

Data Processing

Raw ADCP Data Vessel

SOCIB-Data Center Facility

Document type:	SOP
Date:	2016-09-28
Ref. num.	SOP_RVF_VMADCP-winadcp-software-execution

Description:	Raw RV SOCIB ADCP data pre-processing
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DOCUMENT VERIFICATION LIST

Date:	Checked by (name)	SOCIB division	Ref.
2016-09-28	C. Troupin	SOS	

DOCUMENT DISTRIBUTION LIST

Date:	Distribution to:
2016-09-28	@datacenter
2016-09-28	@vessel

CHANGE RECORD

ver	Date	Description	Author	Checked by
1.0.0	2016-09-28	First version document	C. Munoz	C. Troupin
2.0.0	2019-04-15	Add relevant settings for final results export.	C. Munoz	J. Allen

Index of contents

INTRODUCTION:	4
RELATED DOCUMENTS	4
REQUIRED FEATURES	4
PROCEDURE DEVELOPMENT	4
SOFTWARE INSTALLATION	4
DATA CONVERSION	6
DATA STORAGE	9

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>

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We've enhanced our online customer service portal. Now, you can update your account information, register your products, and view your download history. When you log in with your personal username and password, you will be able to directly access and download firmware, software and documentation from our library and look for specific technical information in our field service database of online documents.

 **CLICK HERE TO LOGIN**

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

I. WORKHORSE SOFTWARE

Read Me	1. PlanADCP v2.xx software for deployment parameters - Windows	Download
Read Me	2. WinSC -- Plan, Deploy, Recover Data (Self Contained) -- Windows	Download
Read Me	3. WinADCP v1.xx -- Data Playback, Windows	Download

- Install software following the instructions provided by the wizard.

4.2. DATA CONVERSION

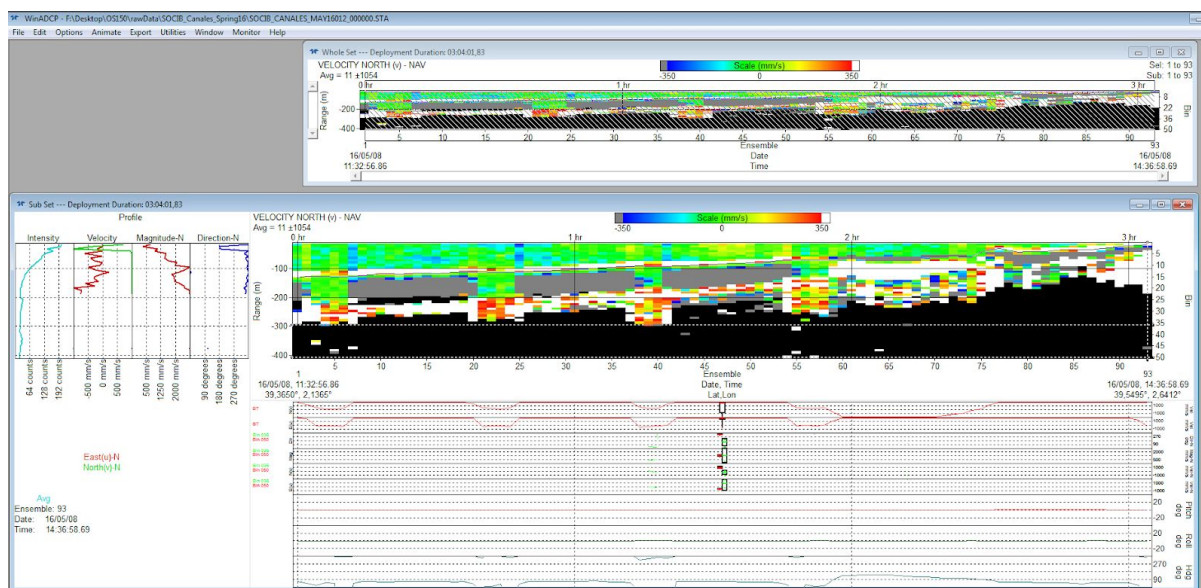
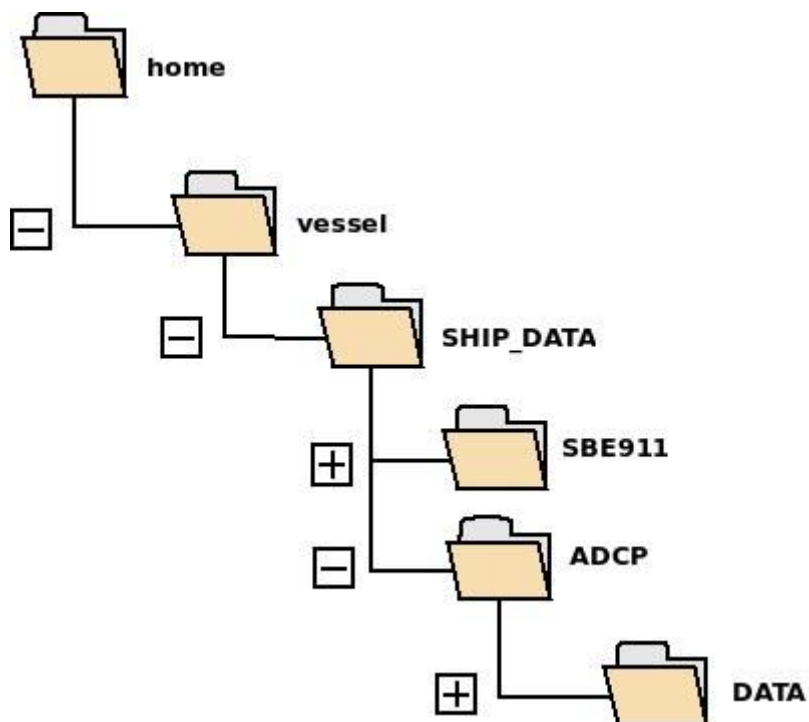
- Open WinADCP software.
- Set WinADCP Chart Options as follows:
 - menu Options > Chart Options > Contour:

The 'WinADCP Chart Options' dialog box is shown with the 'Contour' tab selected. The 'Scale' section has 'Manual' selected with 'Min' at -800 and 'Max' at 800. The 'Appearance' section has 'Locators' and 'Grid' checked, and 'BT Depth' unchecked. The 'Data Type' section has 'North(v)' selected under Velocity, and 'Beam 1' selected under Correlation. The 'Selected Set' section has 'First' at 1 and 'Last' at 363. The 'Sub Set' section has 'First' at 1 and 'Last' at 256. Buttons at the bottom include 'Load', 'Save', 'OK', 'Cancel', and 'Apply'.

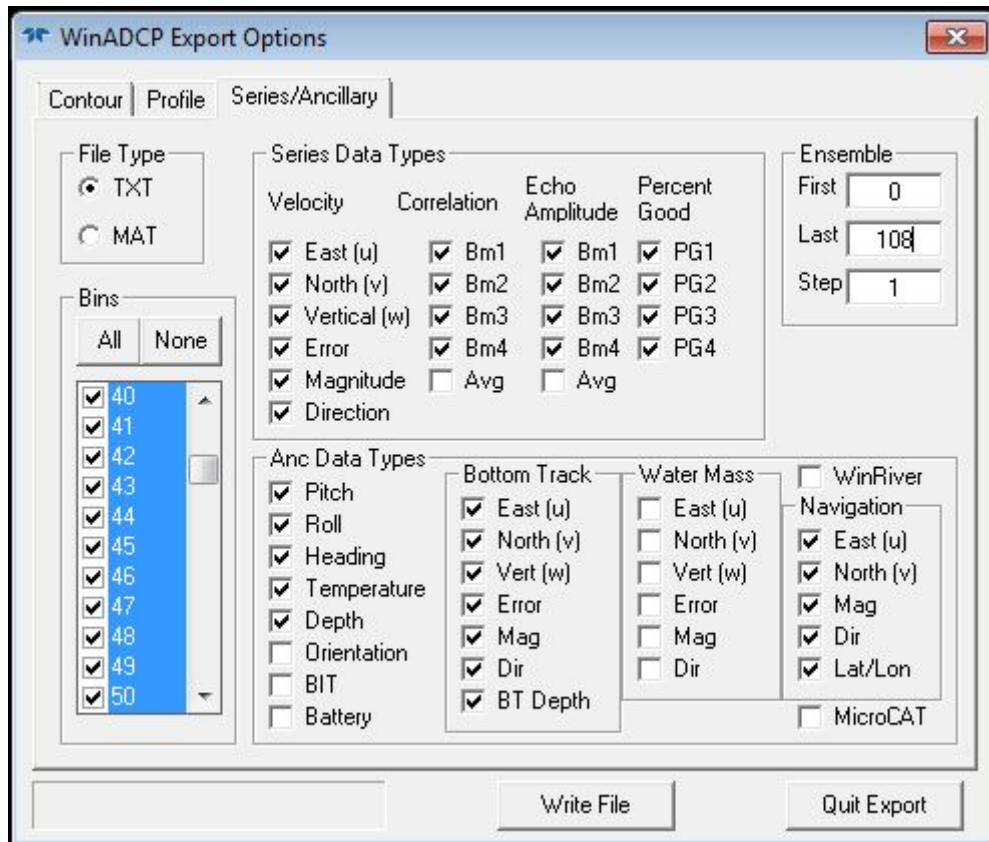
- menu Options > Chart Options > Processing:

The 'WinADCP Chart Options' dialog box is shown with the 'Processing' tab selected. The 'Velocity Reference' section has 'Navigation (VMDAS)' selected. The 'Velocity Scale' section has 'Water' and 'Bottom' both set to 1,000. The 'End of Profile' section has 'BT Depth', 'RSSI Bump Detection', 'Cos(BeamAngle)', 'Cut 1 Bin', and 'Cut 2 Bins' all unchecked. Buttons at the bottom include 'OK', 'Cancel', and 'Apply'.

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

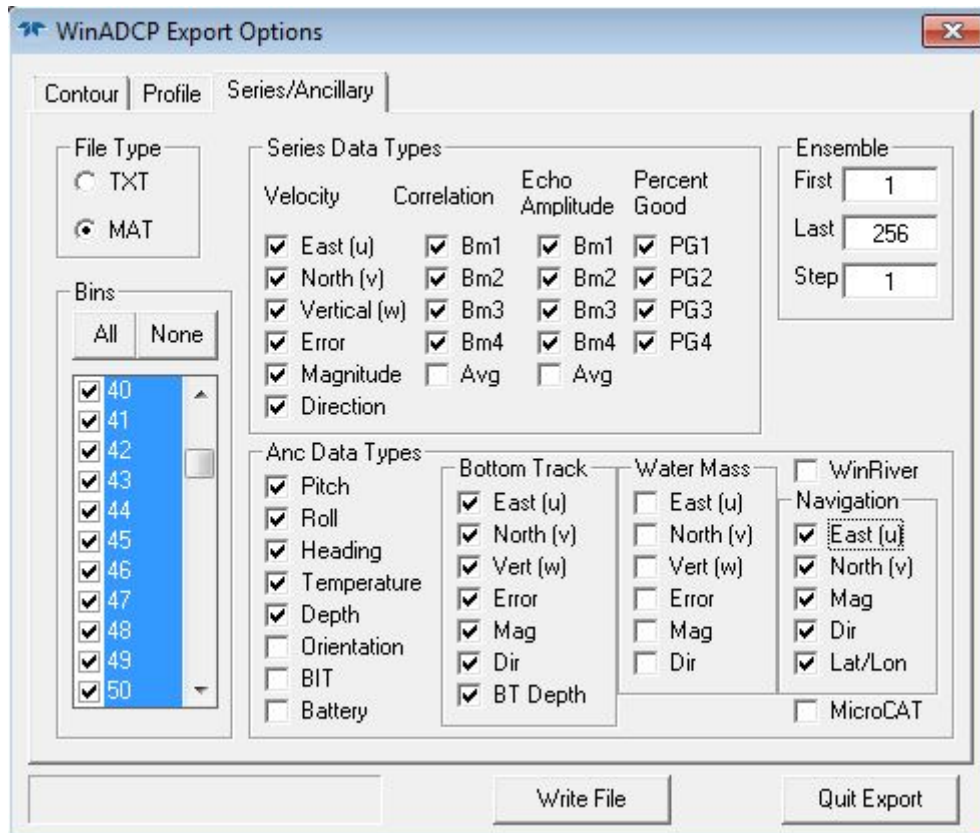


- Export the file to .txt through the menu export. Set the Export options as in the following figure:



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.
- Export the file to .mat by changing the File Type from TXT to MAT as in the following figure:

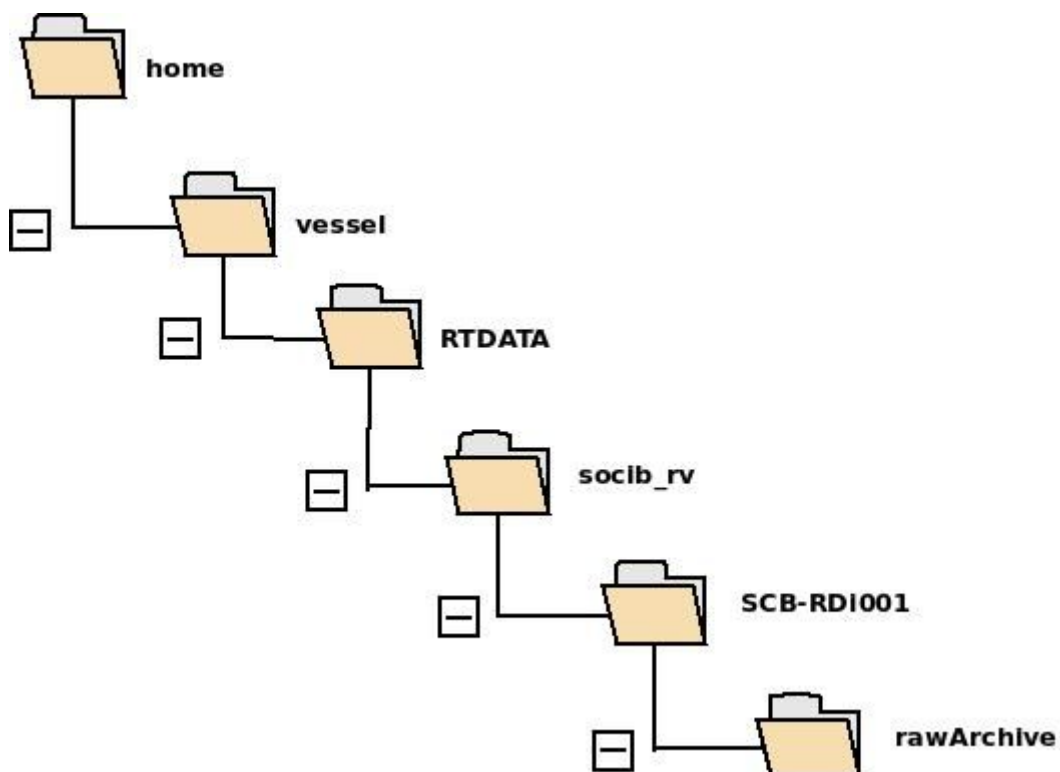


NOTE: Remember to select All bins and set the Last Ensemble according to the number of ensembles provided by the dataset.

- Repeat the same process for all the datasets contained in the cruise directory.

4.3. DATA STORAGE

- All the txt and mat files will be stored in a new folder (named converted) created within the rawArchive directory specified in the following route:



- The nomenclature must follow the following example:
SOCIB_ENL_CANALES_JUL2016_SCB-RDi001
- Inside the directory data will be stored in raw and converted sub-directories:

Nombre	Tamaño
converted	6 elementos
raw	30 elementos