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CARIS

HIPS_{and} SIPS

Trust the Most Comprehensive
Hydrographic Data Processing System



CARIS

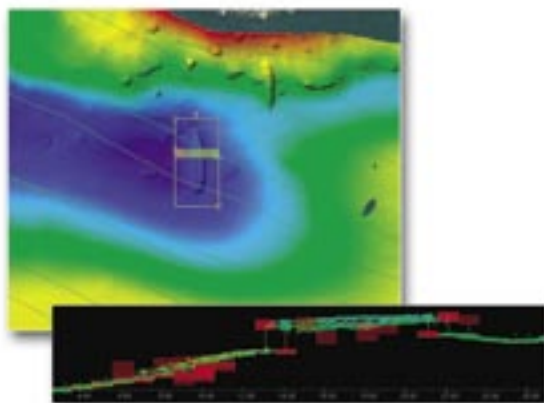
HIPS and SIPS

Trust the Most Comprehensive Hydrographic Data Processing System

CARIS HIPS and SIPS is a suite of comprehensive hydrographic data processing tools. Recognized for over ten years in the marine community as the number one software solution for processing and preparing hydrographic survey data, CARIS HIPS and SIPS is suited for all marine needs. No matter what the application—the reliability and usability of your cleaned bathymetric and side scan sonar survey data is critical. Choose CARIS HIPS for processing large bathymetric datasets, and CARIS SIPS for processing side scan sonar imagery and multibeam backscatter data.

Purpose-built Processing

Area and line-based cleaning, 3-D visualization, and fully integrated sensor-cleaning tools are just a few of the features that clearly suggest one thing: CARIS HIPS and SIPS is a purpose-built processing and production system. Supporting over 40 industry formats and sonar systems, CARIS HIPS and SIPS can process data from virtually any system configuration.



Highly evolved sonar data production tools add stability and reliability to any workflow.

Information You Can Use

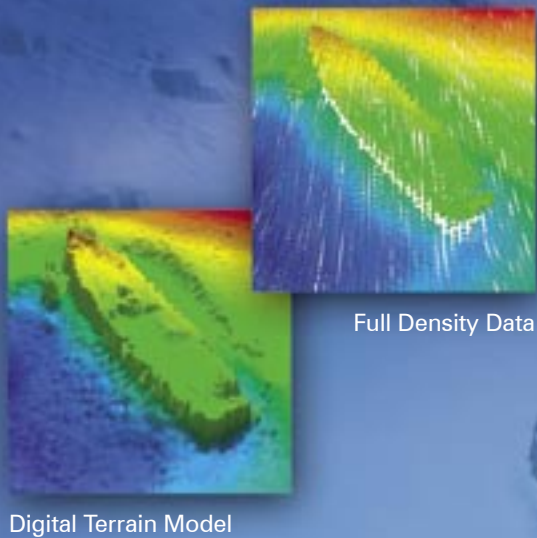
Digital Terrain Models (DTMs), mosaics, tile sets, contours, depth areas, sounding selections and interactive dynamic profiles are among the many outputs that can be generated from your clean bathymetry and sonar data. From safety of navigation surveys to offshore construction, CARIS software turns your survey data into information you can use.

Engineered to Work Together

CARIS software systems are engineered to work together. CARIS HIPS and CARIS SIPS can be used as standalone systems, but they are also capable of operating in unison offering the functionality and format support to take your clean data further. From ping to chart, CARIS HIPS and SIPS has the tools you need.

The Right Context

The integrated display capabilities in CARIS HIPS and SIPS allow you to view a wide variety of industry-standard data formats directly. This includes direct support for the following formats



Full Density Data

Digital Terrain Model



Side Scan



CUBE

Use richly attributed datasets to quickly verify and correlate all survey information in easy to use graphical editors and displays.

including S-57 ENC, DGN, DXF, SHAPE, CARIS Map, GeoTIFF, BSB, HCRF, JPEG2000, ECW, TFW, and many more. Use CARIS HIPS and SIPS to give your data the right context.

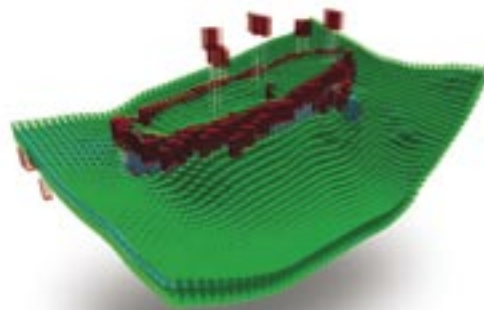
Built To Grow Upon

Built on a robust and scalable architecture, CARIS HIPS and SIPS can handle today's high-volume surveys with ease. From a single boat survey to a long term multi-vessel project, the efficient access and storage of the data allows the system to function under any condition. Regardless of your current workflow, CARIS HIPS and CARIS SIPS is built to grow upon.

The Latest Technology

Take advantage of the latest data processing techniques in CARIS HIPS and SIPS. Statistical surface cleaning, BASE Surfaces, Total Propagated Error (TPE), Combined Uncertainty and Bathymetric Estimator (CUBE¹), and Navigation Surface² concepts are just a few of the tools at your disposal. These modern techniques are easily applied to your high volume sonar data in one easy-to-use

interface. Use the latest in automated cartographic processes to produce accurate vector products from your validated bathymetry and sonar imagery. CARIS HIPS and SIPS continues to push the technology boundary to take your data further.



Use the latest in hydrographic processing techniques and technologies to significantly reduce your data processing time.

1. The CUBE algorithm originates from the work of Dr. Brian Calder at the Center for Coastal and Ocean Mapping/Joint Hydrographic Center at the University of New Hampshire.

2. The Navigation Surface concepts, executables and code are the result of a demonstration study at the University of New Hampshire by LCDR Shepard Smith, NOAA.

HIPS_{and}SIPS Product Suite

HIPS Singlebeam

Supported Formats:

- HYPACK, WinFrog
- Generic ASCII data

Data Cleaning:

- Interactive singlebeam depth cleaning
- Automatic singlebeam spike filters

Data Processing:

- Apply tides / zoning
- Apply sound velocity corrections

HIPS Multibeam Professional

Supported Formats:

- ATLAS, Furuno, GSF, LADS, SeaBeam / ELAC, Sea Falcon, Simrad, UNB, XTF, C3D, Imagex, etc.

Data Cleaning:

- Interactive swath cleaning
- Automatic swath filters
- Refraction repair
- Integrated side scan display
- 3-D subset area cleaning
- Statistical surface cleaning

Data Processing:

- 3-D fly through
- Total Propagated Error (TPE)
- BASE Surface gridding
- CUBE processing
- TrueHeave (POV MV)
- Also includes **HIPS Singlebeam**

SIPS Professional

Supported Formats:

- C-MAX, Coda, EdgeTech, GSF, MarineSonics, QMIPS, SEG-Y, XTF
- Generic ASCII data

Data Cleaning:

- Side scan viewing and cleaning
- Digitize towfish altitude

Data Processing:

- Re-compute towfish navigation
- Slant range correction
- Mosaic creation
- Generate side scan contacts

Common Features

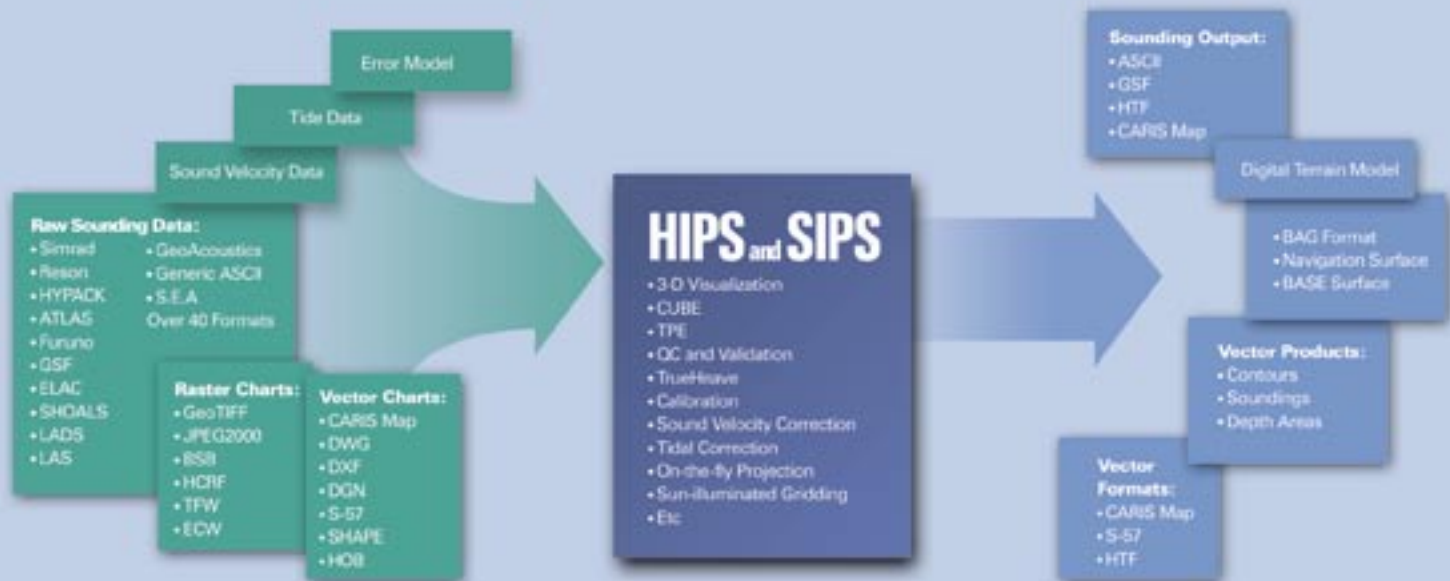
Data Tools:

- Vessel configuration
- Tide / SVP preparation
- Attitude / Navigation cleaning
- GPS RTK Tide
- Background displays (CARIS, DXF, DWG, SHAPE, S-57, BSB, HCRF, TIF...)

Mapping Tools:

- Variable depth tiling
- Sounding selection
- Contouring
- Plotting

HIPS_{and}SIPS Production Workflow



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