



### **DELPH**

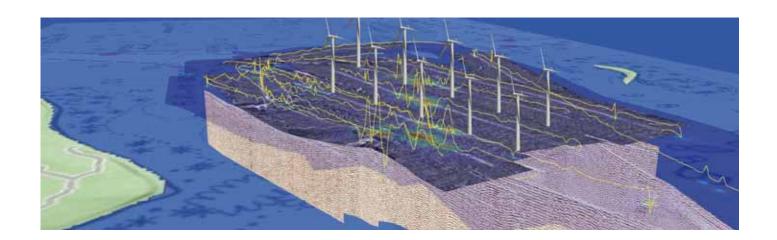
#### SEABED MAPPING SOFTWARE

Geophysical surveys are more and more challenging. To characterize the seabed and subsoil on very large areas, look for the presence of objects, structures or potential hazards, each equipment brings complementary information. By the end, all the collected data needs to be integrated to increase the level of understanding in a multi-sensor dataset.

DELPH Acquisition software is a unified data logging solution to safely monitor and record Side-Scan Sonar, Seismic and Sub-Bottom Profiler data in a resolutely simplified user-interface. It focuses on reliability and online Q.C.

Because multi-sensor datasets not only correlate in time, but in space, DELPH Interpretation software efficiently turns geophysical data into geographic information layers that seamlessly integrate in DELPH 3D geographic visualization and any other Geographical Information System. The common user interface and "global viewer" approach to handle sonar and sub-bottom data brings the user a dedicated tool to process and analyze data with a major gain in productivity.

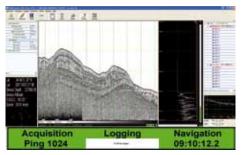
Forget about the traditional scrolling approach, directly access data on any scale, always geo-referenced.

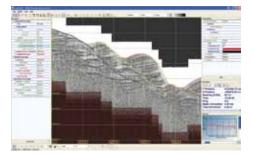


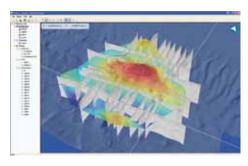
# DELPH SEISMIC SEABED MAPPING SOFTWARE



DELPH Seismic is the most complete acquisition, processing and interpretation software package designed to provide geologists and geophysicists with easy access to ALL data collected from High-Resolution Seismic Systems and Sub-Bottom Profilers. It is the ideal solution for use in all types of surveys.







#### **DELPH SEISMIC ACQUISITION**

is a robust data logger for High-Resolution Seismic and Sub-Bottom profilers. Easy setup and raw data QC functions ensure that optimal data quality is safely recorded.

#### **BENEFITS:**

- Topside software for:
  - 24 bits Analog Seismic
  - Digital Sub-Bottom Profilers
- Master & Slave acquisition modes
- Raw data recording to XTF and SEGY
- Quality Control Indicators

#### **DELPH SEISMIC INTERPRETATION**

is a dedicated processing, interpretation and mapping environment for any type of industry-standard sub-bottom profiler and high-resolution seismic data. DELPH Seismic Interpretation embeds high-level processing and interpretation functions. Its 2D profile view and 3D geographic visualization provide global QC and analysis of complete datasets.

#### BENEFITS:

- Opened to all SEGY and XTF formats
- Global Profile View
- Zoom & Pan capabilities
- Full data processing & vertical correction
- Processed Data available in SEGY
- Complete interpretation tools

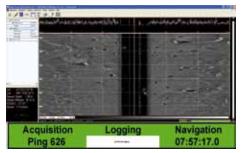
- Batch Interpretation Reporting
- Automatic horizon tracking
- Cross Sections display & browsing
- 3D Interpretation & horizon surfaces
- 3D Fence diagram generation
- Navigation & Background layers

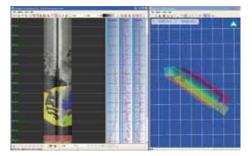
Need a fully integrated sub-bottom profiling solution? ECHOES sub-bottom profilers also come with DELPH Seismic.

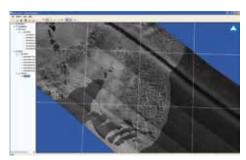
## **DELPH SONAR** SEABED MAPPING SOFTWARE



DELPH Sonar is a complete acquisition, processing and interpretation software designed to easily perform accurate and productive side-scan sonar surveys. Providing an optimal Q.C. at any stage and relying on DELPH powerful workflow and ease-of-use, side-scan sonar mapping has never been so fast.







#### **DELPH SONAR ACQUISITION**

interfaces to most analog and digital side-scan sonars. With a dedicated interface for each it provides a unified data logger for recording raw data in industry standard XTF format.

#### **BENEFITS:**

- Topside software for:
  - 16/24 bits Analog Sonars
  - Digital Side-Scan Sonars

- Single and Dual Frequency
- Raw data recording to XTF format
- Quality Control Indicators

#### **DELPH SONAR INTERPRETATION**

is a dedicated tool for processing, analyzing and mapping any side-scan sonar data. Highly productive, it embeds high-level processing and benefits from DELPH global viewing approach. The 2D profile view and 3D geographic visualization provide global QC and analysis of complete datasets.

#### BENEFITS:

- Opened to industry standard XTF format
- Global Profile View
- Zoom & Pan capabilities
- Full & Fast data processing
- Fine bottom tracking tools
- Annotations & drawing tools

- Batch Contact Reporting
- Contact Management
- Coverage Map Generation
- Contact Map Generation
- Batch Mosaicking in geoTIFF
- Mosaic comparison tools

Need a quick & easy sonar mapping solution?
FLICS side-scan sonars also come with DELPH Sonar.

# DELPH MAG

SEABED MAPPING SOFTWARE



DELPH Mag Locator is a unique operational solution for the mapping of buried objects: in a few comprehensive steps, it filters and maps magnetic anomalies. Although requiring no prior expertise in magnetic science, it provides an accurate magnetic anomaly map to locate magnetic sources.

#### **DELPH MAG LOCATOR**

#### STEP 1:

Any magnetometer or gradiometer data can be imported from ASCII records. The data is indexed and the navigation filtered.

#### STEP 2:

Due to field variations related to diurnal variations, environmental noise or survey conditions, the magnetic data first needs to be filtered, either from a reference station record or using a patented spatial filtering algorithm to preserve anomalies that converge spatially.

#### STEP 3:

The magnetic data is gridded into a surface model to produce magnetic anomaly maps as well as optional layers representing the analytic signal and reduced to the pole anomalies.

The magnetic maps can be quickly generated and superposed to the side-scan mosaic, the seismic or sub-bottom profiles and any other geographic information. With many available display options such as transparency, vertical elevation and offsets the eye-catching maps bring the focus to the surveyed objects, UXOs or wrecks. In such case the use of a magnetometer can boost the analysis of large scale sonar mosaics, particularly when the seabed is covered by boulders and rocky areas.

