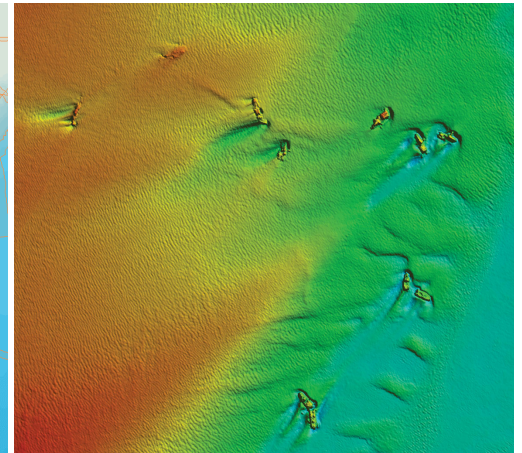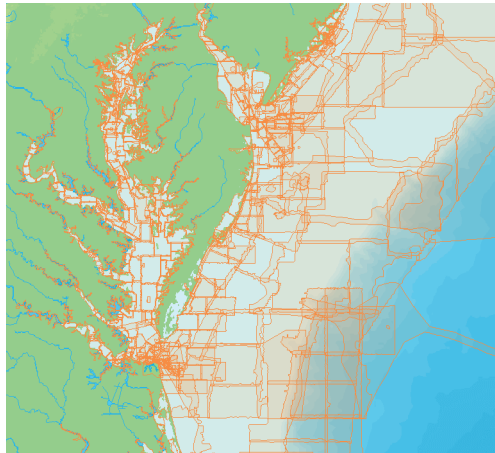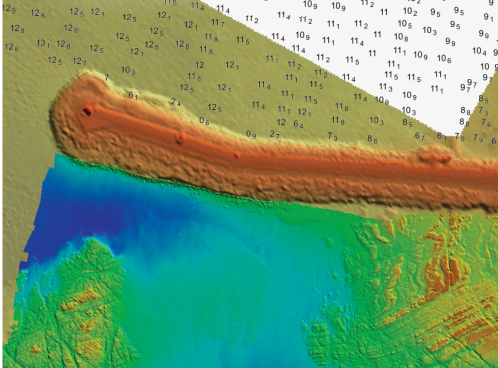CARIS
Bathy DataBASE

caris®
www.caris.com

Manage all your bathymetry assets together, regardless of file size or data source, using the latest database server technology and sophisticated client applications.

Multibeam, singlebeam, LiDAR, and historical soundings from CARIS systems or from 3rd party software packages can be brought into this powerful application and be seamlessly managed for effective validation, analysis and product extraction.

BATHYMETRIC DATA MANAGEMENT FOR THE FUTURE

CARIS
Bathy DataBASE

System Architecture

The Bathy DataBASE is comprised of Client and Server software. The main client application is the BASE Manager. This acts as the primary interface to the Bathy DataBASE Server and allows data to be submitted, retrieved and analyzed. The Bathy DataBASE Server provides the processing power, the scaleable storage mechanisms and robust database administration.

Scaleable Solution

The volume of data produced by modern sensors is ever growing. As a response to this trend CARIS developed the CSAR™ file format, which allows huge high-resolution surfaces and point clouds to be managed alongside sparser data in a highly efficient manner. With the number of people using bathymetric data growing, a client server environment with relational data management is the

ideal solution to handle today's data access demands.

Relational Database Support

Bathy DataBASE works with Oracle® Spatial 11g, utilizing the GeoRaster and Geo Point Cloud data structures for storing the CSAR data. Oracle Spatial has been specifically designed to meet the needs of advanced geographic information system applications and is recognized as offering industry-leading security, performance and scalability for mission-critical spatial information assets. The PostGreSQL database with PostGIS extensions is also offered, and provides an open source database option as an alternative to Oracle, with a lower cost of ownership and implementation.

Client Applications

The BASE Manager allows a wide range of common gridded data formats

including ESRI Grids, USGS DEMs, BAG, and HIPS BASE Surfaces to be pushed into the Bathy DataBASE Server for storage. Original data sources in ASCII XYZ, GSF, LAS can be added as attachments to the stored surface for easy access and traceability. Once in the database, the BASE Manager provides many GIS tools to query, manipulate, visualize, analyze and derive products from the stored data.

The Engineering Analysis Module works in conjunction with the BASE Manager Client and Bathy DataBASE Server, and provides essential engineering extensions for port and waterway management.

CARIS | THE MARINE GIS EXPERTS

BATHY DATABASE

Client Applications *(Continued)*

Spatial Fusion® Enterprise works closely with Bathy DataBASE and provides a sophisticated mechanism to publish bathymetry data to the web using OGC® standards. The Spatial Fusion Viewer can be used as a lightweight client to browse and query the contents of your Bathy DataBASE.

Easy Administration

The Bathy DataBASE Server Administration Tools provide intuitive configuration and control over the Bathy DataBASE Server. These tools allow for user and role management, logging control, back up scheduling, database creation and other database administrative processes.

Metadata Management

When importing and submitting data into the system, metadata can be automatically captured from the source data or manually entered. This information is stored in a metadata profile that is easily customizable to meet the specific needs of the organization or country in question. The metadata can be used to search for bathymetry data within the database and can provide the criteria for data manipulation and analysis. Metadata compliant with the ISO 19115 standard can accompany data exported from the system so that the data can be used by others with confidence.

System Extensibility

A series of customizable batch tools and programming interfaces aid the loading of data and metadata from legacy database systems and file repositories.

Ping-to-Chart™

The Bathy DataBASE is a powerful system for the management and analysis of bathymetry and 3D data. When used in conjunction with other Ping-to-Chart products, Bathy DataBASE becomes your dedicated survey repository, feeding your production and discovery workflows with bathymetric features. CARIS offers the functionality to streamline your operation, from Ping-to-Chart.

FOR MORE INFORMATION VISIT OUR WEBSITE | WWW.CARIS.COM