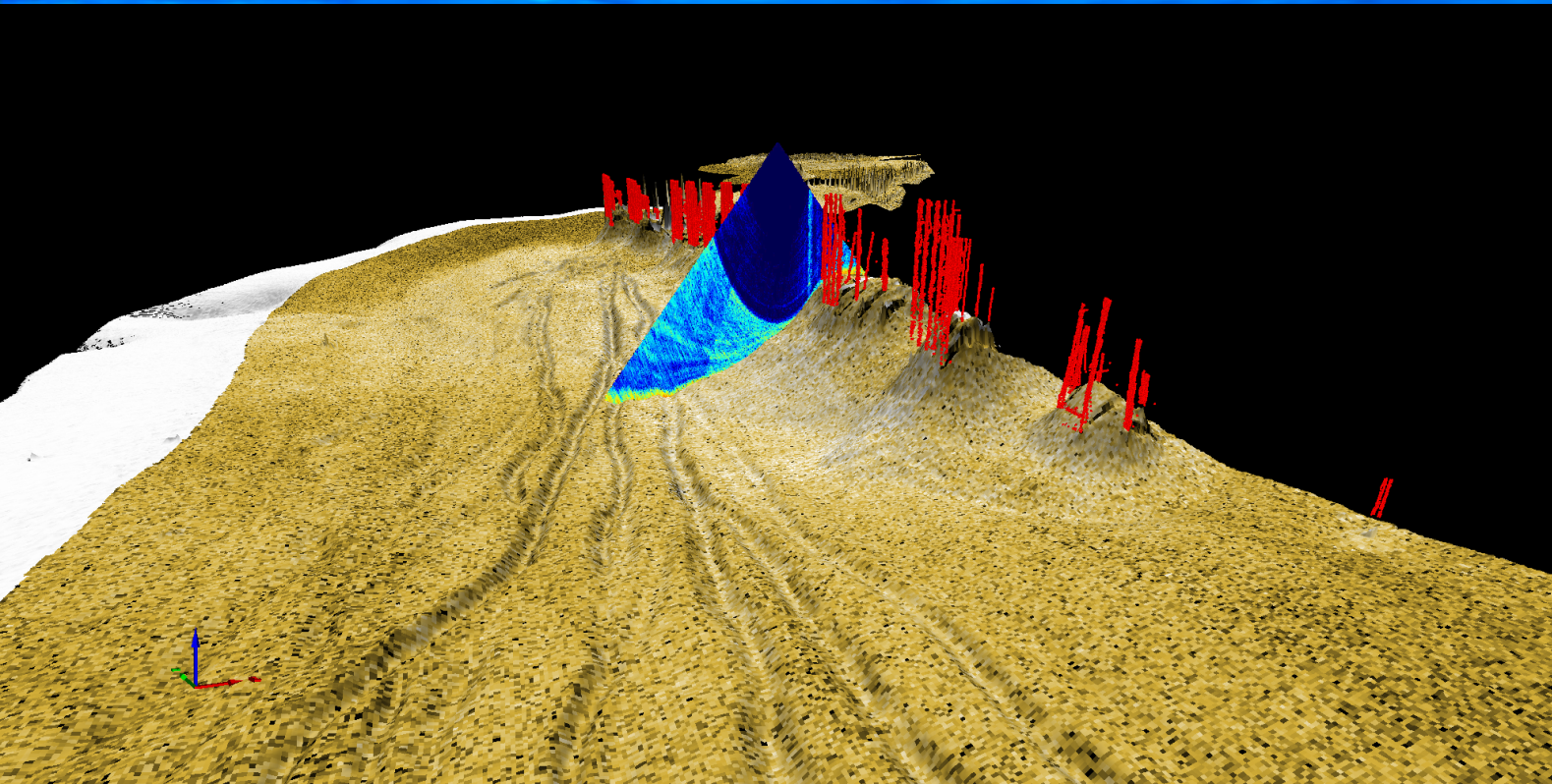


3D Visualization Software for Marine Resources and Geoscience



Main Features of **Visual3DX-7**

This software visualizes bathymetric data obtained by multibeam echo sounders, sidescan sonar images, gravity data, magnetic data, physical data, and SBP images obtained by subbottom profilers in the 3-dimensional (3D) space.

- ★ Displays complex geospatial datasets in the 3D space
- ★ Changes image scale (extension reduction and rotation), and also moving viewpoint like a flight simulator.
- ★ Exports high-resolution bitmap images
- ★ Creates animations by easy and visible operation

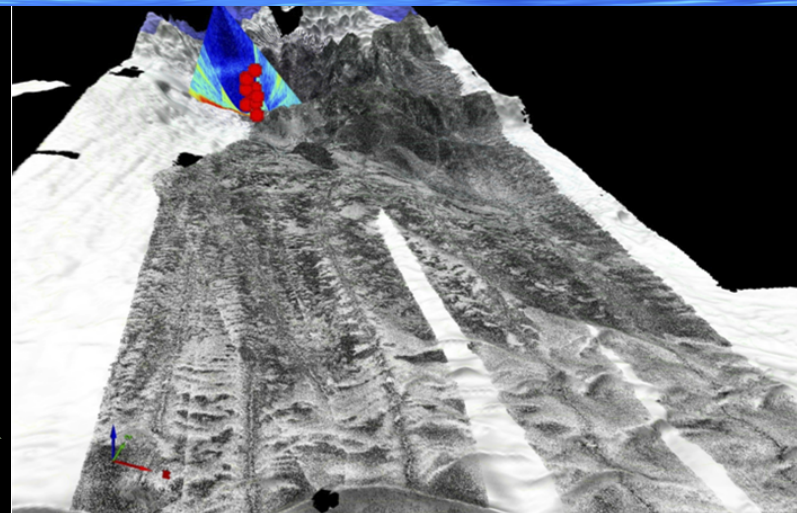
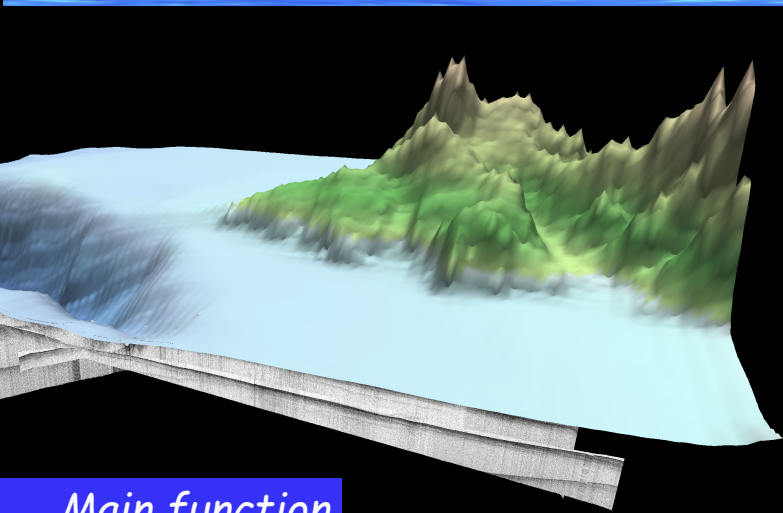
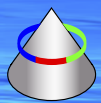
Main Use of **Visual3DX-7**

3D still images and animations by Visual3DX-7 recommend for

- ◆ Presentation at conferences
- ◆ Journal manuscript
- ◆ Exhibitions, Web pages

In a word, Visual3DX-7 is the ideal to bundle for Geospatial data





Main function

■ 3D view of observation and analysis data

- Displays 3D view by using Mercator, TM or Lambert projection.
- Selectable expression for gravity and magnetic field data with 3D stack or color coding.
- Sidescan and remote sensing images can be overlaid on the bathymetry surface.
- SBP images can be set 0-100% transparency.
- Displays multiple boundary surfaces in 3D view.

● Image optimization

- Fix resolution mode
- Adjustable resolution mode (optimal resolution for distance from the viewpoint)

In each mode, optimized display can be achieved by calculating available amount of graphic board memory.

● Changing image scale, and moving viewpoint as if like a flight simulator

- Displays flying view by using a keyboard and mouse as a control lever.

■ Display of a cross-sectional view

- Set any of the section line, and displays a cross-sectional view.

■ Exporting high-resolution images (camera output function)

- Exports high resolution still images keeping resolution of an input file.

■ Creating animation

- Reference frame of animation viewpoint can be created in a main window.
- Editing time interval of the animation, mouse operation or keyboard input can be selected.
- Editing animation viewpoint, heading, angle and altitude, mouse operation, keyboard input, or text input can be selected.
- Animation viewpoint can be adjusted visible.
- Animation route can be confirmed in the ground plan and cross section.
- The size of output images can be set up to 1280 × 960 pixels.
- Frame rate (output frames/second) can be set 1/s - 60/s.

■ Other various functions

- Manage input file for each layer
 - Setting and saving display range, color and transparent of input files. Maximum of layers is 50.
- By the coloring table editing function, edit the color of the input data on the screen and save
 - Import color palette file (*.cpt) created by Generic Mapping Tools (GMT)
- Display of mark and placard
 - Setting placards position, size, text, and color.
- The 3D information window, to manage the following information
 - Speed control of flight simulator
 - Latitude, longitude, altitude, heading, pitch and roll of viewpoint
 - Light source setting
 - Drawing back of topography

- Visible/invisible for Navigator
- Vertical exaggeration
- 3D frame

■ Importable data

- Bathymetric data, Boundary surface data : NetCDF
- Gravity, geomagnetic data : NetCDF
- Geophysical information : XYZ, CSV
- SSS images, Remote sensing images : jpg or bmp
- SBP images, Water column images : jpg or bmp
- Mechanism : strike, dip, rake bent

New Verocity structure : Handvel, CSV

New Coredata : OBJ, CSV

■ Export data

- Still image : BMP, 3DPDF
- Movei : AVI

■ Operating environment

- OS : Microsoft Windows7 SP1 or later (64 bit)
- CPU : Core i7 2600K or more
- Memory : 8 GB or more Hard disk : 50 GB or more
- Graphic board : Radeon HD6450 or more (DirectX 9.0c or later)
- Monitor : 1280 x 1024 or higher resolution,
- number of colors : True Color 32 bits or more

