

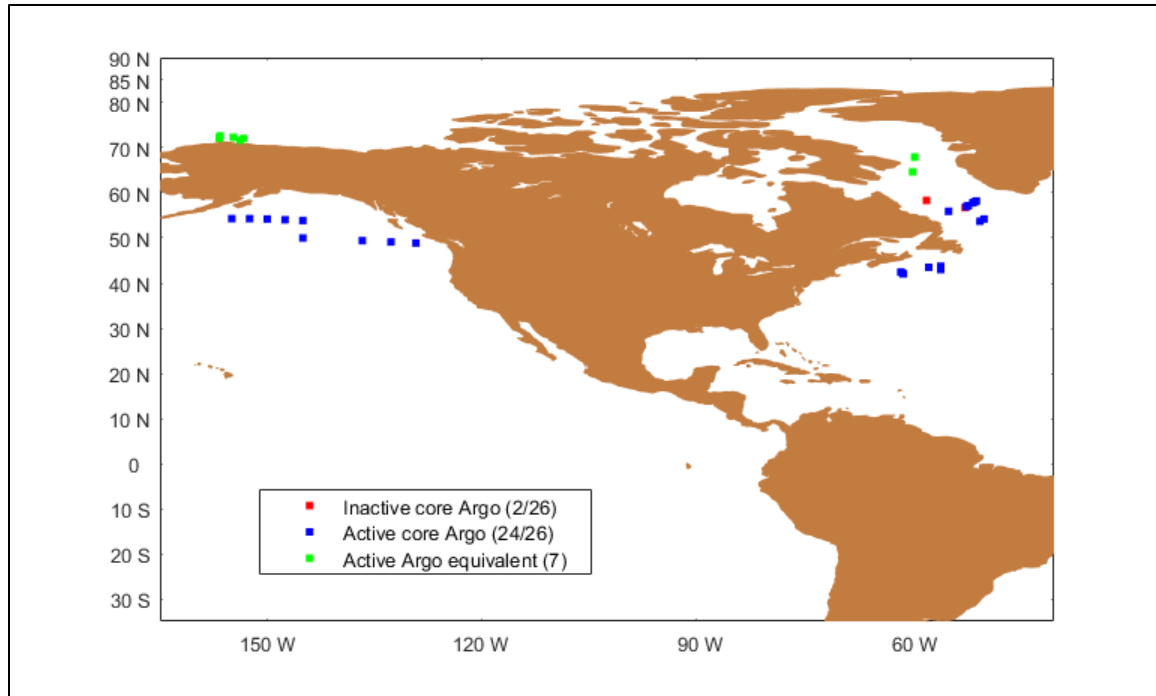
Argo Canada National Data Management Report

ADMT19

San Diego, USA, Dec 2- 7, 2018

1. Status

Canadian deployments from December 2017 to October 2018



Data acquired from floats: We are currently tracking 103 floats of which 7 might have failed to report within the last 2 months. Since December 2017, we deployed a total of 27 core Argo and 7 Argo equivalent floats. Twenty of the new core Argo floats were NOVA floats acquired from MetOcean, and seven were ARVOR-I floats acquired from NKE. All reported on the Iridium satellite system. It was the first time that Argo Canada deployed and managed ARVOR-I profiling floats. The seven Argo equivalent floats, which were NOVA floats, report daily and have maximum profile pressures of 200 to 1500 dBar.

Data issued to GTS: All data are issued to the GTS in TESAC and BUFR formats. As of July 2018, MEDS stopped sending TESAC on the GTS. Since December 2017, on average, 94.1% of data were issued on the GTS within 24 hours in BUFR formats.

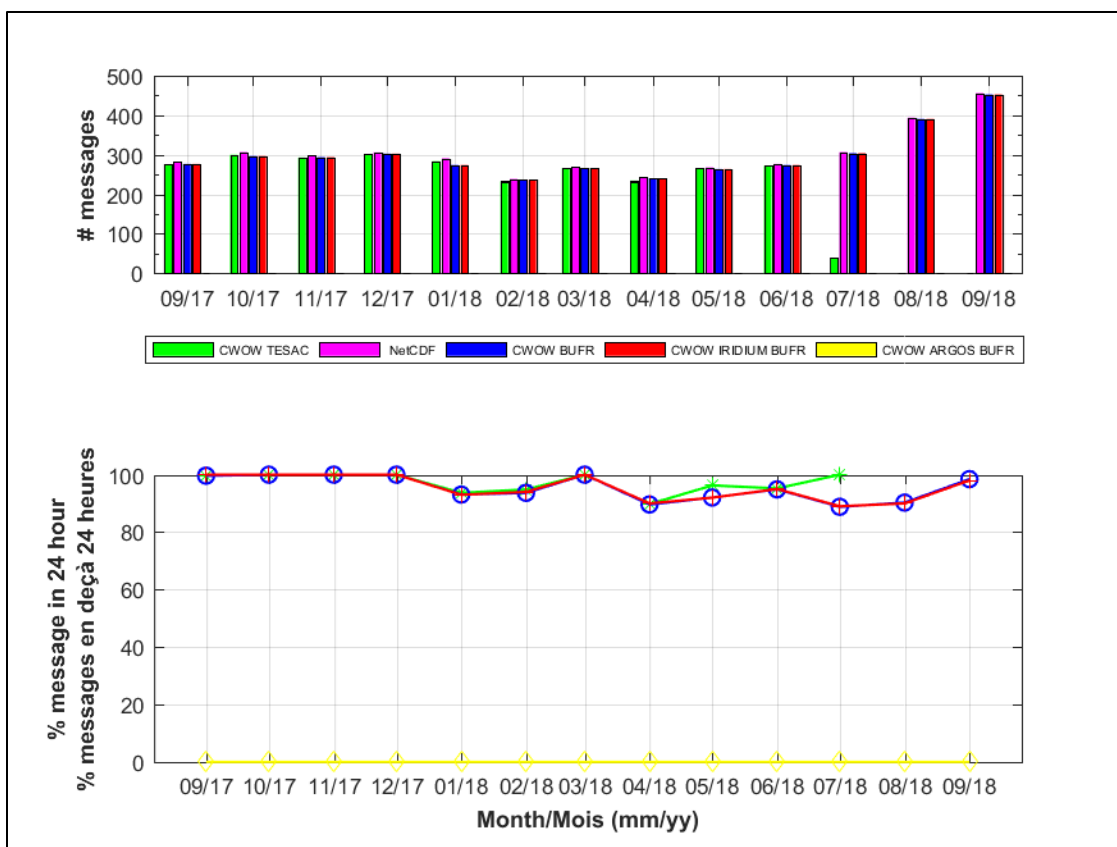


Figure 1: Performance of TESAC and BUFR transmission on the GTS under bulletin CWOW between December 2017 and September 2018

Data issued to GDACs after real-time QC: The profile, technical, trajectory and meta files are transmitted to the GDACs in NetCDF format version 3.1 on an operational basis with some additional delay compared to the data sent on the GTS, because the two processes run on different servers. There are still a number of trajectory NetCDF files of dead floats that are not in format version 3.1 at the GDACs.

Data issued for delayed QC: Data are available for delayed mode QC as soon as they are sent to the GDACs, but only for floats deployed for at least 6 months.

Delayed mode data sent to GDACs: The DMQC eligible files from 59 floats (~7500 cycles) were quality-controlled or re-quality controlled for salinity or pressure since December 1, 2017.

Web pages: <http://www.meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/argo/index-eng.html>

We maintain web pages that show float tracks and all data collected by Canadian floats. Links to 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.

Another website section describes the Line-P products and other uses of Argo to monitor the N.E. Pacific:

<http://www.meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/argo/canadian-products/index-eng.html>

Statistics of Argo data usage: 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.meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/argo/canadian-products/index-eng.html>

The Canadian Meteorological Centre (Dorval, Québec) of Environment Canada is assimilating real-time Argo data in operational mode.

2. Delayed Mode QC

As of October 23, 2018, 51% of all eligible floats, active and inactive, had their profiles QCed visually and adjusted for pressure according to the latest delayed-mode procedures at least once. The salinity component of DMQC had been performed at least once on 73% of eligible cycles. 33% of eligible B-files had been visually QC'd, and 15% were fully DMQC'd. In addition to DMQC of new profiles, 17 previously-processed floats received either updates to the visual QC or new adjustments in response to feedbacks (e.g., reports of density inversions). For floats that have been DMQC'd at least once and continued transmitting after the most recent DMQC, 14% of new profiles were less than one year old, and 28% of profiles were less than two years old.

3. GDAC functions

Canada forwards TESAC data to the GDACs in Ifremer (France) and USGODAE (USA) three times a week. Canada also monitors the timeliness of Argo data on the GTS in BUFR and TESAC formats.

4. Region Centre Functions

Canada has no regional centre function.