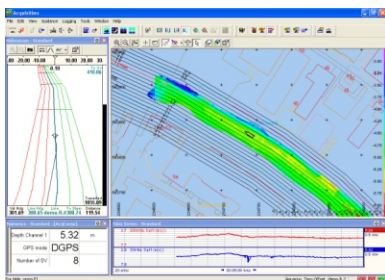## PDS2000-Singlebeam

- **RESON products for accurate, efficient surveys**

- **Full support for singlebeam surveys**

- **Fast Real-time 3D visualisation**

- **Line-based and position editor**

- **Multiline editor**

- **Volume calculations**

- **Plot module**

- **Easy to upgrade to other applications**

RESON is a world leader in singlebeam and multibeam echosounders, dredge guidance systems, and hydrographic software.

RESON's in-house developed PDS2000 is an easy to use software package for hydrographic surveys. It is available for different applications tailored to specific operations and covers the entire project from acquisition to end product.

PDS2000 for Singlebeam Surveys provides the best functionality for surveyor and helmsman to carry out the survey efficiently. Online numerous displays are available to monitor the quality and the progress of the survey. A 3D helmsman display shows the selected track guidance line in 3D. The progress of your survey is registered in an online updated, color-coded Digital Terrain Model (DTM). Alarms warn you for shallow water, loss of RTK and other user-definable settings. A profile view shows the measured depth and the designed depth together with your last survey.

For processing, a line based editor shows the depths relative to the sailed line together with the position editor, which shows the sailed lines on a DXF chart and C-map background. All editing tools such as delete, undelete, smooth, move, interpolate and spike finding are available. In the editor the processor can compare different files of the same line. Data can be used to create grid models, calculate volumes and generate charts and reports.

PDS2000 for Singlebeam integrates seamlessly with other PDS2000 applications. Expansion to Multibeam surveys is smooth as most modules have the same user interface. RESON supplies singlebeam echosounders and PDS2000 software.

PDS2000
Singlebeam Application

GENERAL
- Complete software suite for acquisition, processing, charting and dredge guidance
- User friendly
- Modular set up
- Easy to adapt to your project

PROJECT SET UP
- Wizard guides you through the setup
- Configuration of all equipment and lay-out of the vessel
- Import of DXF file for Vessel shape

PLANNING
- Create track guidance lines, waypoints and routes
- Multiple DXF charts displayed simultaneously
- Import design model from a 3D-DXF file
- Use another DTM as design

INTERFACING
- All common positioning systems
- Most common Singlebeam echosounders
- Compass
- Motion sensors
- Sound velocity probe
- Tide
- Configurable output

SURVEY OPERATION
- Acquisition, time stamping and logging of all sensors in a single file
- Electronic Navigation chart
- DXF files, C-MAP (optional), Geo tiff
- Shows DTM with corrected depths and annotated values and/or coloured cells.
- Profile displays show your depths and design
- Planview with progress of survey
- 3D helmsman view
- Status views of equipment, logging and alarms
- Online correction for:
    - Heave, Roll and Pitch of vessel
    - Offsets
    - RTK height or tidal information

PROCESSING
- Position editor shows position with DXF, Geotiff and optionally C-map in background
- Linebased editor shows data relative to sailed line
- Multiline editor to compare data on the same track guidance line
- Tidal data editor
- All editors show the original position together with edited and removed data
- All editors have the following functions:
    - Delete/Undelete
    - Move / Smooth
    - Interpolate / Find spikes
    - UNDO / REDO function
- All editors are Synchronised
- Tide is applied, reapplied and removed without replay of the data
- New models are generated direct and fast from the data file
- Direct generation of 3D model from DTM
- Filter DTM data, view depths, standard deviations and hits per cell, interpolate functions
- 3D TIN modeling

CHARTING
- What you see, is what you get
- Generation of your chart in minutes using templates
- Multiple planviews / Multiple profiles
- Plot of Depths / Contours / Text images
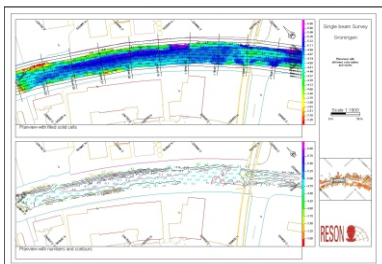- Quickplot of profiles

VOLUME COMPUTATION
- Compute volumes and generate reports
- Volumes computed from DTM gridmodel
- Volumes direct from datafile
- Design model can be:
- Profile design
- 3D model from 3D dxf format

EXPORT
- Export data in various formats (CSV, Excel, XYZ, ESRI grid)

RESON One supplier for your project solution

www.reson.com