



FRANCE

# FRENCH OPERATIONAL INSTRUMENTATION SUPPORT TO THE GLOBAL ARGO NETWORK



Coriolis

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Ifremer

SHOM L'océan en référence

Long term high quality global ocean observations are needed to understand the role of the ocean on the earth's climate and to predict the evolution of our weather and climate.

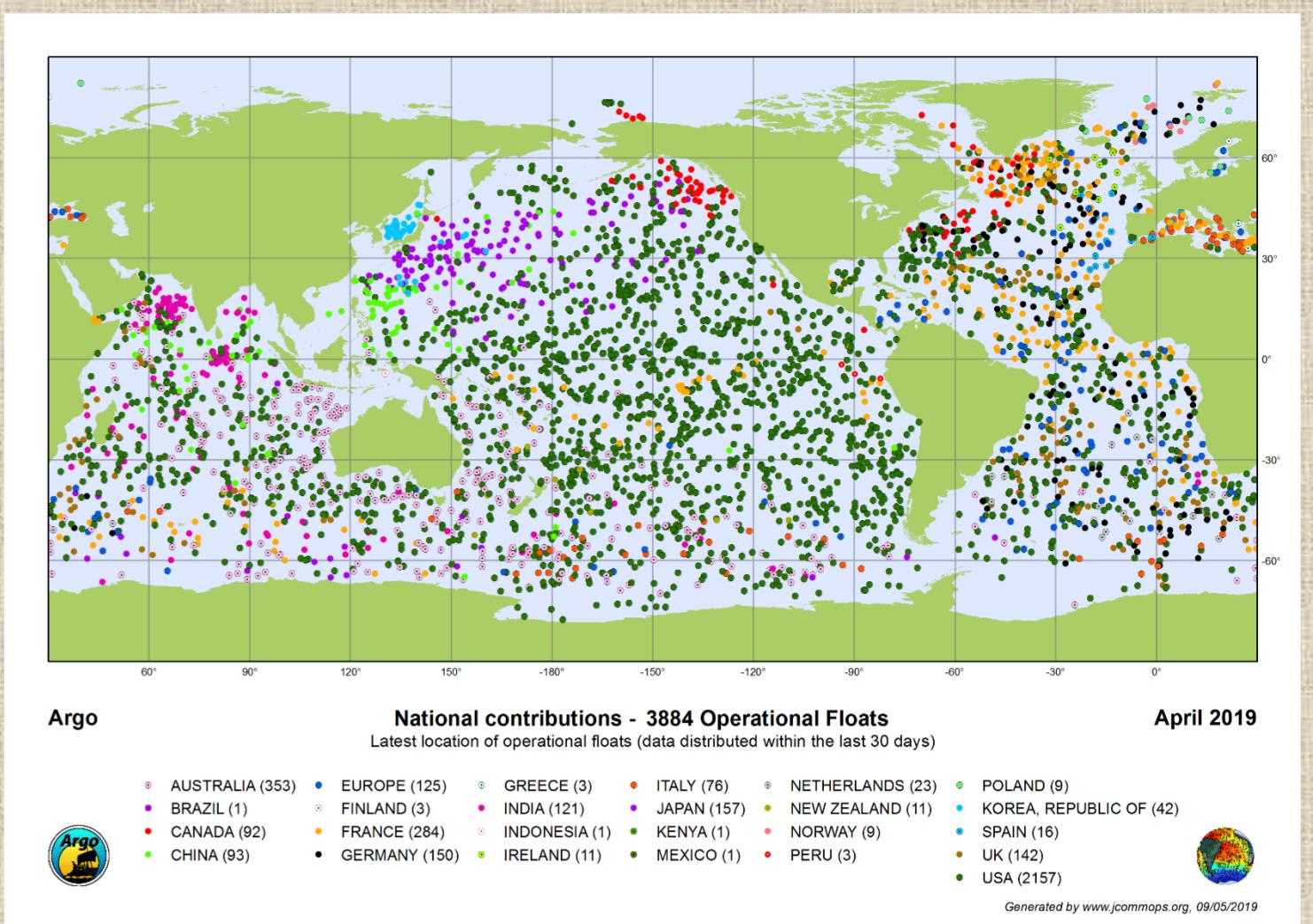
## Argo: a Revolution in Global Ocean Observation Dual Use : Research and Operational Oceanography

Argo is the first International global **real time in-situ ocean observing system** with about **3 900 active floats** worldwide measuring the Temperature and Salinity to a depth of 2 000 m. It delivers global data sets within a few hours from acquisition. (2 GDAC, 11 DAC)

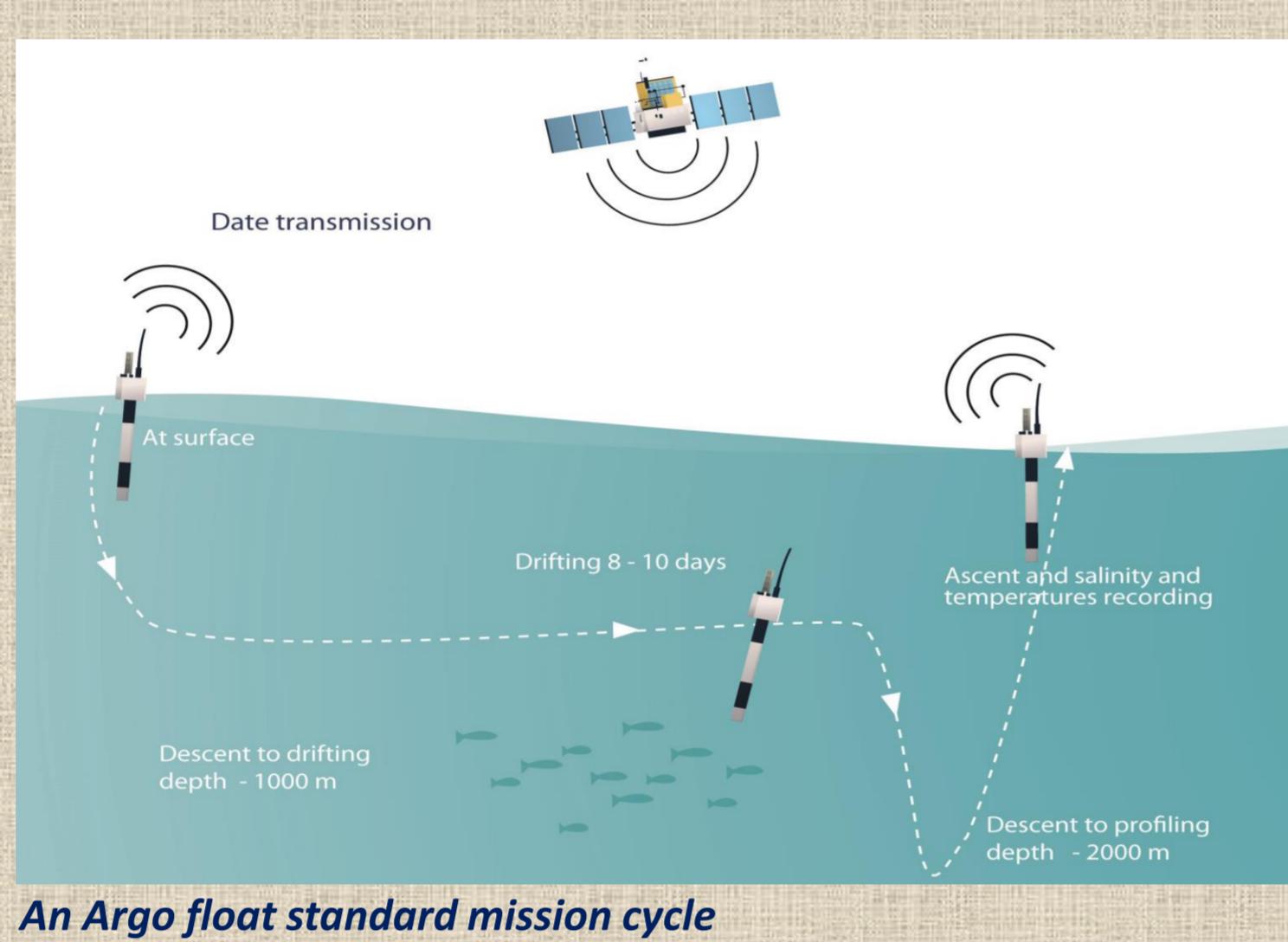
At European level, the legal structure **Euro-Argo** consolidate and improve European long term contribution to Argo. It aims maintaining a network of over **800 platforms (1/4 of the global array)** and deploy about **250 floats a year**. Its objectives also includes the extensions of Argo (e.g. marginal seas, biogeochemistry, deep ocean, polar regions)

**Argo-France** contribution builds up to about **a third of the European Argo network**, mainly in the Atlantic region but also in the ocean areas of French overseas territories.

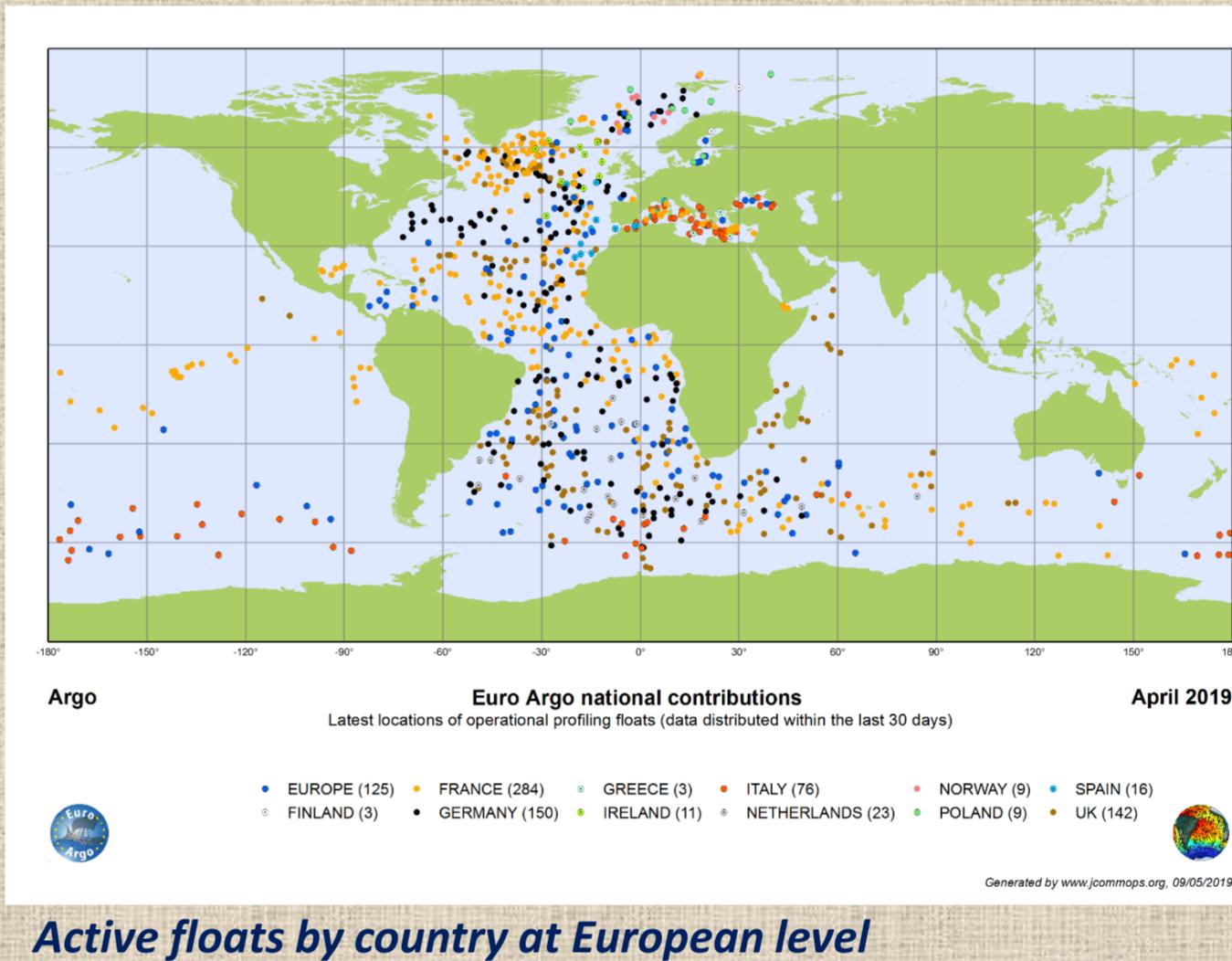
**Argo-France** and **Euro-Argo** share operational tools including Ifremer's float testing and storing infrastructure, at-sea monitoring tools and deployment strategies.



Active floats by country



An Argo float standard mission cycle



Active floats by country at European level

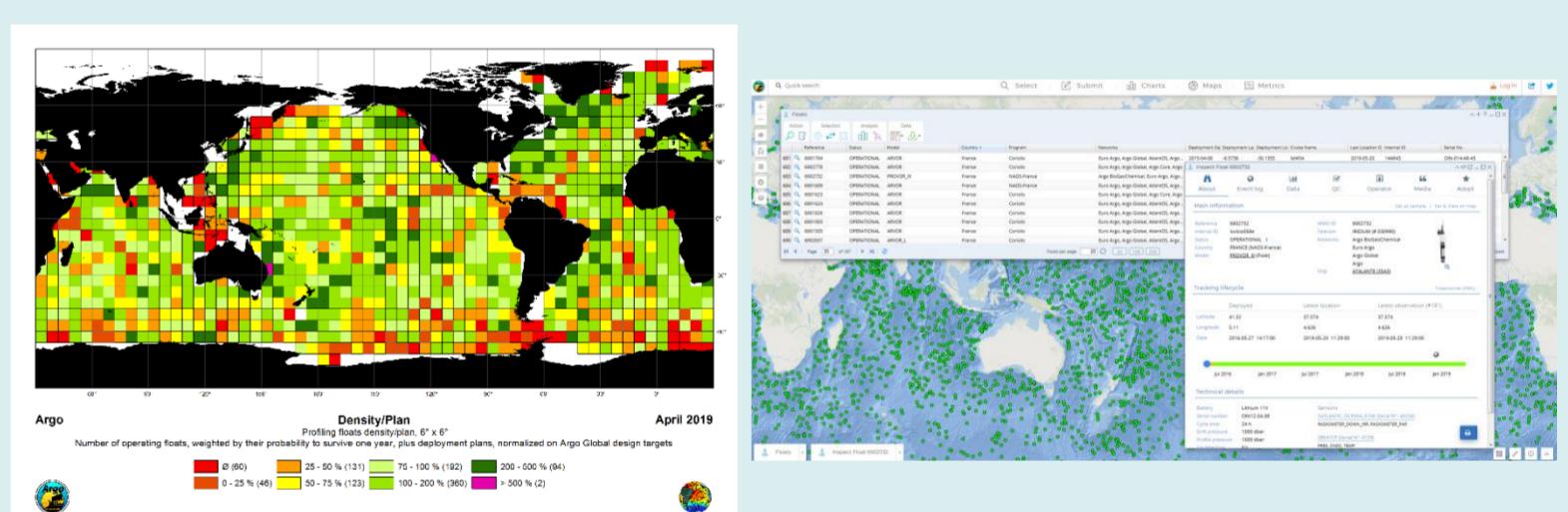


Storage and logistics for 100+ floats yearly

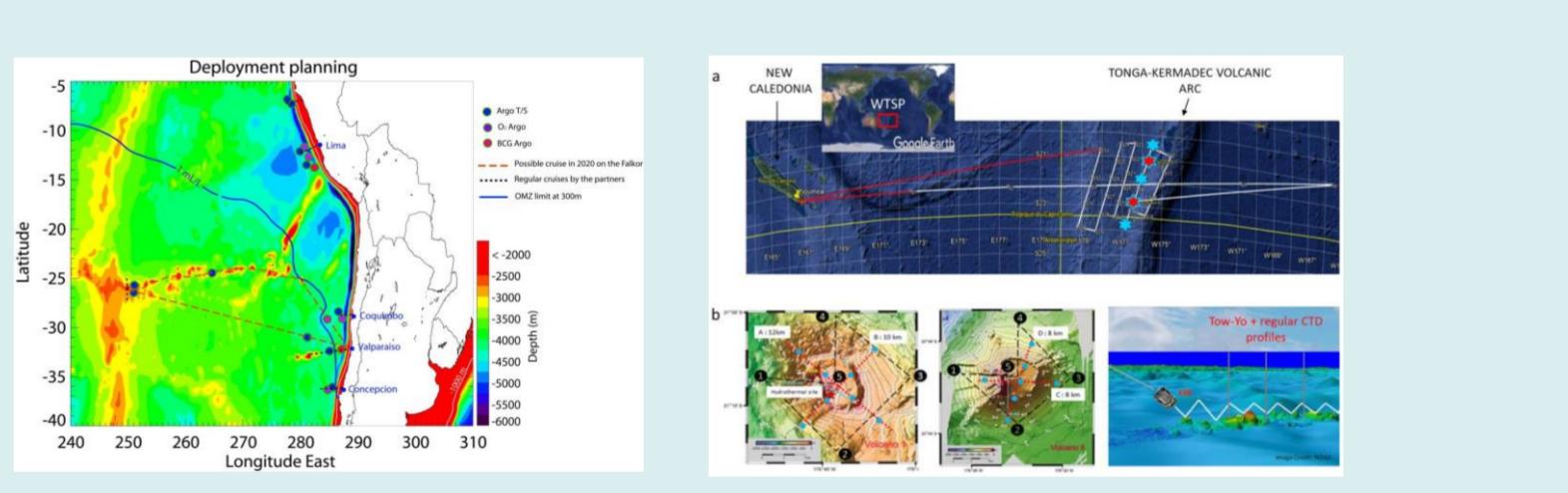


Yearly Deployment Plan based on:

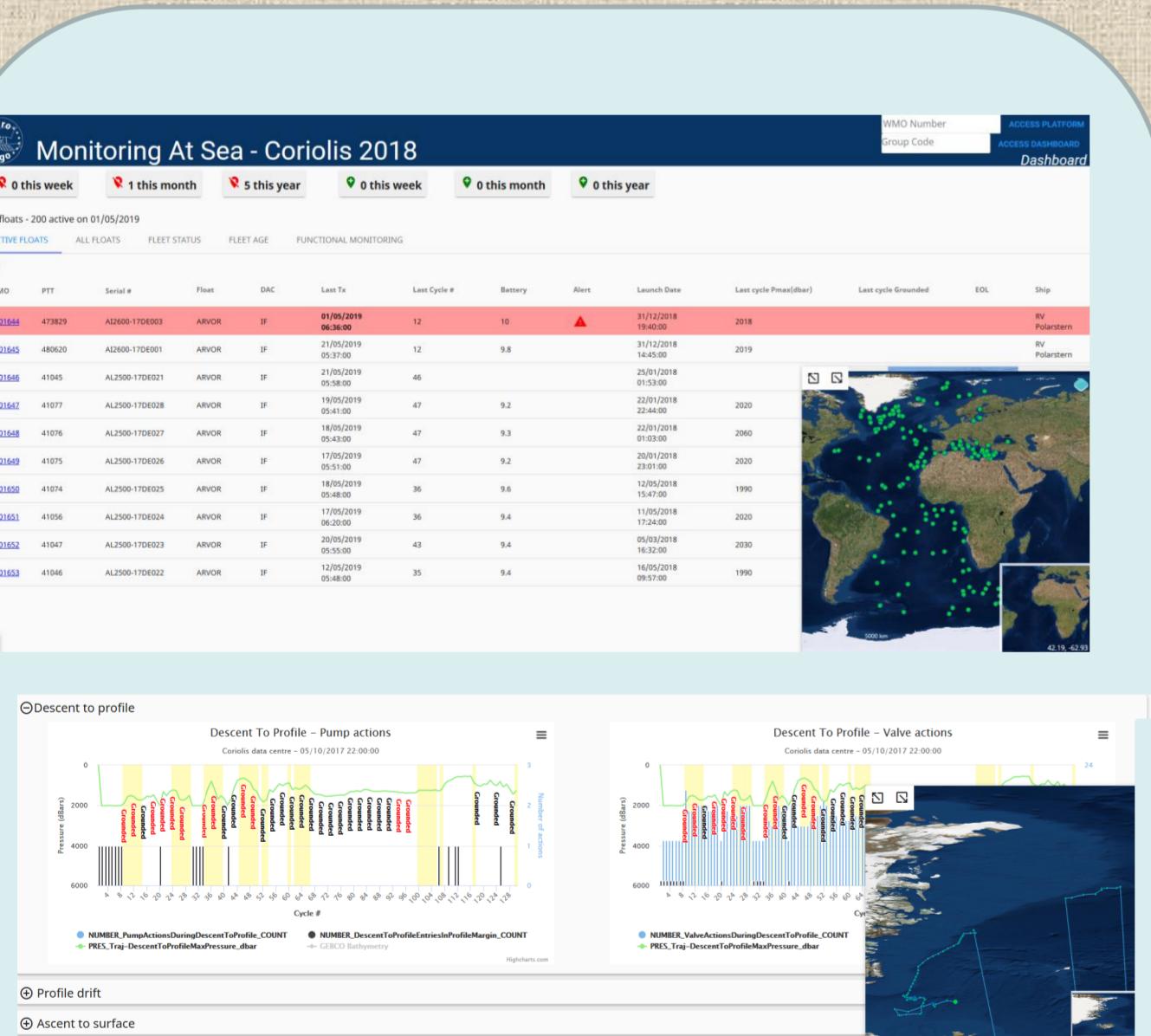
- Argo global design and density/age maps (JCOMMOPS)
- Implementation strategy for marginal seas
- National Plans and Scientific Projects
- Cruises opportunities from partners and others



Jcommops Argo density analysis tools



Extract of 2019 scientific cruise plans



### Argo-France Instrumental support team

Noé Poffa, Nathanaële Lebreton : [codep@ifremer.fr](http://codep@ifremer.fr)

In work here with Euro-Argo team

### Monitoring the French and European Argo fleet

- Online Coriolis Argo monitoring website developed by Euro-Argo and Ifremer
- Monitoring of key technical parameters through online dashboard, alerts and graphical interfaces
- Regular statistics and KPIs

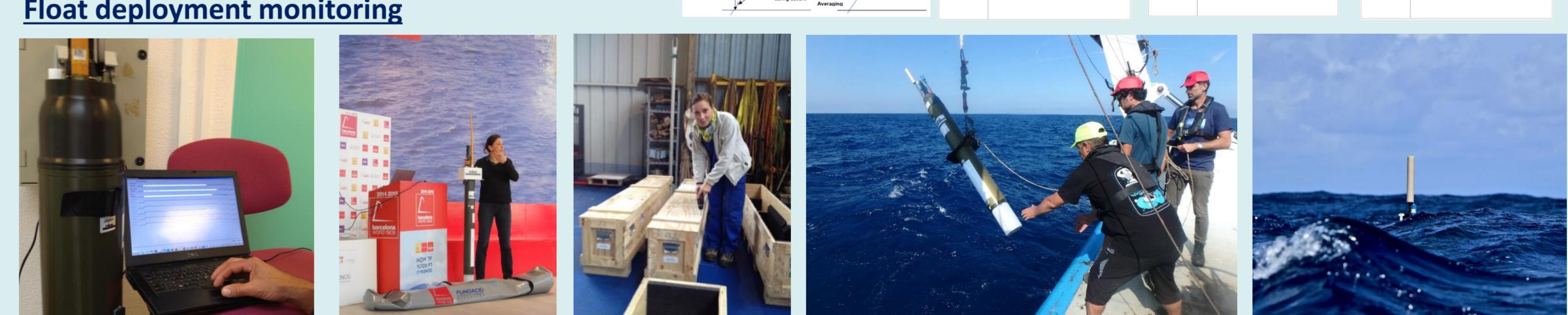
### Argo Metadata control at Coriolis GDAC level

- Regular control and update of metadata (technical and platform/sensors information)

### Programming and shipping floats

- Definition of float strategy with Pls
- Deployment teams training / documentation
- Shipments worldwide

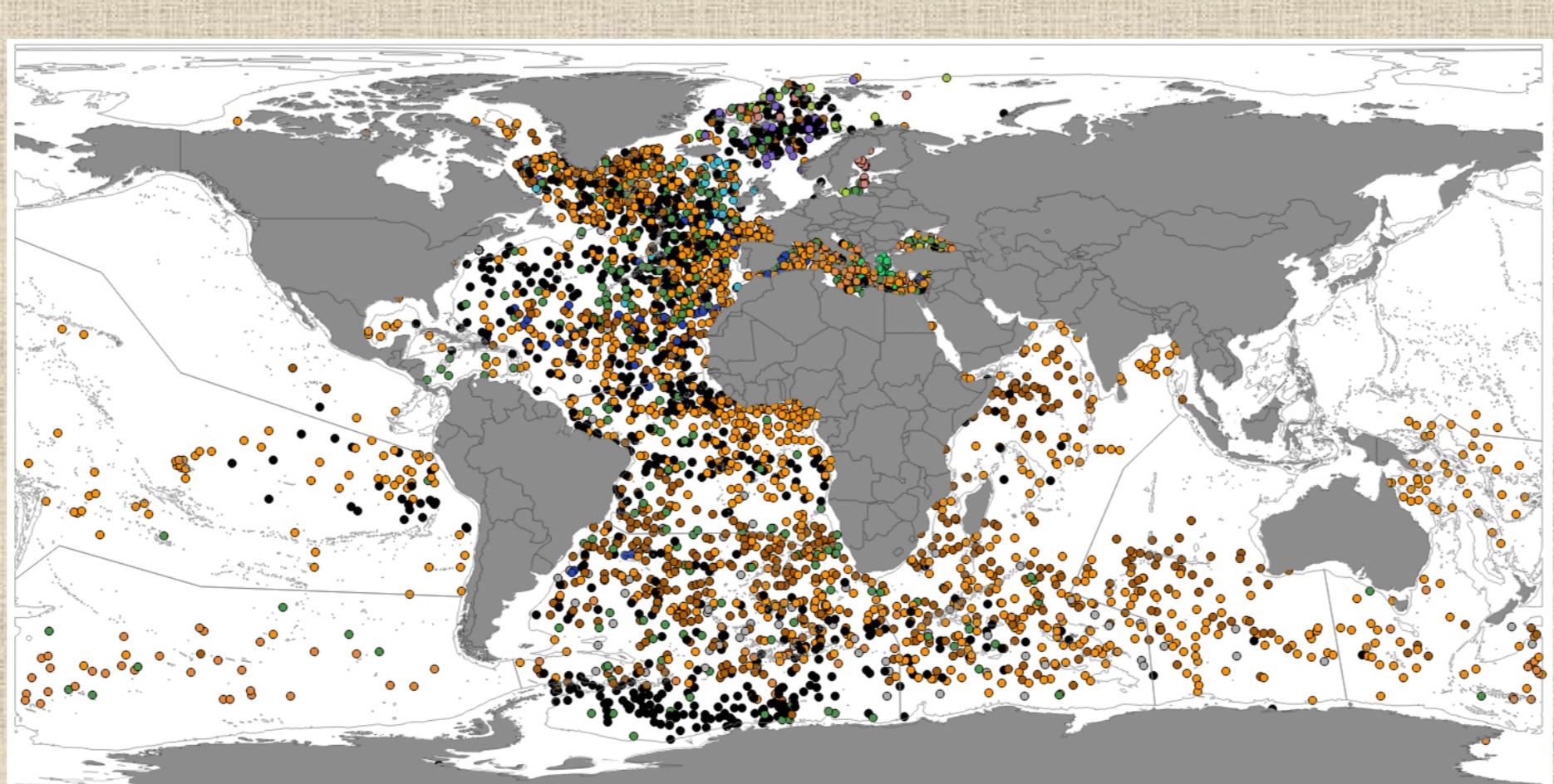
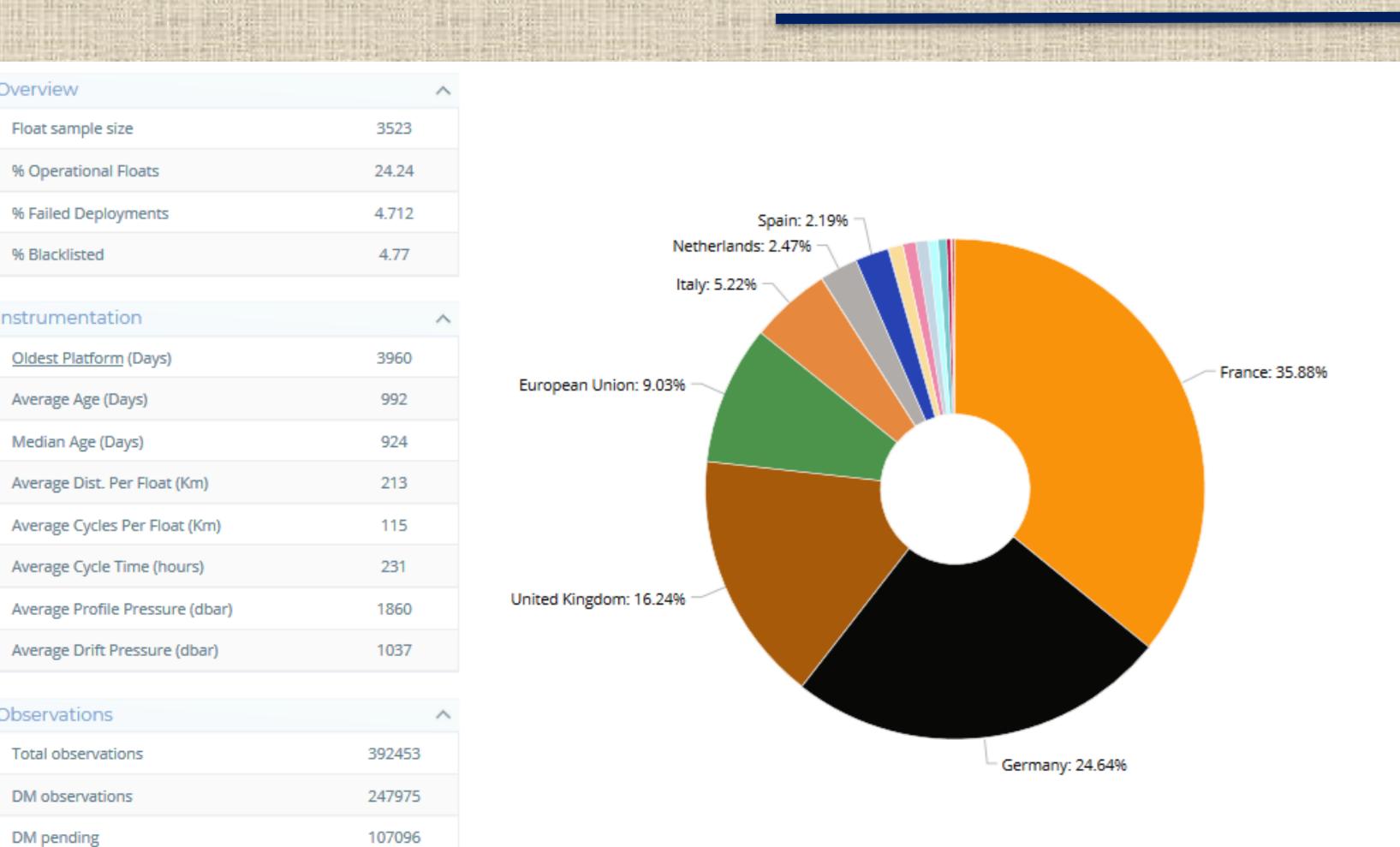
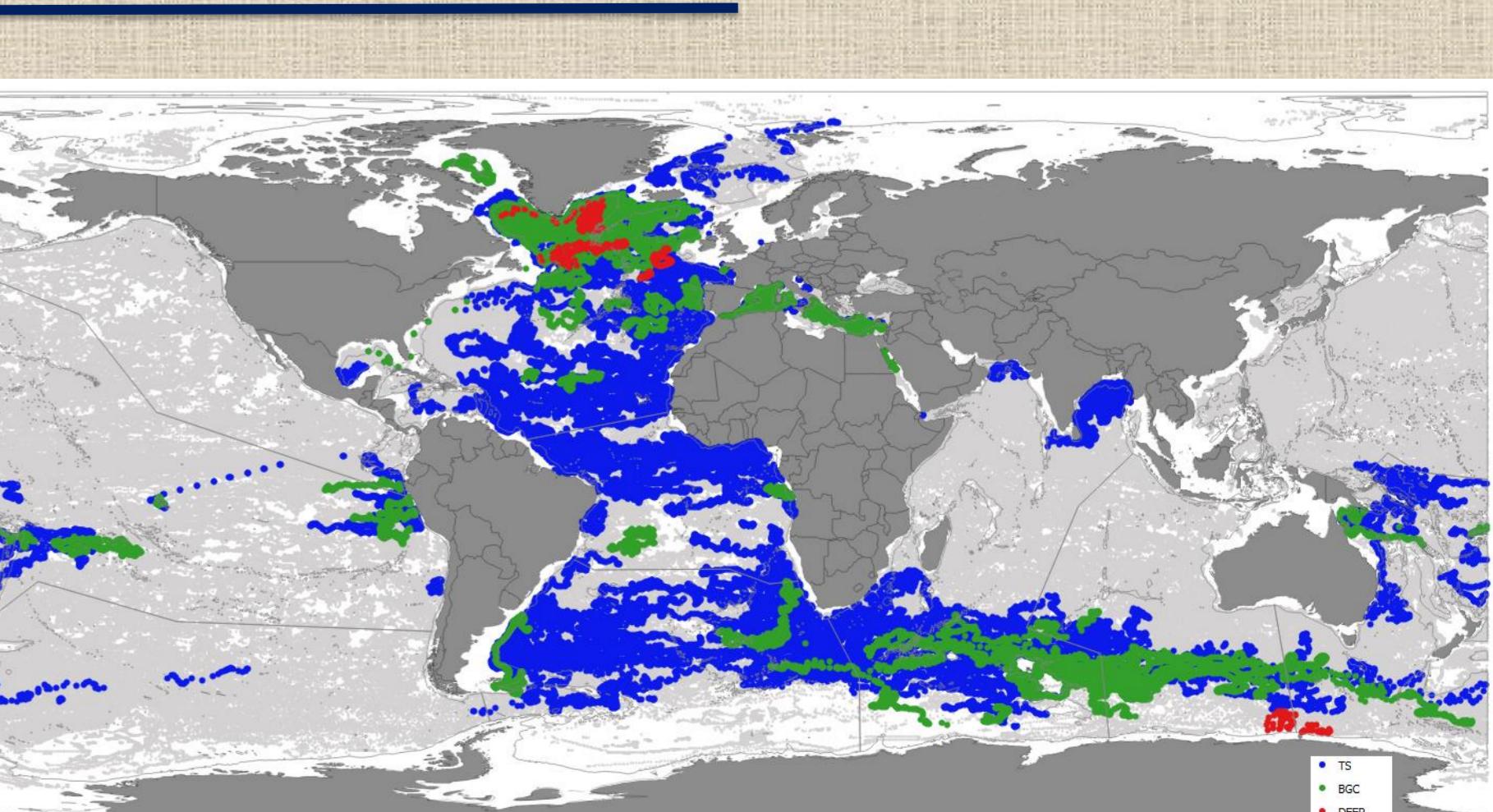
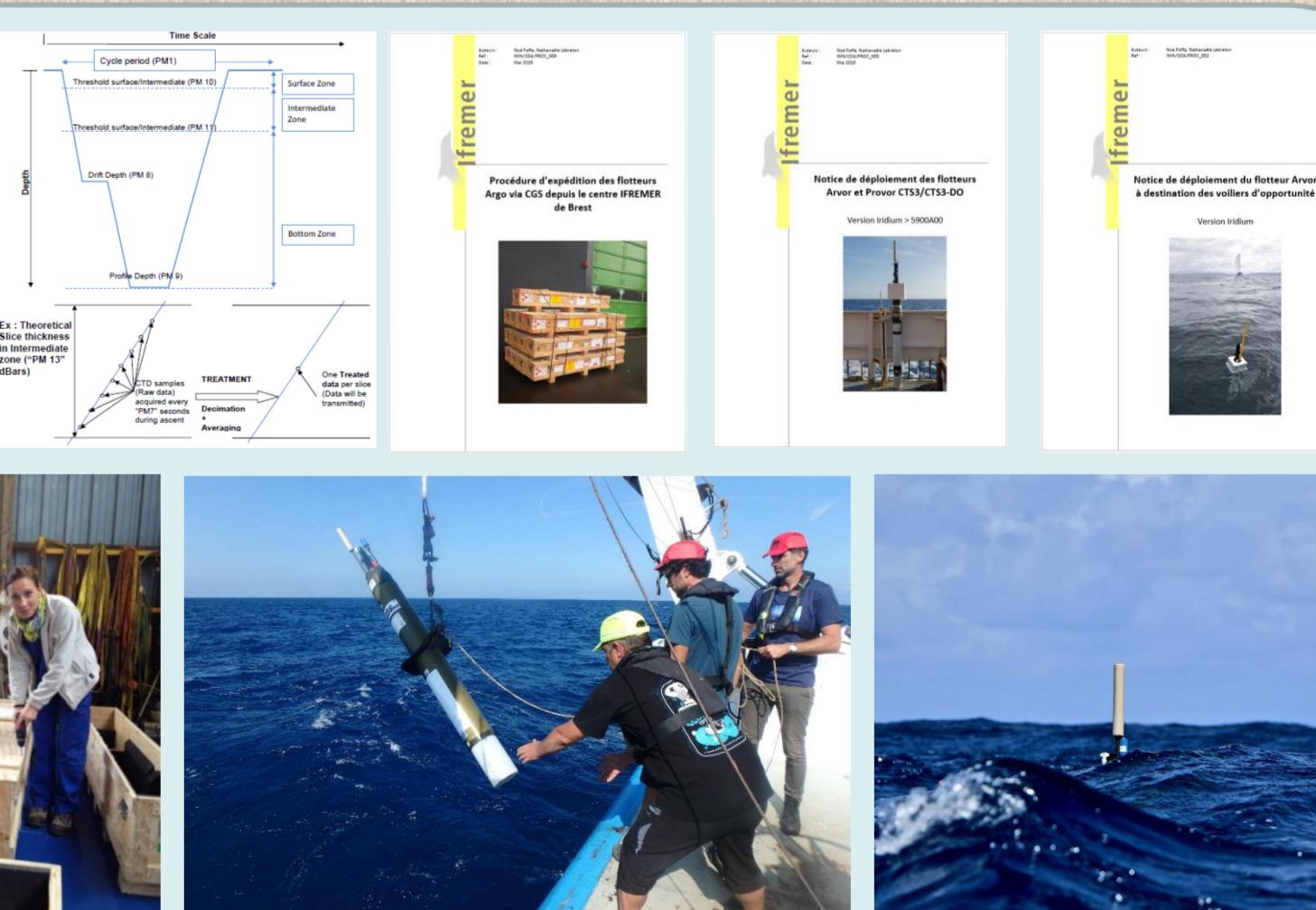
### Float deployment monitoring



### Feedback to R&D and industrial float development

- Feedback on operational /technical aspects
- Helping to a continuous improvement of float technology
- Provide ship opportunity for R&D testing

### Maintain the European network up-to-date



French floats profiles 2015-2019 by float type