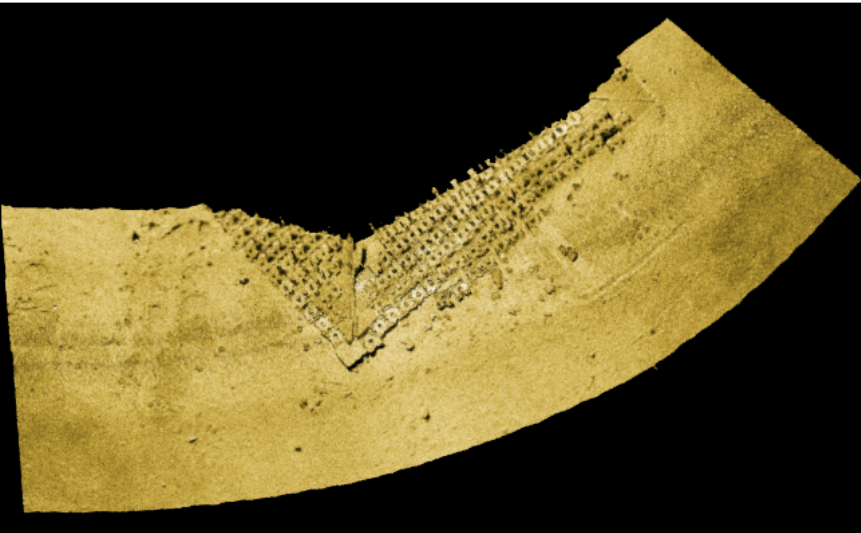# Sidescan Sonar Data Processing Software
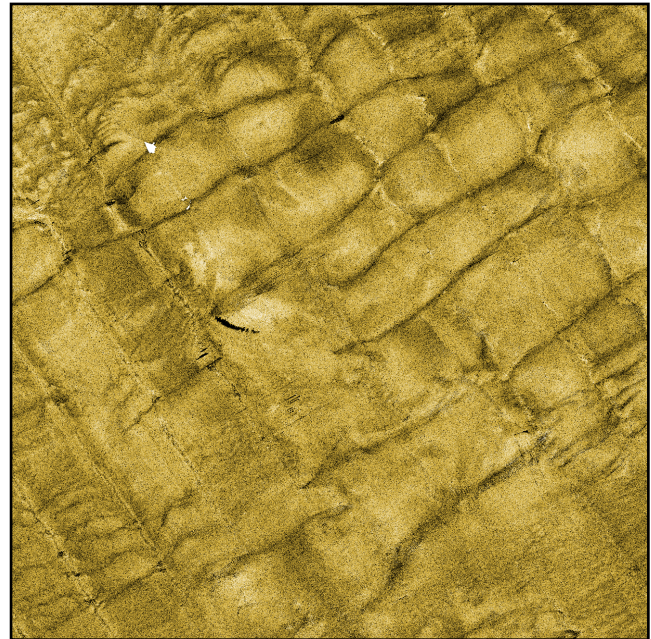
LampyridEye8
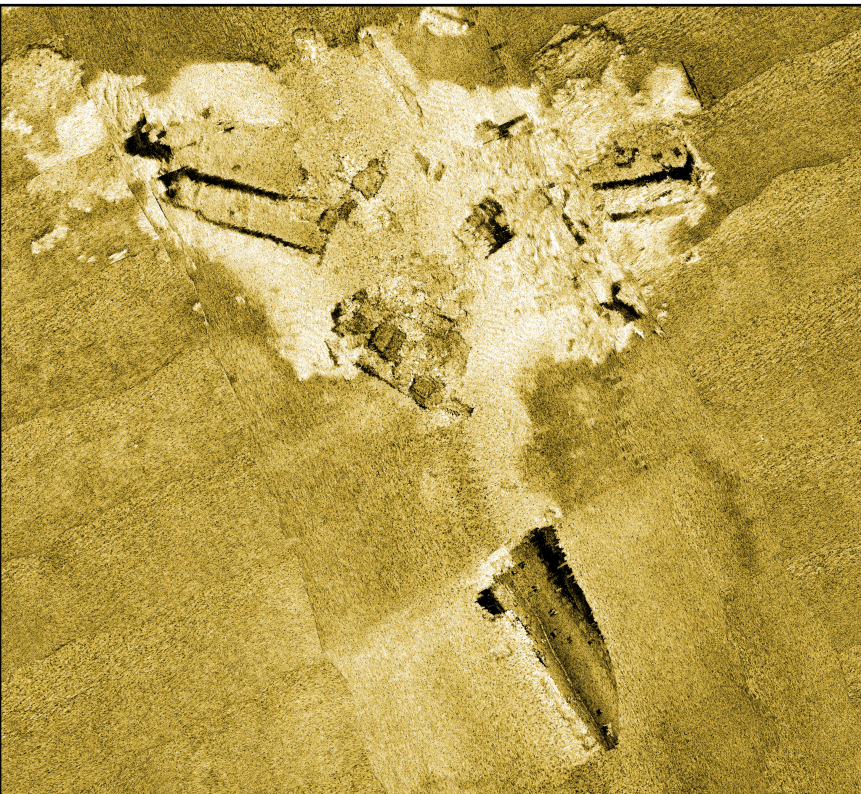
This software is making a mosaic image
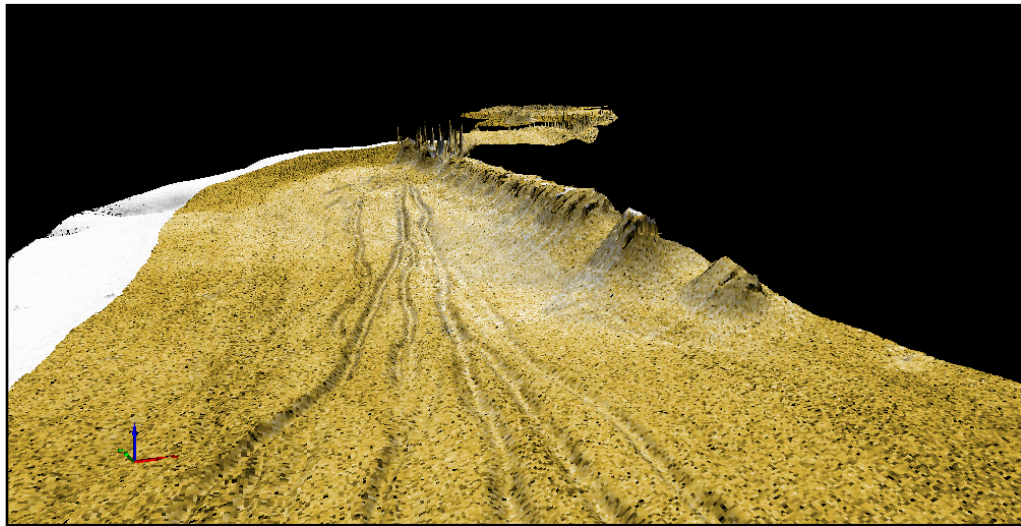from acoustic information acquired by the side-scan sonar.

Structure

Sand Wave

Sunken Ship

◆ Supports various side scan data formats

◆ Visible track editor

◆ Various correction functions
　for physical data

◆ Handy tools to make mosaic images

◆ Displays and outputs high-resolution
　SSS (Side Scan Sonar) images

OHTI

LampyridEye8

3D mosaic image overlapped on the seafloor topography data by Visual3DX-6*3

Optimization of graphical user interface

The optimized user interfaces such as a ribbon bar and a file view improve operational efficiency.

Import Format

New KMALL, XTF, XSE, all, mb41, asd, acf, hsx, JSF, S7K, 81s, 872, sdf*1

Reading of external files

It reads the position information, motion information, and sensor water depth information from an external file, and corrected.

Information sharing

- Project files sharing with MarineDiscovery7*2
- SSS images are easy to import into Visual3DX-6*3 and other GIS software

Track Correction

- Display of track information (ship and tow fish)
- Manual or Auto editing of track (linear interpolation, spline interpolation)

Quality Control

- Browsing of data for each ping (e.g. date and time, location, 3-axis information, altitude, water depth, gain, pixel size, etc.)
- Graph displays of sensor information
- Various correction for each file (e.g. level, radiometric, magnetic deviation, bathymetric distortion, etc.)
- Batch Calculation of under water depth for each ping from image

New - New function for cleaning noise (angle filter, add flags for noise)

Display Settings

- Three kinds of map projection (Mercator, TM and UTM) corresponding to the rotating coordinate by any origin
- Scale Settings (1/1000,1/2500,1/5000,1/10000,1/25000,1/50000,1/100000, 1/200000,1/500000,1/1000000)
- Display in high resolution commensurate with enormous side scan data (150,180,300,600,1200dip,up to a maximum resolution of the input data)
- Selectable Color display (the mosaic image color can be displayed)

SSS Image View

- Geometric correction by using motion or track data
- Method of display image is selectable (e.g. raw, interpolation, averaging)
- Easy to generate mosaic images (image display order is selectable e.g. port, starboard, and time axis respectively)
- Import of contour images (Overlapping of contour images created by MarineDiscovery on mosaic images is available)
- Distance mesure on mosaic images.

New - Importing color palettes files (clr of ESRI and cpt).

Export File

- Bitmap, GeoTiff, PostScript

New - GeoTiff of digital number(32bit float)
- CSV files of latitude, longitude, amplitude.

Operating environment

PC	OS	Windows7 SP1, or later
	CPU	Intel Core i7 2600K, or more
	Memory	8 GB, or more
	Hard Disk	50 G B, or more (500 G B, or more recommended)
	Graphics board	GeForce GT610 or Radeon HD6450, or more
	Peripherals	CD-ROM, Keyboard, mouse
Screen	Resolution	1280×1024, or higher
	number of colors	True Color 32 bits, or more

*1.Please inquire about other formats and models.

*2.MarineDiscovery7 is our product, multibeam data processing software.

*3.Visual3DX-6 is our product, 3D visualization software.