

# Processing application environment, data processing raw CTD Vessel

*SOCIB-Data Center Facility*

<b>Document type:</b>	Internal procedure
<b>Date:</b>	01/06/2016
<b>Ref. num.</b>	SOP-DC-DatProc-04

<b>Description:</b>	Raw data pre-processing procedure for CTD data from SOCIB R/V
<b>Authors:</b>	cmunoz, kreeves
<b>Supervision:</b>	ctroupin
<b>Involved Personnel:</b>	Data Centre and ETD

### DOCUMENT VERIFICATION LIST

Date:	Checked by (name)	SOCIB division	Ref.
13/06/2016	ctroupin	DC	

### DOCUMENT DISTRIBUTION LIST

Date:	Distribution to:
01/06/2016	SOCIB Data Centre

### CHANGE RECORD

#	Date	Description	Author	Checked by
	01/06/2016	First version document	cmunoz	

## *Index of Contents*

<b>1.INTRODUCTION.....</b>	<b>4</b>
<b>2.RELATED DOCUMENTS.....</b>	<b>4</b>
<b>3.REQUIRED FEATURES.....</b>	<b>4</b>
<b>4.PROCEDURE DEVELOPMENT.....</b>	<b>4</b>
<b>4.1.SOFTWARE INSTALLATION.....</b>	<b>4</b>
<b>4.2.FOLDER STRUCTURE.....</b>	<b>5</b>
<b>4.3.PREPARE BATCH PROCESS.....</b>	<b>6</b>
<b>4.4.DATA STORAGE.....</b>	<b>9</b>

## 1. Introduction

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

The following sections describe the data pre-processing procedure using as example the data from the IEO Bluefin Tuna Campaign performed in June 2013.

## 2. Related documents

- [SBEprocessingConf-SOP-DatProc-04-1](#)

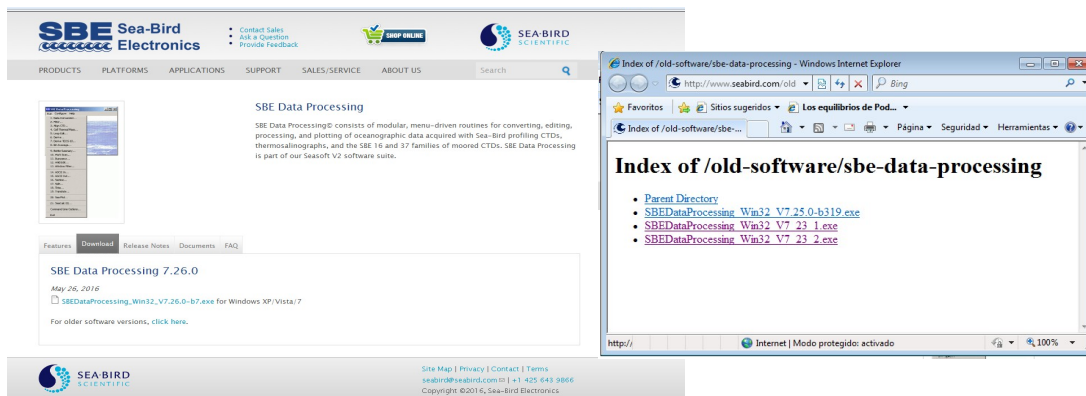
## 3. Required Features

- Desktop or laptop.
- Internet connection.
- Vessel home access.
- Windows Operating System.
- SBE Data Processing software.
- [SBEprocessing Batch Application Repository](#)

## 4. Procedure Development

### 4.1. Software Installation

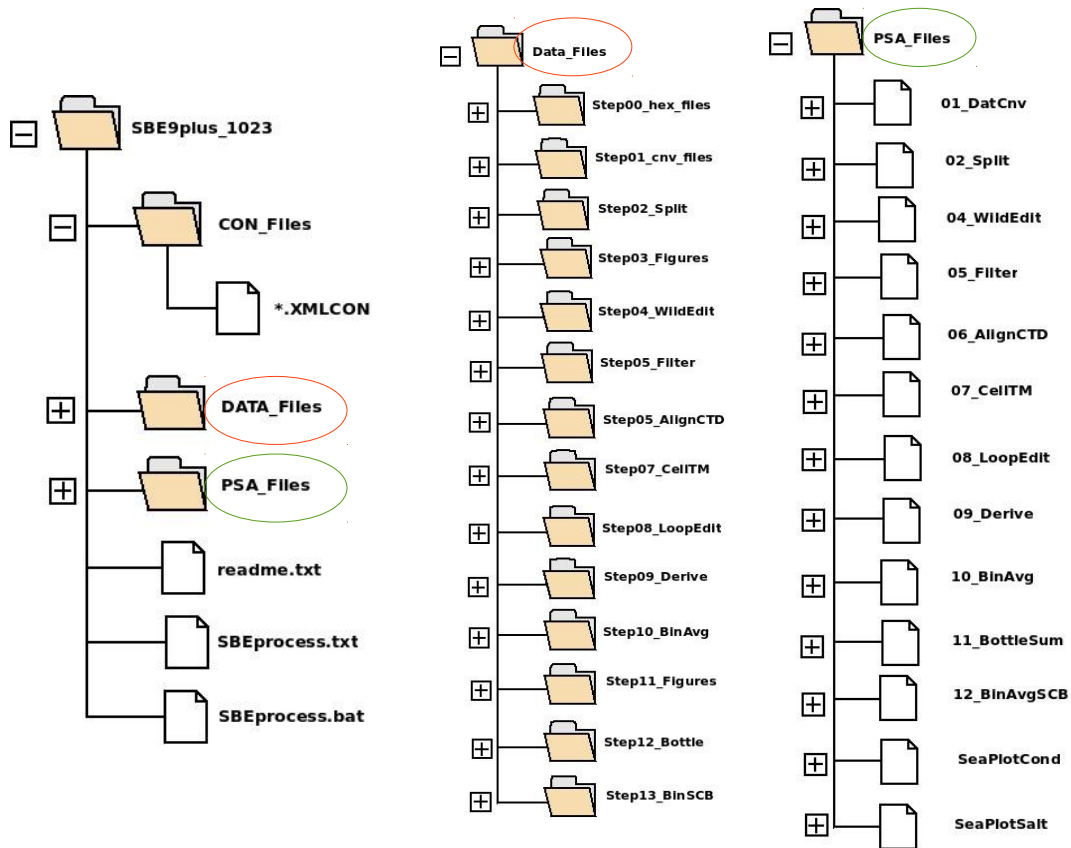
- Access to the seabird website: <http://www.seabird.com/software/sbe-data-processing>
- Go to the download section, then enter to older software versions and install **V7 23.2**:



## 4.2. Folder Structure

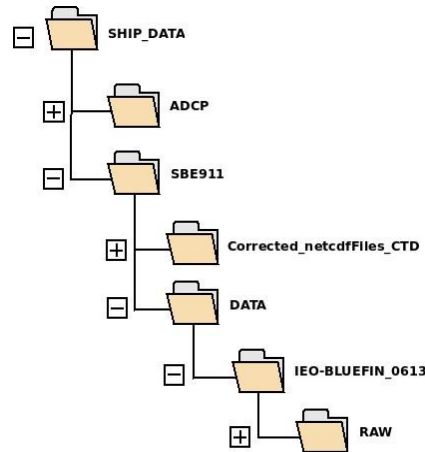
- Copy the SBE9plus\_1023 folder contained in the google drive into the directory where you wish to keep it (local Desktop directory will be used in this procedure).
- The SBE9plus\_1023 folder contains the following internal structure.

**NOTE:** You need to take this into account to perform some adjustments that will be described during the following sections.



### 4.3. Prepare Batch Process

- Copy the configuration file used during the data acquisition in the **CON\_files** directory.
- Go to the directory that contains the raw files. It should be in **/home/vessel/SHIP\_DATA:**



- Copy the raw files into the **DATA\_Files/Step00\_hex\_files** directory.

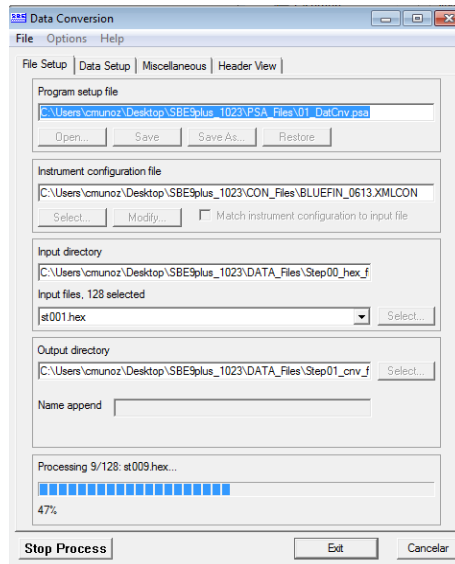
**WARNING: Remember to copy all the raw files including \*.hex, \*.hdr and \*.bl formats.**

- Make the following changes in the PSA files contained in **PSA\_Files** directory:
  - In **each** **psa** file you need to set the **InputDir** value and **OutputDir** value to the path where you have the psa files:

```

<Data_Conversion >
  <Version value="7.21d" />
  <ServerName value="Data Conversion" />
  <InstrumentPath value="C:\Users\cmunoz\Desktop\SBE9plus_1023
\CON_Files\BLUEFIN_0613.XMLCON" />
  <InstrumentMatch value="0" />
  <InputDir value="C:\Users\cmunoz\Desktop\SBE9plus_1023
\DATA_Files\Step00_hex_files" />
  <InputFileArray size="1" GrowBy="-1" >
    <ArrayItem index="0" value="st001.hex" />
  </InputFileArray>
  <OutputDir value="C:\Users\cmunoz\Desktop\SBE9plus_1023
\DATA_Files\Step01_cnv_files" />
  <NameAppend value="" />
  <OutputFile value="st001" />
  <LastProcessed value="0" />
  <ProcessScansToEnd value="1" />
  <ScansToSkip value="0" />
  <ScansToProcess value="1" />
  <MergeHeaderFile value="0" />

```



- Only in the **01\_DatConv**, **09\_Derive** and **BottleSum psa** files you need to set the **InstrumentPath** value pointing to the configuration file:

```
<Data_Conversion >
  <Version value="7.21d" />
  <ServerName value="Data_Conversion" />
  <InstrumentPath value="C:\Users\cmunoz\Desktop\SBE9plus_1023\CON_Files\BLUEFIN_0613.XMLCON" />
  <InstrumentMatch value="0" />
  <InputDir value="C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step00_hex_files" />
  <InputFileArray size="1" GrowBy="-1" >
```

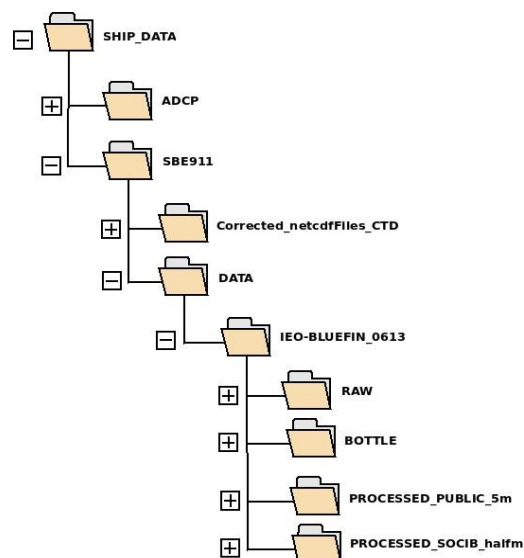
- Run the SBEprocess.bat file:  **SBEprocess**

**NOTE:** This process may take several minutes for high volumes of data (over 100 profiles).

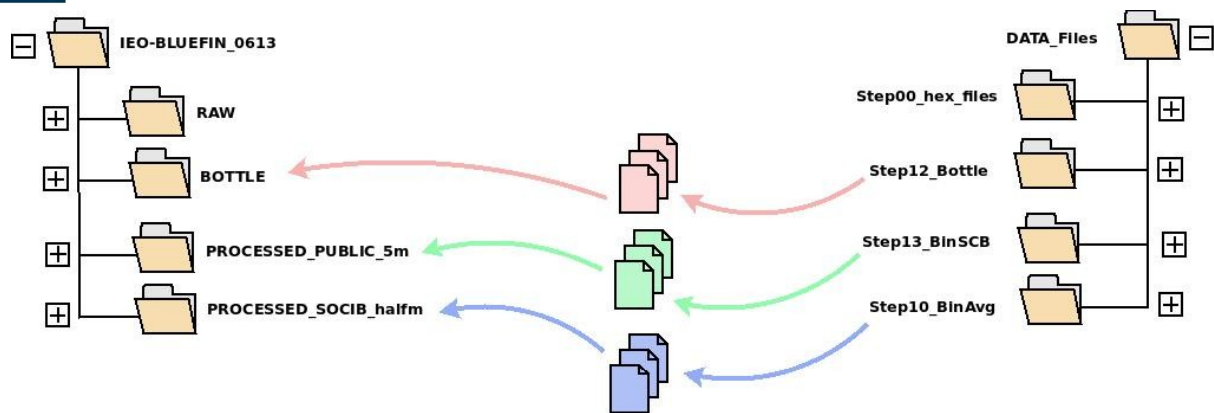


#### 4.4. Data storage

- Get back to /home/vessel/SHIP\_DATA. Then create three new sub-folders (**BOTTLE**, **PROCESSED\_PUBLIC\_5m** and **PROCESSED\_SOCIB\_halfm**) into the campaign folder following the schema of the next figure:



- Move the generated files from the batch process folders in DATA\_Files to the new sub-folders in their respective campaign as follows:



- Remove all the files within the DATA\_FILES sub-folders.

**NOTE:** you can automatically do it by opening a command prompt, then parse till the DATA\_Files folder and type the following commands:

- del \*.cnv /s
- del \*.hex /s
- del \*.bl /s
- del \*.hdr /s
- del \*.jpg /s

```
C:\Windows\system32\cmd.exe
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst109.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst110.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst111.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst112.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst113.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst114.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst115.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst116.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst117.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst118.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst119.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst120.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst121.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst122.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst123.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst124.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst125.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst126.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
g\dst127.cnv
Archivo eliminado: C:\Users\cmunoz\Desktop\SBE9plus_1023\DATA_Files\Step10_BinAv
```