

# Data Processing

## Raw ADCP Data Vessel

*SOCIB-Data Center Facility*

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<b>Authors:</b>	C. Munoz, K. Reeve
<b>Supervision:</b>	C. Troupin
<b>Involved Personnel:</b>	DCF, RVF, ETD

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## 1. INTRODUCTION:

The aim of this document is to describe a standardized procedure to conduct the data pre-processing from the SOCIB R/V ADCP profiles using WinADCP software.

This procedure is applicable to the following SOCIB instruments:

- SCB-RDi001. sn 1878

## 2. RELATED DOCUMENTS

- [Processing configuration](#)
- [SOP\\_RV\\_F\\_VMADCP\\_data-processing-process-configuration](#)

## 3. REQUIRED FEATURES

- Desktop or laptop.
- Internet connection.
- Vessel home access.
- Windows Operating System.
- Teledyne WinADCP software.

## 4. PROCEDURE DEVELOPMENT

### 4.1. SOFTWARE INSTALLATION

- Open RDI Teledyne website and navigate through support > software/firmware section.  
You can use this link: <http://www.rdiinstruments.com/support/software-firmware>



The screenshot shows the Teledyne RD Instruments website. The header includes the company logo and a navigation menu with links: Home, Products, News & Events, Resource Center, Support, Company, and Contact. A search bar is located in the top right corner. The main content area is titled "Software / Firmware" and features a "CUSTOMER SUPPORT" sidebar with links to various support resources. The main text area contains a paragraph about the online customer service portal and a "CLICK HERE TO LOGIN" button.

- Log in using your RDI account that you must have previously created.
- Download the last version from WinADCP for windows.

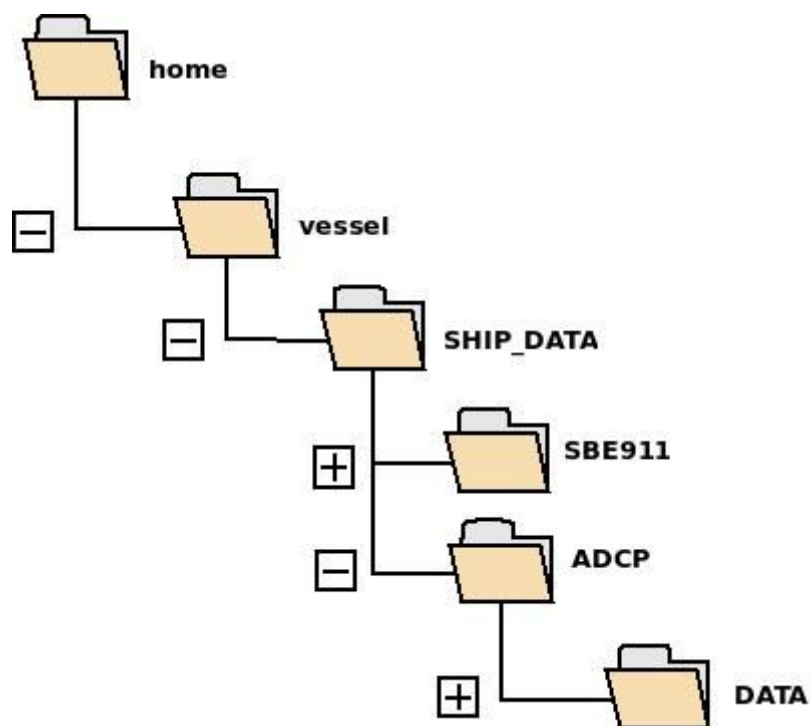
#### I. WORKHORSE SOFTWARE

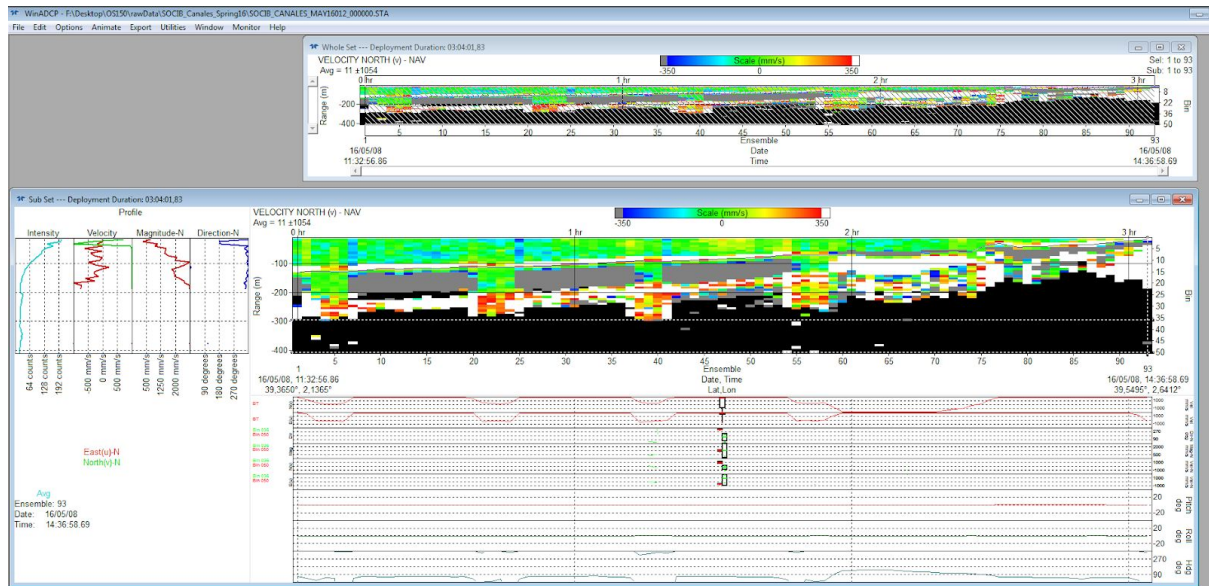
<a href="#">Read Me</a>	1. PlanADCP v2.xx software for deployment parameters - Windows	<a href="#">Download</a>
<a href="#">Read Me</a>	2. WinSC -- Plan, Deploy, Recover Data (Self Contained) -- Windows	<a href="#">Download</a>
<a href="#">Read Me</a>	3. WinADCP v1.xx -- Data Playback, Windows	<a href="#">Download</a>

- Install software following the instructions provided by the wizard.

## 4.2. DATA CONVERSION

- Open WinADCP software.
- Open the first STA file from your cruise directory within the DATA folder through the menu file > open.





- Export the file to .txt through the menu export. Set the Export options as in the following figure:

**WinADCP Export Options**

Contour | Profile | Series/Ancillary

File Type  
☒ TXT  
☐ MAT

Bins  
 All None  
☒ 40  
☒ 41  
☒ 42  
☒ 43  
☒ 44  
☒ 45  
☒ 46  
☒ 47  
☒ 48  
☒ 49  
☒ 50

Series Data Types

Velocity	Correlation	Echo Amplitude	Percent Good
<input checked="" type="checkbox"/> East (u)	<input checked="" type="checkbox"/> Bm1	<input checked="" type="checkbox"/> Bm1	<input checked="" type="checkbox"/> PG1
<input checked="" type="checkbox"/> North (v)	<input checked="" type="checkbox"/> Bm2	<input checked="" type="checkbox"/> Bm2	<input checked="" type="checkbox"/> PG2
<input checked="" type="checkbox"/> Vertical (w)	<input checked="" type="checkbox"/> Bm3	<input checked="" type="checkbox"/> Bm3	<input checked="" type="checkbox"/> PG3
<input checked="" type="checkbox"/> Error	<input checked="" type="checkbox"/> Bm4	<input checked="" type="checkbox"/> Bm4	<input checked="" type="checkbox"/> PG4
<input checked="" type="checkbox"/> Magnitude	<input type="checkbox"/> Avg	<input type="checkbox"/> Avg	
<input checked="" type="checkbox"/> Direction			

Anc Data Types

Anc Data Types	Bottom Track	Water Mass	WinRiver
<input checked="" type="checkbox"/> Pitch	<input checked="" type="checkbox"/> East (u)	<input type="checkbox"/> East (u)	<input type="checkbox"/> Navigation
<input checked="" type="checkbox"/> Roll	<input checked="" type="checkbox"/> North (v)	<input type="checkbox"/> North (v)	<input checked="" type="checkbox"/> East (u)
<input checked="" type="checkbox"/> Heading	<input checked="" type="checkbox"/> Vert (w)	<input type="checkbox"/> Vert (w)	<input checked="" type="checkbox"/> North (v)
<input checked="" type="checkbox"/> Temperature	<input checked="" type="checkbox"/> Error	<input type="checkbox"/> Error	<input checked="" type="checkbox"/> Mag
<input checked="" type="checkbox"/> Depth	<input checked="" type="checkbox"/> Mag	<input type="checkbox"/> Mag	<input checked="" type="checkbox"/> Dir
<input type="checkbox"/> Orientation	<input checked="" type="checkbox"/> Dir	<input type="checkbox"/> Dir	<input checked="" type="checkbox"/> Lat/Lon
<input type="checkbox"/> BIT	<input checked="" type="checkbox"/> BT Depth		<input type="checkbox"/> MicroCAT
<input type="checkbox"/> Battery			

Ensemble  
 First 0  
 Last 108  
 Step 1

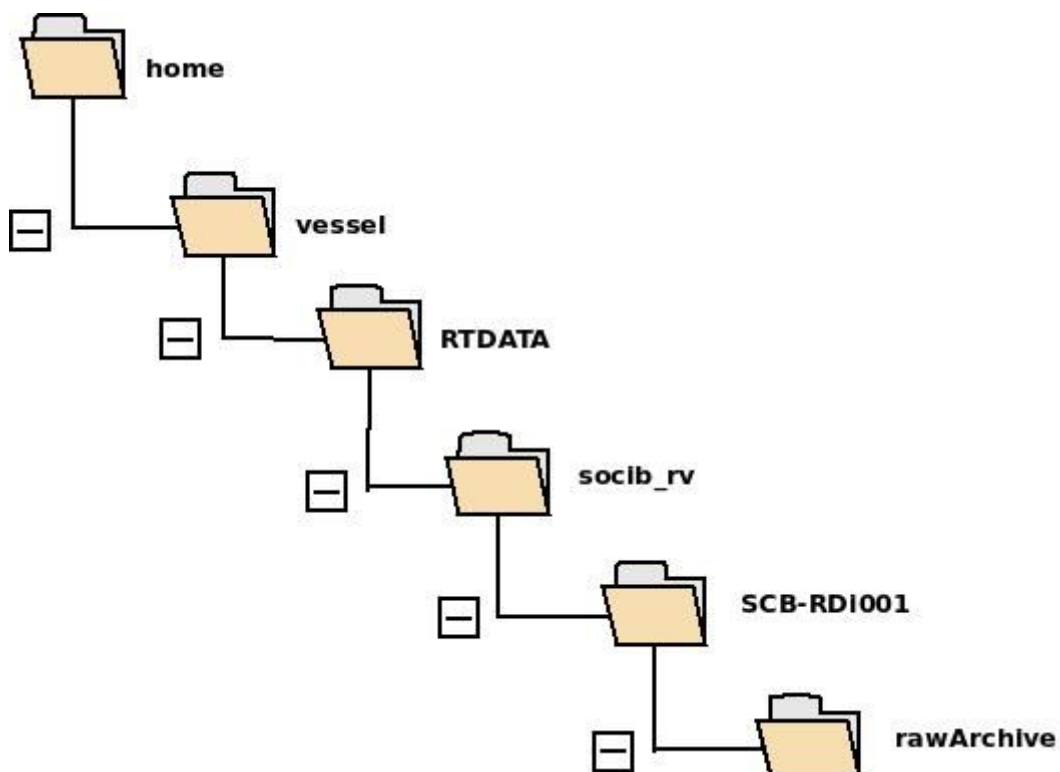
Write File Quit Export

**NOTE: Remember to to select All bins and set the Last Ensemble according to the number of ensembles provided by the dataset.**

- Click Write File and store the output file within a new folder created in the rawArchive directory specified in Data Storage section.
- Repeat the same process for all the datasets contained in the cruise directory.

### 4.3. DATA STORAGE

- All the txt files will be stored in a new folder created within the rawArchive directory specified in the following route:



- The nomenclature must follow the following example:  
**SOCIB\_ENL\_CANALES\_JUL2016\_SCB-RDi001**