SOCIB Balearic Islands Coastal Observing and Forecasting System

Processing application environment, Data Processing

Glider Delayed Time Mode

Addendum for GTB v1.3.X

SOCIB-Data Center Facility

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Description:	Addendum to data processing procedure for Delayed Time Mode Glider data using the glider toolbox v1.3.X (1.3.0 and small releases)
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1.0	2018-08-31	First version document	M. Charcos	I. Ruiz

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1. INTRODUCTION

1.1. Objective

This document aims to complement the SOP_DCF_delayed-time-processing document for processing glider data in delayed mode when using the glider toolbox version 1.3.0 and up. Installations of the glider toolbox run in the SCB-DATPROC01 server and live at */home/glider/gtb_versions* as glider_toolbox_datproc01_db01_VX.X.X. The gtb_utils located at the same directory support the processing and other actions of the glider toolbox.

The following sections describe the data processing procedure using as example the deployment SOCIB_ENL_CANALES_SEP2017_SDEEP04_GFMR0063 covering the period between September 13th 2017 and October 26th 2017.

1.2. Related Documents

- Glider Toolbox Description
- Original SOP_DCF_delayed-time-processing document for delayed mode processing
- PUM_DCF_glider-toolbox-quickstart_v1.3.0 of the glider toolbox (also released with the code)

2. REQUIRED FEATURES

- Desktop or laptop.
- Internet connection.
- Glider User access.
- DataProc User access.

3. DELAYED TIME PROCEDURE DEVELOPMENT

The operator has to connect to **SCB-DATPROC01** with the **glider** user:
ssh glider@SCB-DATPROC

3.1 PREPARE DATA

The gtb_utils will prepare the data of the mission in the local directory before start processing.

Run: gtb import_dtbin -i sdeep04
This will show an interactive menu with the various missions found in folder containing the card data from the glider (*/home/glider/deployment*). The result is a new folder for the mission at */home/glider/data_dt* containing the binary data with the appropriate names (in fact, soft links to the data) that the glider toolbox can recognize:

gliderName_yyyy_ddd_mmm_sss.*bd

3.2 RUN THE MAIN PROCESSING

Find the deployment id. This number can be checked into apps.socib.es/instrumentation/ → Deployments → Check the deployment info.

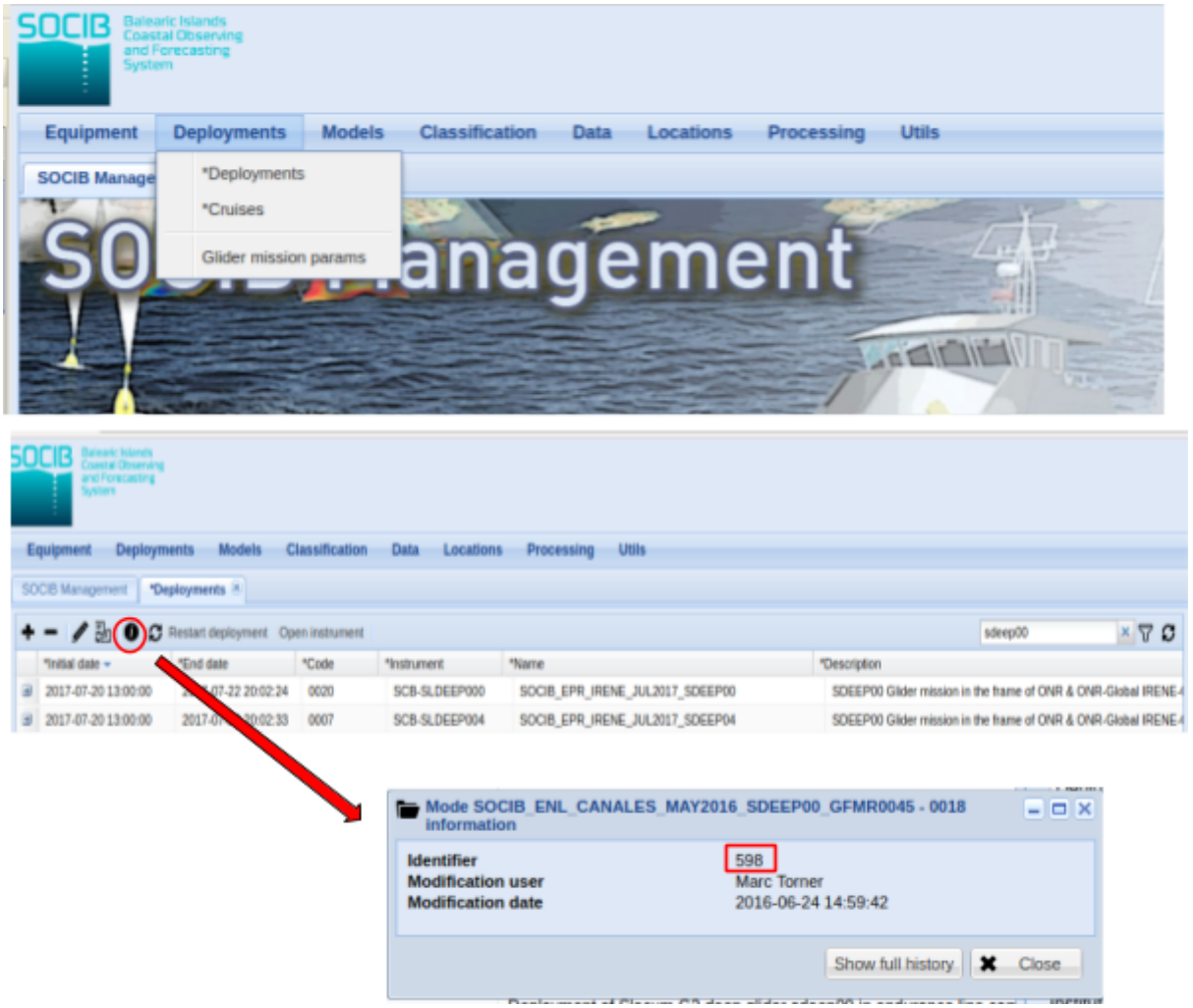

Figure 11. Deployment ID.

In the case of SOCIB_ENL_CANALES_SEP2017_SDEEP04_GFMR0063 the id is 762. Use gtb_utils to start the processing of the mission:

gtb run -t v1.3.0 -d 762

IMPORTANT: The db_access configuration of the deployment_ids must be in the main configuration file configMainDT.txt because the gtb_utils does not access referenced files indicated in the configuration file as db_access.fconfig. Unfortunately, the release v1.3.0 cannot manage definitions of db_access in multiple files. That is that if a fconfig is defined, all the values will be taken from the fconfig. Therefore, the user will be required to edit configPrivateSOCIB.txt with the appropriate deployment id (deployment_ids=762). For versions 1.3.1 and up this problem is fixed. The main configuration file can contain deployment_ids while keeping the database information in a private file configPrivateSOCIB.txt. Thus, 1.3.1 can be run using gtb_run without editing any configuration file. Gtb_run will automatically update the configuration.

3.3 CHECK OUTPUT RESULTS

See main document SOP_DCF_delayed-time-processing for more information.

4. GARICAST

Because the heading and attitude information of the glider is not recorded in the GARICAST operations, the glider toolbox is not able to perform the interpolation step of these variables. For this reason, the configuration must be adjusted in order to skip this step. Set the appropriate processing configuration file (e.g. configDataProcessingSlocumG2.m) corresponding to the glider that was deployed as follow:

```
processing_options.attitude_filling = false;
processing_options.heading_filling = false;
```

Do not forget to set it back to the previous values (true) in order to avoid problems in future processing of normal missions.