

Isis Sidescan Acquisition Software

This complete software suite has the options of logging the sidescan and the sub-bottom profiler data, process the data and produce a mosaic image of the seabed as shown in the figure. It has the ability to export these images in a geotiff format which can be read directly by any GIS software, like MapInfo.



ISIS online mosaic screenshot.

ISIS continues to be the most advanced sidescan sonar acquisition system available today. Isis® Sonar™ is the tool of choice for a variety of applications including: mine-hunting, hydrography, archaeology, environmental studies, oilfield engineering, civil engineering, oceanography, and law enforcement.

Real-time Sensor Quality Control

ISIS offers a wealth of display options to ensure high data quality. Typical windows for monitoring raw sensor information include a waterfall display for the sonar imagery, a signal voltage display for each incoming ping, and a parameter display for navigation, motion sensor, etc., and file storage. A real-time link with TEI TritonMap™ provides for on-line mosaic production, an invaluable tool for assessing seabed coverage and the quality of geo-referencing between adjacent lines (figure 6).

Reliable, Precise Sonar Data Acquisition

ISIS systems are active throughout the world, incorporating over 20 years of field experience in hardware and software design. Incoming sidescan sonar and ancillary sensor data are time-stamped to

millisecond accuracy, thereby ensuring the final data products can be properly corrected during processing. Wide Compatibility,

Compatible with All Sidescan Sonars

ISIS interfaces with any sidescan sonar available today. Analogue or digital, regardless of the manufacturer -- we offer a custom interface that is intuitive to set up and is designed around the sonar's communication requirements. All data are stored in TEI's open XTF (eXtended Triton Format), an industry-standard, non-proprietary format.

Comprehensive Data Correction & Analysis

Numerous tools exist within ISIS for correcting and analyzing data and generating reports. Bottom-tracking, time-varying gain, slant range correction, and layback may all be applied to the imagery on-screen without affecting the raw data being logged. Events, scale lines, and notes can be associated with the imagery. A powerful ASCII report tool allows practically any information stored in the XTF file to be extracted in user-defined formats.

GIS Mosaicing

A mosaicing link exists between Isis® Sonar™ and TEI's TritonMap™ GIS product. These mosaics may be overlain on navigation charts or other background information. Contours, navigation hazards, or contacts may be overlain on the mosaics as they are being built.