


# Multibeam Data Processing

with CARIS HIPS and SIPS 



## E-Learning Course Requirements

This document lists the requirements for someone to take this CARIS self-paced online training course. It assumes that you will be running the CARIS HIPS Essential software and accessing the online course on the same computer. CARIS cannot guarantee that you will be able to complete all parts of the training course if your computer does not meet the following requirements.

## CARIS Software and License

A copy of the CARIS HIPS software is required in order to get the most out of this training course. If you choose to take this training course without a valid HIPS license, you will not be able to complete the training exercises portion of the course.

This course is based on HIPS Essential.

*The CARIS software and license are not included with this course.*

## Operating System

The self-paced online training course can be accessed from an internet browser running on most modern Windows-based computers.

CARIS HIPS Essential is certified to work with Windows® 10 Professional 64-bit.

## Computer System Requirements

The suggested computer requirements for CARIS HIPS Essential are:

- Processor: Recent generation multi-core CPU.
- Memory: 16 GB of RAM.
- Storage: 7200 RPM disk drive or Solid State Drive, minimum 1 GB available for installation.
- Display: NVidia® or AMD® display adapter, with an OpenGL 3.3 compatible GPU, with 2GB of memory or greater.
- Dual monitors are recommended but they are not a requirement.
- Audio: headphones are recommended as most videos include audio

## Internet Connection

This course requires a high-speed internet connection in order to access all the course materials including the training videos.

## Internet Browser

This training course is compatible with most modern internet browsers like Google Chrome, Firefox and Internet Explorer.

Due to the large number of available browsers, and the frequency with which new versions become available, CARIS cannot guarantee that all parts of the course will work on every version of these browsers.

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

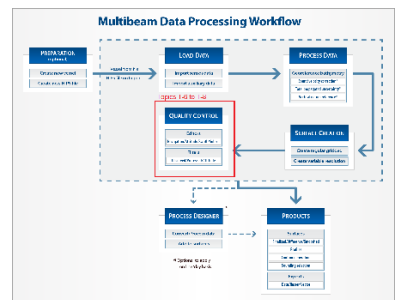
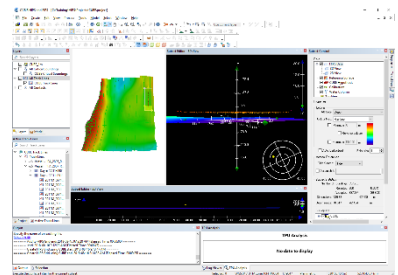
**GOAL**  
The main learning goal of this training course is to help you gain a good understanding of the main functionality, concepts and terminology of the CARIS HIPS and SIPS desktop software program which is used to process laser survey data into many different products used in the hydrographic industry.

**OBJECTIVES**  
The objectives of this course are for learners to:

- Be introduced to the purpose and use of HIPS and SIPS
- Start HIPS and examine 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
- Clean bathymetric data to remove noise and artifacts
- Create products from bathymetric data such as surfaces, contours, and fly through videos
- Export raw and processed data from HIPS and SIPS to a variety of formats

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

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



## Internet Browser Settings

The following functions must be configured on your internet browser:

- Pop-up windows must be enabled
- Cookies must be enabled
- Java must be installed, up to date and enabled

Check that these items are correctly set up before starting the course. If you need more information, refer to your browser's help and support materials for instructions.

These settings are required in order to view the training course videos, which may not display if any of these settings are not enabled.

## Other Software

The following third party software must be installed:

- Adobe PDF reader
- Adobe Flash Player

## Contact us

For more information about this training course, please contact CARIS Global Headquarters:

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Website: [www.caris.com](http://www.caris.com)

**EXERCISE 5-2: Create a Process Model**

**Objective**  
Create your own process model that imports additional scalar data into the CURB file and adds the georeferenced bathymetry to the CURB. This exercise covers the following topics:

- 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...