ENC BATHYMETRY PLOTTER

PRODUCT DESCRIPTION

The ENC Bathymetry Plotter is used to create contour lines and selected soundings for incorporation into ENCs or other digital hydrographic chart products.

The contouring process is applied to a Nautical Elevation Model (not to the source data). Users have to set a few parameters (e.g. contour levels) only. The resulting contour lines have a smooth appearance and do not require any further generalization. Moreover, ENC Bathymetry Plotter supports the creation of selected soundings at a configurable density.

PRODUCT HIGHLIGHTS

- Straightforward workflow from data import via model creation to export of results
- Import of gridded bathymetry files (e.g. S-102, BAG) or xyz PointCloud data
- Easy to use display controls, 3D display, raster backdrops
- Support of multiple colour palettes for optimal data presentation
- Detailed statistics about input data and processing results
- Shoal-biased smoothing and generalization process
- Fast Contour Generation from Nautical Elevation Model
- Sounding selection function
- Generation of detailed processing report and statistics in PDF format
- Command line mode for batch operations

Product Sheet 1.0 - All features and specifications subject to change without notice.

* The image was created from data provided by courtesy of NOAA.
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INPUT DATA
ENC Bathymetry Plotter reads gridded bathymetry dataset files in various formats (BAG, ESRI ASCII Grid, etc.) and xyz point cloud data.
- Selector for vertical orientation (up/down) of input data
- Direct import of gridded bathymetry files and Nautical Elevation Models from previous sessions
- Preview of xyz input file
- Support of different separators
- Definition of grid size and interpolation parameters
- Optional grid interpolation
- Easy column mapping

DATA VISUALIZATION
ENC Bathymetry Plotter provides multiple display controls and many options to customize the data presentation.
- Support of multiple colour palettes. Graduation and gradient colour mode.
- Display of geo-referenced raster backdrops
- 3D display and multiple display filters
- Separate display of source data and Nautical Elevation Model
- Display of difference model

NAUTICAL ELEVATION MODEL
ENC Bathymetry Plotter transforms the input data into a Nautical Elevation Model. Users can set the processing parameters conveniently in a special configuration widget.
- Strength of generalization can be defined individually for different vertical levels
- Dynamic presentation of Nautical Elevation Model preview in profile viewer
- Automatic and interactive creation of profiles for preview in profile viewer
- Generation of Nautical Elevation Model according to user defined parameters.

CONTOURING AND SOUNCING SELECTION
Users can specify which contours they want to process from the Nautical Elevation Model. Selected soundings are derived from the source data. Sounding density is defined accordingly.
- Easy definition of contouring levels (individual values or via start value and constant interval)
- Optional contour optimization parameters to reduce number of line vertices and to avoid small closed contours
- Definition of sounding optimization parameters to reduce number of line vertices and to avoid small closed contours
- Calculation of deepest and shallowest sounding per selected candidate

TOOLS AND EXTRAS
ENC Bathymetry Plotter integrates tools for data analysis and quality control.
- Support of EPSG Coordinate Reference System definitions
- Distance Measuring
- Profile drawing function and dedicated profile visualization window
- Automatic generation of data coverage polygon
- Statistics tool
- Log book functionality
- Memory usage monitoring

DATA EXPORT
ENC Bathymetry Plotter supports individual export of bathymetric features, surface models, and a report.
- Contours, soundings, depth areas and coverage polygon
- Nautical Elevation Model and difference model
- Summary report

SUPPORTED FORMATS
- Source data read: S-102, BAG (* .bag), ESRI Grid (* .grd), Surfer 7 Grid (* .grd), UGRID NetCDF (* .nc), ASCII xyz point cloud (* .txt, *.dat, *.asc, *.xyz)
- Backdrop: Geo-referenced images (gif, tif, jpeg, png, bmp)
- Export of bathymetric features: S-57 (* .000), ESRI shape (* .shp)
- Export of surface models: ESRI ASCII grid (* .grd)
- Export of report: PDF (* .pdf)

SUPPORTED OPERATING SYSTEMS
- Windows 7, 8, 10 (32bit, 64bit)

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