

CARIS

# HIPS and SIPS

# 7.0



Release the potential...

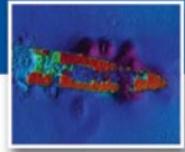
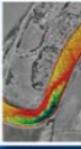
**caris**<sup>®</sup>

CARIS

# HIPS and SIPS 7.0

**Release the potential...**

With this new release of CARIS HIPS and SIPS you have invested in a tool that will release the full potential of your data.



## Geocoder

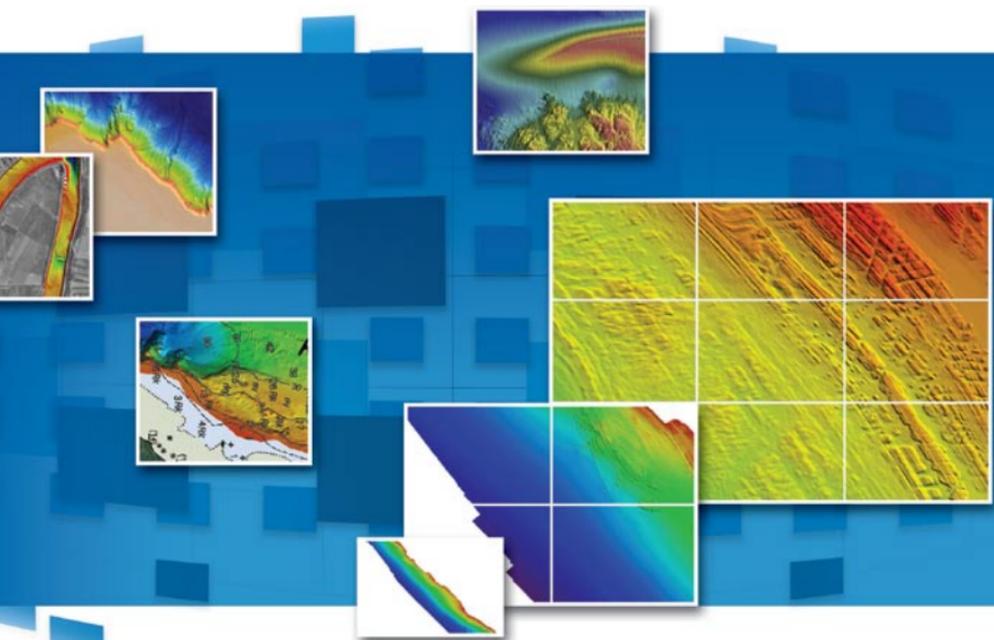
A fundamental shift has taken place in SIPS, moving from a line-based to an area-based processing approach. SIPS 7.0 seamlessly incorporates the backscatter processing and sediment analysis capabilities of an integrated Geocoder processing engine.

This Geocoder implementation enables HIPS and SIPS users to produce better quality mosaics than ever before with the introduction of a new Mosaic Editor. By utilizing Georeferenced Backscatter Rasters (GeoBaRs) and improved Mosaic creation tools, context-sensitive controls, reliable default settings, and choice of standard or advanced displays, SIPS 7.0 is the perfect tool for the creation of high-resolution mosaics, image classification and sedimentation analysis. Low noise, few artifacts and reduced zipper effect between parallel acquisition lines are also features that contribute to the many practical applications of SIPS such as seafloor characterization.

For analysis of the corrected backscatter returns, SIPS 7.0 introduces the new Sediment Analysis Tool (SAT). GeoBaRs can be divided into user-defined, regularly-spaced patches that for any given patch can have the signal response analyzed to determine the average grain size

through cross-referencing a configurable lookup table of textural responses (e.g. silty clay). This analysis also provides a descriptive confidence value.





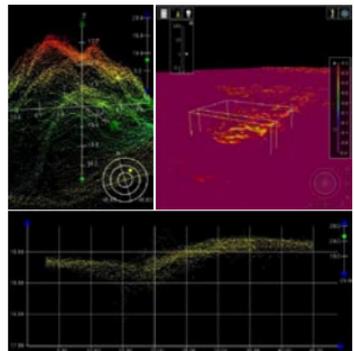
## CSAR Framework

Following the success seen with the implementation of the CSAR (pronounced Caesar) Framework into CARIS Bathy DataBASE 2.3, this technology is now available in HIPS and SIPS 7.0. The CSAR framework is designed to handle very large volumes of multi-dimensional data and has allowed CARIS to implement a sophisticated, multi-resolution, multi-attributed, geo-referenced 2D grid that can support billions of gridded nodes. This benefits such as data caching, multiple data layers, scalability in HIPS and the ability to create fully editable, gigapixel mosaics in CARIS SIPS.

A portable file format called an archive has also been implemented that allows you to store terabytes of data, along with the accompanying metadata all while being storage-device independent.

## Subset Auto-updating in 3D

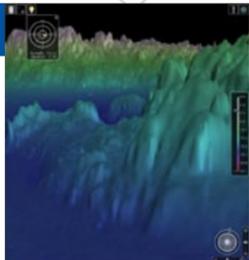
The redesign of the 3D window has released the full potential of HIPS allowing for automatic updating of the surface in conjunction with the Subset Editor. Any surface manipulations and sounding accepting or rejection are updated instantaneously in the 3D view once the changes from subset surface are saved. This ability to visualize the changes in 3D, and on-the-fly reinforces HIPS as your complete and robust data processing tool.





## Visualization Enhancements

As a direct result of the introduction of the CSAR Framework, vast improvements can be seen in the visualization of gridded data sets within the 2D as well as the 3D windows. In addition to the implementation of the CSAR file format, the 3D window has been redesigned with new features and a layout that ensures continuity when switching to and from the 2D view. Features such as adding the customizable background colouring along with the new 3D interface has improved the ability to visualize and fly-through the data.



## Multithreading

BASE Surface creation in 7.0 utilizes the full processing power of your computer through multithreading. Various processes can be executed simultaneously without interfering with each other resulting in quicker processing of your data. This brings CARIS HIPS in line with the latest IT trends.

## Updated User Interface

The HIPS and SIPS 7.0 user interface has been updated to bring its look and layout in-line with other CARIS Ping-to-Chart solutions. This interface update introduces the Layers and Draw Order tabs as well as an updated Properties panel for enhanced usability.

**CARIS HIPS and SIPS 7.0 is the tool that will release the full potential of your hydrographic data.**

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