

# Argo Canada National Data Management Report

ADMT13

Nov 12- 16, 2012

## 1. Status

**Data acquired from floats:** We are currently tracking 127 floats. Of these, 36 might be in trouble or might have failed to report within the last 6 months. In 2012, we deployed 27 floats from METOCEAN which report on Iridium satellite. Currently, we acquired Argo messages from Argos (through CLS) and Iridium (SBD packets through Joubeh, Rudics through CLS).

**Data issued to GTS:** All data are issued to the GTS in TESAC and BUFR format. On average, 75% and 57% of data were issued on the GTS within 24 hours in TESAC and BUFR between September 2011 to September 2012, respectively. For this period, the timeliness decreases compared to other year due to the delays and problems in the development of new decoders for new METOCEAN floats and a maternity leave.

**Data issued to GDACs after real-time QC:** All of the profile, technical, trajectory and meta files are transmitted to GDACs in netCDF format on an operational basis with some additional delay compared to the data sent on the GTS, because the two processes run on two different servers and the conversion process to netCDF takes a long time. After some program modifications and optimization, the time delay between the GTS data and the data sent to GDACs has now been reduced to 2 hours.

**Data issued for delayed QC:** Data are available for delayed mode QC as soon as they are sent to the GDACs but only considered eligible for DMQC after 6 months.

**Delayed data sent to GDACs:** A total of about 4855 eligible files from 19 floats were quality-controlled or re-quality controlled for salinity (following OW software) and pressure (delayed mode method according to the manual) and sent to the GDAC since October 2011.

### Web pages:

<http://isdms.gc.ca/isdms-gdsi/argo/index-eng.html>

We maintain pages that show float tracks and all data collected by Canadian floats. Links for both real-time and delayed mode data are also available for download directly from GDAC. The pages are updated daily.

We also show some information about the global programme including the position of floats over the previous months, the success rate of meeting the 24 hours target for getting data to the GTS at various GTS insertion points, the number of messages transmitted, reports of floats which distributed more than one TESAC within 18 hours and Canadian float performance statistics.

**Statistics of Argo data usage:** We currently have three PIs. Argo data have been used to generate monthly maps and anomaly maps of temperature and salinity along line P in the Gulf of Alaska. Line P has been sampled for 50 years and has a reliable monthly climatology. For more information on the Line-P products and other uses of Argo to monitor the N.E. Pacific go to:

<http://www.pac.dfo-mpo.gc.ca/science/oceans/Argo/Alaska-Argo-eng.htm>

## **2. Delayed Mode QC**

As of October 2012, 20% of all eligible floats, active and inactive, had their profiles QCed visually and adjusted for pressure and salinity according to the latest delayed-mode procedures. The salinity component of DMQC had been performed on 65% of eligible cycles. The following challenges or actions prevented the processing of more cycles and floats: migration of servers which run the software and contain the large climatological and profile files and visually inspecting every cycle from inactive floats which were never inspected or whose reviewed RAW flags had not been updated when they were visually inspected (pre 2009) and competing reprocessing actions triggered by the objective analysis and pressure correction audits.

The 61 profiles from 10 floats that had been identified as suspicious by the Coriolis Objective Analyses from November 2011 to June 2012 have been corrected. There are however currently 15 profiles from 7 floats which have been identified by the Coriolis Objective Analysis since July 2012 which have not been processed.

The problems revealed by Jeff Dunn's pressure correction audit on the global archive on 25 Nov 2011 have been fixed.

## **3. GDAC functions**

Canada forwards TESAC data to the GDAC in Brest and NODC three times a week.

#### **4. Region Centre Functions**

Canada has no regional centre function.