Argo National Data Management Report for ADMT-25

Each country is asked to send a National Report using this document as a guide for the material to be reported. As we take steps to modernize the real time processing chain, we have changed the format for the Real Time Status to help better understand the current status at each DAC. We also updated several other section prompts and ask that you use this updated template when writing your report.

Reports are DUE: 10 October 2024

1. Real Time Status

Please report the status of your real time data processing for all Argo Missions, including pilots. If you have not yet implemented the tasks, please give us an estimate of when you expect the task to be completed. Here are some questions to answer:

Float family	Number of versions	Number of floats* (*approximate)
APEX	8	416
BGC APEX	8	156
ARVOR	0	0
PROVOR	0	0
Navis	2	477
BGC Navis	3	35
SOLO/S2A	3	982
SOLO S2-BGC	1	9
Deep SOLO	3	110
Deep Arvor	0	0
ALTO	1	9

• How many floats are you currently processing & what type are they?

Other (customize additional rows as needed)		
---------------------------------------------	--	--

• How many different sensors are you currently processing?

Parameters	Type(s) of sensor for that parameter
Temperature/Salinity	SBE41CP, SBE61, RBR, SBE41N, SBE_STS
oxygen	SBE63, SBE83, Aanderaa 3830, Aanderaa 4330
NO3	ISUS, SUNA
рН	DURA, SEAFET, GDF
Chla	MCOMS_FLBBCD, MCOMSC, ECO_FLBB_AP2, ECO_FLBBCD, ECO_FLBBCD2, ECO_FLBBCD_AP2, ECO_FLBBFL_AP2
рр	MCOMS_FLBBCD, MCOMSC, ECO_FLBB_AP2, ECO_FLBBCD, ECO_FLBBCD2, ECO_FLBBCD_AP2, ECO_FLBBFL_AP2
cdom	MCOMS_FLBBCD, MCOMSC, ECO_FLBBCD, ECO_FLBBCD2, ECO_FLBBCD_AP2
irradiance	OCR504_ICSW
radiance	OCR504_ICSW
PAR	SATLANTIC_PAR

New Sensors you have begun processing (either deployed in past 12 months or expected in the next few months)	Have all the Argo vocabularies been implemented to accommodate the sensor? (Yes, No, In progress)
CHLA DUAL channel	No or In progress?
FLBBFL	No

SBE83 optode	No
--------------	----

 What is the status of BGC processing and RTQC test implementation? See here to get the version of manuals you are using to process and qc the BGC variables or : <u>Documentation - Argo Data Management (argodatamgt.org)</u> If your floats **do not** include a listed parameter, please enter 'N/A' (Not Applicable); if your floats **do** include the listed parameter, but you have not yet implemented processing for this parameter, please enter 'N/I' (Not Implemented).

parameter	Processing cookbook version you are using (ie, current or version 2.0 Oct 2018)	QC manual version you are using (ie, current or version 2.0 Oct 2018)	Notes on when changes will be made to update to latest version
oxygen	Version 2.3.1 2018-06-13	Version 2.0 2018-10-23	Processing Version 2.3.3 2022-04-27
			QC Version 2.1 2021-02-24
NO3	Current Version 1.2.2 2024-03-05	Current Version 1.0 2021-10-01	
рН	Current Version 1.2 2023-12-19	Current Version 1.0 2023-12-11	
Chla	Current Version 1.0 2015-09-30	Version 1.1 2018-03-15	QC Version 3.0 2023-09-30 WIP By 2024-11
вр	Current Version 1.4 2018-03-07	BGC QC Version 1.0 2016-03-01	QC Version 1.0 2023-09-01 WIP By 2024-11
CDOM	Current Version 1.0 2017-10	BGC QC Version 1.0 2016-03-01	
irradiance	Current Version 1.1 2017-10-09	Current Version 1.0 2019-07	

What is the status of RBR data processing (if applicable)? Are you adjusting salinity in real time? See <u>DACs with floats with RBR CTDs to implement real-time salinity</u> adjustment as per QC Manual, and flag PSAL_ADJUSTED_QC = '1' in 'A' mode. Real time adjusted data can be distributed onto GTS · Issue #55 · OneArgo/ADMT (github.com)

RBRargo3 2K model	Are you filling Adjusted data (A mode) following QC Manual 3.8 instructions?	Notes or additional information
pre-April 2021	Yes	Using this list : <u>https://github.com/ArgoDMQ</u> <u>C/RBRargo_DMQC/blob/mai</u> <u>n/Compressibility_correction/</u> <u>RBRargo3_compressibility_ta</u> <u>ble.csv</u>
post-April 2021	Yes	

- Are you regularly applying real time adjustments for the following items:
 - Salinity adjustments
 - Cpcor for deep floats
 - BGC parameters (if so, which ones)

	Yes/No for current R files	Are you going back to make adjustments on all available R files when new adjustment comes in?	Notes or additional information
Salinity adjustment	yes	yes	
Cpcor adjustment for Deep floats	yes	yes	

oxygen	WIP	yes, when done	
NO3	WIP	yes, when done	
рН	WIP	yes, when done	
Chla	yes	yes, when done	Based on 2018 QC Manual
bbp	yes	yes, when done	
irradiance	no	no	No adjustments described in the QC Manual

- What data are you sending onto the GTS? Core & Adjusted Doxy data. Other BGC parameters are WIP; collaboration with Anh Tran.
- What data is going to the aux directory? UVP, FL2BB, etc
- Are you automatically greylisting questionable floats detected by min/max test? For most floats, we contact the float owner and refer to their judgment. Following their guidance, we then grey list the float. We provide feedback on this as needed.
- What is the status of the transition to v3.2 trajectory files? When do you think you will be ready to stop acceptance of v3.1 Btraj files? Ready with v3.2 trajectory files. Reprocessing of older BGC floats to add BGC data to the Rtraj files is ongoing.
- Do you have any code to share with other DACs? If so, where is that available? We have code to share. We have to figure out the logistics on sharing (dedicated github account)

2. Delayed Mode QC status

This section of the report is for reporting on the status of DMQC in your country and is the place to share your progress, your challenges, your concerns and any links to shareable tools or code. The following questions to help guide you:

- What is the status of delayed mode trajectory files? Have you created any dmode trajectory files? If not, what are the reasons? If you have, would you be interested in sharing your experiences with others?
- How are you implementing BGC dmode by parameter or one expert does all parameters?
 - One lead person. Joint effort, not split by parameter.
- What challenges have you encountered and how have you dealt with them? Delayed moding old AOML floats that don't have certain sensors. I am working on making a GUI, so I can adjust the data while I can see it.
- Do you have any code or tools you'd like to share with other DM operators? If so, where is that available?
 - We use code provided to us by others.
- Do you have any concerns you'd like to bring to the ADMT?
- 3. Value Added items
 - List of current national Argo web pages, especially data specific ones: <u>https://www.aoml.noaa.gov/argo/</u>

https://www.aoml.noaa.gov/biogeochemical-argo-program/

- Known National Argo data usage
 - Please list known operational centers using Argo data in your country in this table:

Operational center	Contact (name, email), if known	What data do they use? (for example, core, BGC, all profile data, trajectory data)

- Products generated from Argo data that can be shared
- Publicly available software tools to access

4. GDAC Functions

If your centre operates a GDAC, report the progress made on the following tasks:

- Operations of the ftp server
- Operations of the https server
- Operations of a user friendly interface to access data
- Data synchronization
- Statistics of Argo data usage : Ftp and https access, characterization of users (countries, field of interest : operational models, scientific applications) ...

N/A

5. Regional Centre Functions

If your Nation operates a regional centre, report the functions performed and any future plans.

N/A

6. Other Issues

Please include any specific comments on issues you wish to be considered by the Argo Data Management Team. These might include tasks performed by OceanOPS, the coordination of activities at an international level and the performance of the Argo data system.