EURO-ARGO *BEST PRACTICES*

Decoding floats at European DACs (Data Assembly Centres)

The purpose of this document is to guide European teams deploying Argo floats in organising the decoding of their data in a timely manner and following Argo Data Management procedures.

Argo Information Centre (AIC) at OceanOPS

https://www.ocean-ops.org/board?t=argo

This is the single entry-point where **any planned Argo float deployment should be notified** to comply with international rules. Using your credentials, you can edit metadata for the floats belonging to the program(s) you are managing. Registering a float on the AIC does not trigger the decoding of your data! You should liaise with your DAC who can also advise on AIC population.

Contact support@ocean-ops.org

European Data Assembly Centres (DACs)

BODC and **Coriolis** are the data centres that will organise the **decoding of your float data** according to well-defined Argo Data Management procedures, and will then distribute data to the GDAC (Global Data Assembly Centres) and to operational ocean and climate forecast/analysis centres via the Global Telecommunications System (GTS).

Contacts
argo@bodc.ac.uk (BODC)
codac@ifremer.fr (CORIOLIS)

From float raw data to standardised Argo data available to operational and science communities

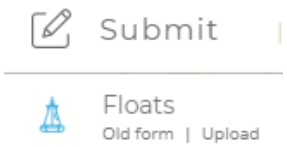




Float procurement	Link with your DAC	Satellite data	Float deployment	Decoding & Monitoring
• Discuss procurement with your DAC, particularly for new float manufacturers or new sensors • Register your deployment plan on AIC	• Verify it handles your float type and version • Send user manuals and all documentation	• Ensure float raw data is available to your DAC from your satellite communication provider	• Update your notification and metadata on AIC if needed • Send deployment information to your DAC	• Your float data is decoded by your DAC • Your float is monitored by the AIC
6 months in advance	*4 months in advance*	*2 months in advance*	*On deployment*	*Real time*

AIC float registration in detail

- You can register several floats at a time
- You can upload csv or meta netCDF files
- Fill all metadata: Program*, float model, deployment lat/lon/date/ship, sensors, etc.
- Check information and register!
- Check online help if needed



https://www.ocean-ops.org/metadata/demo_files/csv_sensors_demo.csv

*Program
Float funded on national funds = Argo Country (e.g. Argo ITALY)
Float funded on EU projects = Project name (e.g. Euro-Argo RISE)

British Oceanographic Data Centre
National Oceanography Centre

euro-argo.eu
contact@euro-argo.eu
@EuroArgoERIC

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Satellite communication in detail

For **Argos** floats please check with your satellite provider and DAC for how the data will be managed.

For **Iridium** floats there are 2 types of technologies for satellite communications:

- **SBD** (Short Burst Data) service that delivers **emails**. It is mainly used for Core and Deep floats.
- **RUDICS** (Router-based Unrestricted Digital Internetworking Connectivity Solutions) where the data is stored on a **server**. It is mainly used for BGC floats.

For SBD floats please **ask your Iridium provider to distribute emails** to:

- The manufacturer of the float (e.g. profiler.sbd@nke-i.eu)
- Your DAC SBD email (co_iridium@ifremer.fr or argo_iridium_sbd@bodc.ac.uk)
- ERIC technical team for floats procured via the ERIC (euroargo.iridium.sbd@gmail.com)
- Your institute SBD email
- Regional centres if applicable (e.g. float@inogs.it for deployments in Med. or Black Seas)

For RUDICS floats please communicate **your server login details to your DAC**.

Coriolis processing chain in detail

Coriolis is able to process NKE, APEX, NOVA, NAVIS and NEMO floats. For new float versions please inform the DAC ahead of float deployment so the processing chain may be updated.

There are **Deployment Sheets** (Excel files) available for every float type and version, that must be filled with float **metadata** to initiate the decoding of the data.

Contacts
vincent.bernard@ifremer.fr
codac@ifremer.fr

ARGO PROJECT INFORMATION	PI_NAME	Waldemar Walczowski
ARGO PROJECT INFORMATION	PROJECT_NAME	ARGO POLAND
ARGO PROJECT INFORMATION	FLOAT_OWNER	IOPAN
ARGO PROJECT INFORMATION	OPERATING_INSTITUTION	Euro-Argo
PLATFORM INFORMATION	PLATFORM_FAMILY	FLOAT
PLATFORM INFORMATION	PLATFORM_TYPE	ARVOR
PLATFORM INFORMATION	WMO_INST_TYPE	844
PLATFORM INFORMATION	PLATFORM_MAKER	NKE
PLATFORM INFORMATION	BATTERY_TYPE	Lithium
PLATFORM INFORMATION	BATTERY_PACKS	2 WILPA1621A
PLATFORM INFORMATION	FLOAT_SAIL_ID	AREX2019
PLATFORM INFORMATION	FLOAT_SERIAL_NUMBER	AI2600-18EU008
PLATFORM INFORMATION	CONTROLLER_BOARD_TYPE_PRIMARY	I535
PLATFORM INFORMATION	CONTROLLER_BOARD_SERIAL_NO_PRIMARY	C157946-0040
PLATFORM INFORMATION	WMO_NUMBER	3902108
PLATFORM INFORMATION	IMEI	300234065862990
PLATFORM INFORMATION	BLUETOOTH_NUMBER	2017 12 0040
PLATFORM INFORMATION	FIRMWARE_VERSION	5900A04
PLATFORM INFORMATION	STANDARD_FORMAT_ID	102005
PLATFORM INFORMATION	MANUAL_VERSION	33-16-033
PLATFORM INFORMATION	FIRMWARE_CHECKSUM	B8C9
PLATFORM INFORMATION	CORIOLIS_DECODER_VERSION	5.45

Example of Deployment Sheet available at Coriolis

BODC processing in detail

BODC is able to process NKE, APEX and NAVIS floats. For new float versions please inform the DAC ahead of float deployment so the processing chain may be updated.

Contact
argo@bodc.ac.uk

Euro-Argo Office support contact

romain.cancouet@euro-argo.eu

BGC in detail

Decoding of BGC floats and management of the associated metadata (e.g. sensors calibration coefficients) is complex. Please contact your DAC for help and guidelines.

Contacts
argo@bodc.ac.uk
vincent.bernard@ifremer.fr
catherine.schmechtig@imev-mer.fr