BIO-Argo Data Management in Canada

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Data Management

• Canada deployed 5 new DOXY floats equipped with SBE63 sensors in 2017. We currently have 10 active floats out of 19 DOXY floats with SBE63 sensors ever deployed.

• Real-time data management
  – Assembly of profile data collected from float and automatic QC with tests listed in the Argo Quality Control Manual, version 2.9
  – Incoming data are sent to GDAC in netCDF format version 3.1, and to the GTS in BUFR format

• Delayed mode data management
  – Modified existing software to be able to visual quality control DOXY profile
  – Converted the majority of DOXY netCDF files from version 2.2 to 3.1
  – Performed DMQC data for one DOXY float (4900494) equipped with Aanderaa’s Optode 3830 by applying gain coefficient found in Table 2 of Johnson et al. (2015, Journal of Atmospheric and Oceanic Technology), visually quality controlled DOXY profiles and generated D files.
Location of DOXY floats deployed since 2015

- Active DOXY SBE63 sensor (10/19)
- Inactive Doxy with SBE63 sensor (9/19)
- Inactive DOXY float with Aanderaa Optode 3830 (25)
Takapm019b (CTD-O) : Dead, 365 profiles 7/06/2016 - 25/05/2017

Takapm005b (CTD-OA) : Dead, 97 profiles 9/07/2016 - 31/10/2016

Takapm013b (CTD-NOA) : Dead, 97 profiles 9/07/2016 - 31/10/2016

Note : RemA out of order after mid August 2016
Takapm006c (CTD-NOA) : Dead, 9 profiles 20/07/2017 - 29/07/2017
Note : CTD broken after experienced sea ice
Note : unexpected last com 19/11/2017 ! (but under ice with water leak)

Takapm012b (CTD-NOA) : wintering, 103 profiles 20/07/2017 - 02/11/2017