

21/01/2016 – Glider Data Management.

Attendees : Thierry Carval, Claire Gourcuff, Loïc Petit de la Villéon, Jean-Philippe Ranou, Pierre Testor, Victor Turpin

Lacks in glider data management have been identified since the beginning of AtlantOS, highlighting at the same time sticking points in the data flow. This meeting was set up between Coriolis and EGO to discuss these lacks and adjust procedures to simplify and strengthen the glider data flow. This meeting was also an opportunity to initiate discussion about delayed mode data management.

Bold = actions.

Data submission process

- The procedure has to be clarified in the EGO and Coriolis Web site. A « **good practices for data management** » document will be edited and accessible through the web site. *In charge : Victor.*

Evolution of the deployment registration system.

The registration web page will evolve to automatically generate a serie of actions that are not automated today :

- Production of a minimal .json → **We have to define what is the minimal set of information for the json file.** *In charge : JP and Victor*
- FTP repository directory production : The repository for data delivery to Coriolis will be based on the following architecture : XXX/yyyymmdd_deploymentCode with XXX = name of the glider, yyyyymdd = planned starting date, deploymentCode=name of the deployment – ex : *milou/20150824_perseus54*. **This repository will be automatically produced after deployment registration.** *In charge : Victor and Pierre*
- Sending Email : **The glider coordinator, the DAC and the GDAC will be alerted by email that a deployment has been registered.** It will allow data management to be followed. *In charge : Victor and Pierre*
- Json examples will be available. **A library of json files for Slocum/Seaglider/Spray/SeaExplorer and sensors will be also available.** *In charge : JP and Victor*
- **The mapping of the variable names** between sensors and EGO format has to be made. *In charge : JP and Victor*

HD dataset

- After the recovery of a glider, data from the flash card should be drop in a repository that will be created at the same time as the real time repository under the following architecture : XXX/yyyymmdd_deploymentCode_HD. **This procedure has to be documented.** *Tasks responsible Claire and Pierre*

Access to the data processing system (from raw to EGO files).

- **Access to "glider data processing system" developed by Coriolis will be given through EGO and IFREMER websites.** *Tasks responsible JP, Victor and Pierre*
- The « processing system » will be made of the processing chain (to convert raw file

(from land-station) to EGO files), a EGO format checker and a documentation up to date. The processing chain will be available for Slocum/Seaglider/Seaexplorer at the moment.

- Coriolis will also offer its services for the implementation/demonstration of the chain and the checker.

Evolution of the EGO Format

- **Including the technical parameters and the current values, mainly for the delayed mode or HD format, will be put under discussion in the next month.** This will lead to a second version of the EGO format manual. *In charge : Claire, Thierry and Pierre*

Delayed mode data management

- Claire Gourcuff will be hired to work on the delayed mode. The first case study will be to produce a reference delayed mode data set for the med on T,S, Chl, O2.
- A specific work on oxygen data will also be part of her tasks.
- From there, propositions for delayed mode data management will be made

Export of the glider sub-set from Coriolis

In the framework of AtlantOS, we need an export of the glider sub-set of the Coriolis Database for different purposes :

- the development of a smart phone app'.
- the development of monitoring tools
- make a link with JCOMMOPS needs for their websites.

The subset will have to be updated regularly.

The extraction will be discuss between Thierry Carval (IFREMER), Lovro Valic (BRUNCIN) and Victor Turpin (CNRS) in the next weeks. *In charge : Victor, Thierry, Pierre and Lovro*

Knowledge based library :

- One opportunity through AtlantOS will be to give access to tools for data management, visualization, piloting etc. To do so, we are planning to agregate and document existing code that would be identified as "usefull for the community". The processing chain and the checker will be part of that knowledge base library for example. **A short documentation about implementation of the process chain and the checker will be needed for each tool.** *In charge : JP*

Bunch of idea

- Glider constructor could produce the json files directly from the gliders.
- The EGO database will be accessible by Coriolis to produce json files.
- In the framework of ENVRI+ discussion about deployment and sensor testing on glider will happen soon.

How to produce a complete .json file (metadata file) and fluidify the data flow in real time ?

