


Multibeam Data Processing

with CARIS HIPS and SIPS 



Description

This self-paced online training course provides an introduction to processing multibeam data within CARIS HIPS Essential. The course covers the same topics and includes the same exercises as the equivalent classroom training course. However, it lets you go through the materials at your own pace, using your own computer with internet access, from your desktop, and without having to attend a classroom training course in another location.

Length

24 hours (estimated – completion time may vary based on experience).

Audience

Any marine or hydrographic personnel wishing to gain a detailed technical overview of the CARIS HIPS Essential software. No previous HIPS usage is necessary. It is also of interest to students or others wishing to learn about HIPS Essential.

Topics

- Getting Around in HIPS:
 - ✓ User interface
 - ✓ Getting Help
 - ✓ HIPS and SIPS settings
- Interacting with Data:
 - ✓ Opening Data
 - ✓ Viewing and Selecting
 - ✓ Filtered Selections and layer
- Project Setup:
 - ✓ Vessel Editor
 - ✓ Importing Sensor Data
- Georeference Bathymetry:
 - ✓ SVP and Tide editors
 - ✓ Georeference Bathymetry
 - ✓ Single Resolution Surfaces
- Process Designer:
 - ✓ About Process Designer
 - ✓ Creating Process Models
 - ✓ Running a Process Model
- Line Editors:
 - ✓ Navigation Editor
 - ✓ Attitude Editor
 - ✓ Swath Editor
- Subset Editor:
 - ✓ Subset Tiles
 - ✓ Subset Controls
 - ✓ Subset Filters

WELCOME!
You are now logged in to this CARIS self-paced online training course. Proceed through the course from your own desktop at your own pace.

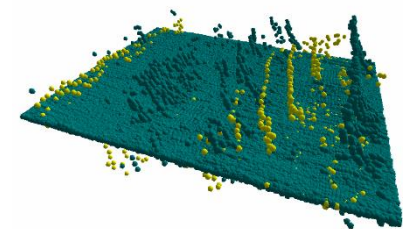
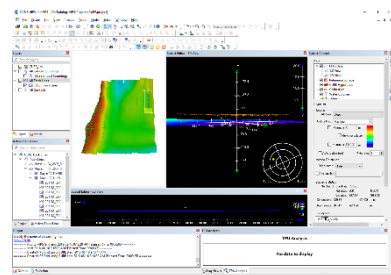
GOAL
The main learning goal of this training course is to help you gain a good understanding of the main functionality, concepts and terminology of the CARIS HIPS and SIPS desktop software program which is used to process some survey data into many different products used in the hydrographic industry.

OBJECTIVES
The objectives of this course are for learners to:

- Be introduced to the purpose and use of HIPS and SIPS.
- Start HIPS and explore the user interface.
- Open a sample HIPS project and learn to use the basic view and selection tools.
- Start a new HIPS project using sample raw survey data.
- Perform the steps to obtain georeferenced bathymetry from raw survey data.
- Create bathymetric data to remove noise and artifacts.
- Create products from bathymetric data such as surfaces, contours, and fly through videos.
- Export data and products from HIPS and SIPS to a variety of formats.

WHERE TO START - GENERAL SECTION
First, review the materials in the General section of the top of the course content area, including the:

- **Welcome, Goal and Objectives** - this page.
- **Course Layout and Navigation** - a quick overview of the course layout and how to navigate through it.
- **Download** - download the training exercise datasets, charts and backup versions from this page.
- **Course completion checklist** - a summary listing of the activities to complete in the course.
- **Glossary** - common terms associated with chart production in Caripower.

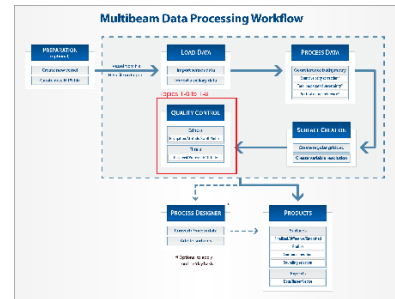


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- 8. Depths Filtering
- 9. Bathymetric Products:
 - ✓ Surface Products
 - ✓ 3D Display Window
 - ✓ Profiles
- 10. Cartographic Feature Products:
 - ✓ Contours
 - ✓ Sounding Selection
- 11. Export Data:
 - ✓ Export Bathymetry
 - ✓ Export Coverage
 - ✓ Export Vector



Course Materials

This self-paced online training course makes use of different complementary types of materials including:

- ✓ Introductory webpages with text and screen captures
- ✓ Short video presentations with audio
- ✓ Practical step-by-step exercises with downloadable datasets
- ✓ Multiple choice quizzes to review what you have learned

Prerequisites

This is an introductory training course. No previous experience working with CARIS software is required. Ideally, all participants will:

- ✓ Be familiar with operating Windows computers and software including using an internet browser
- ✓ Already have some basic knowledge of multibeam data acquisition and processing, as this would be helpful but is not required

Software Requirements

Participants must have access to the following as these items are *not* included with access to the online course:

- ✓ CARIS HIPS Essential or Professional software program
- ✓ A valid CARIS software license
- ✓ High speed internet access and an internet browser

Contact us

For more information about this self-paced online training course, please contact CARIS Global Headquarters:

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E-mail: support@caris.com
Website: www.caris.com

EXERCISE 5-2: Create a Process Model

Objective
Create your own process model that imports additional sonar data into the CUBE file and adds the georeferenced bathymetry to the CUBE file coverage file.

Topics reviewed in this exercise:

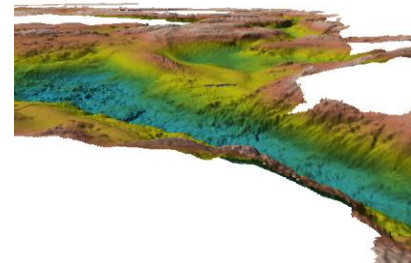
- Adding tools to the Model window
- Setting tool properties
- Creating connections between tools

Work through the exercise **Steps** in order, using the buttons below, or using the **Lesson** menu entries to the left.

- Step 1: Add Tools to the Model Window and Set their Properties
- Step 2: Add Connections to Process Model

Complete the exercise by reviewing the expected **Results**.

The button with a * beside its name indicates the current page.



Which command do you use to open an existing project?

Select one:

- A. File > Open Connection...
- B. File > New > HIPS File...
- C. File > Project > Open Project... ✓ **Correct** – Use the Open Project command to open an existing project.
- D. File > Open...

Your answer is correct.
The correct answer is: File > Project > Open Project...