

4th BGC-Argo Mission Team Meeting AST24, March 20-21 2023, Halifax



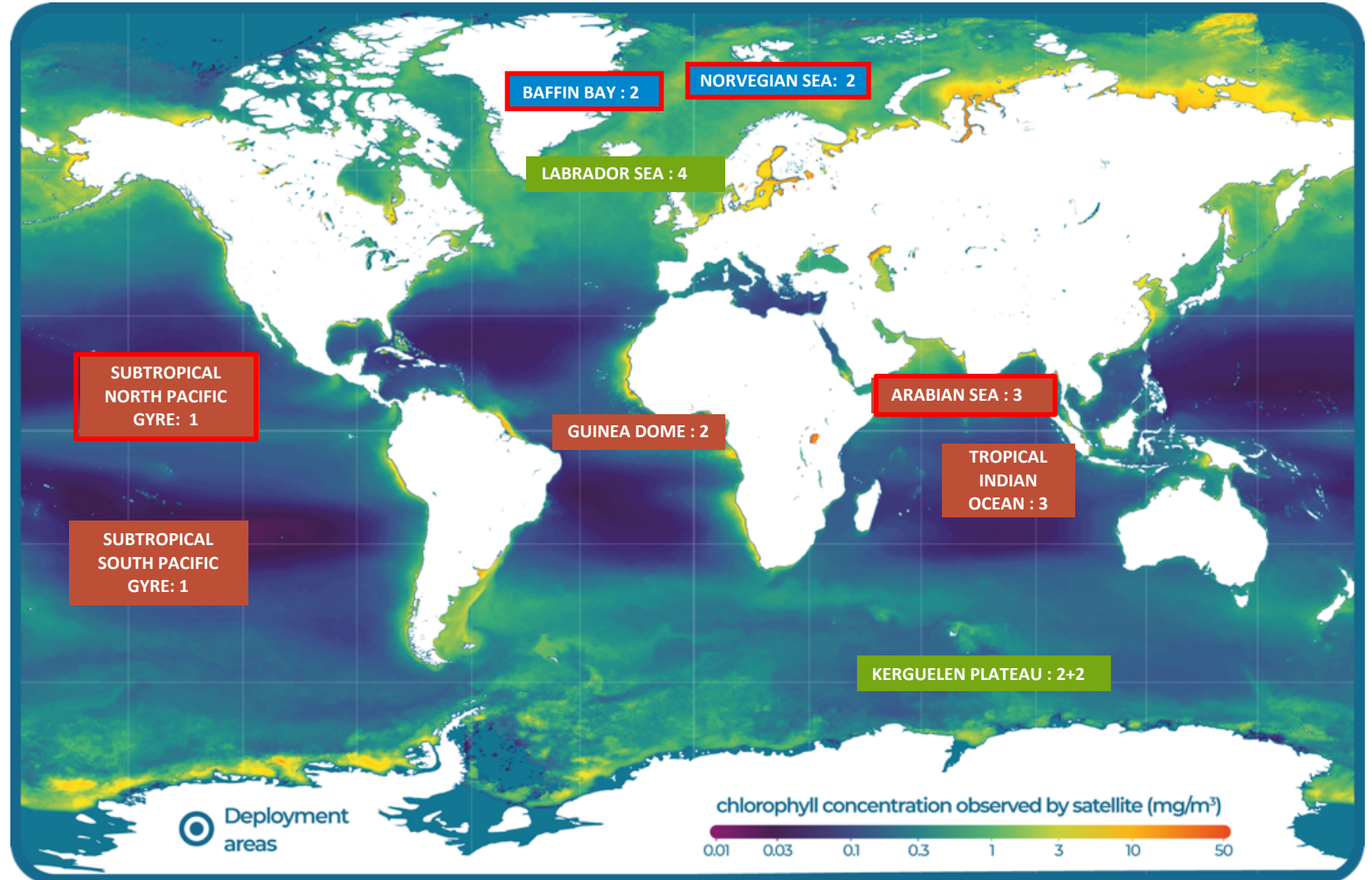
French National report

France : Long-term vision / actions for sustained BGC-Argo

Target for sustained fleet : ~ 15 BGC-Argo (+ 23 Argo-O₂) year⁻¹

Over the period 2023-2027, this is OK through a cluster of (too) many projects

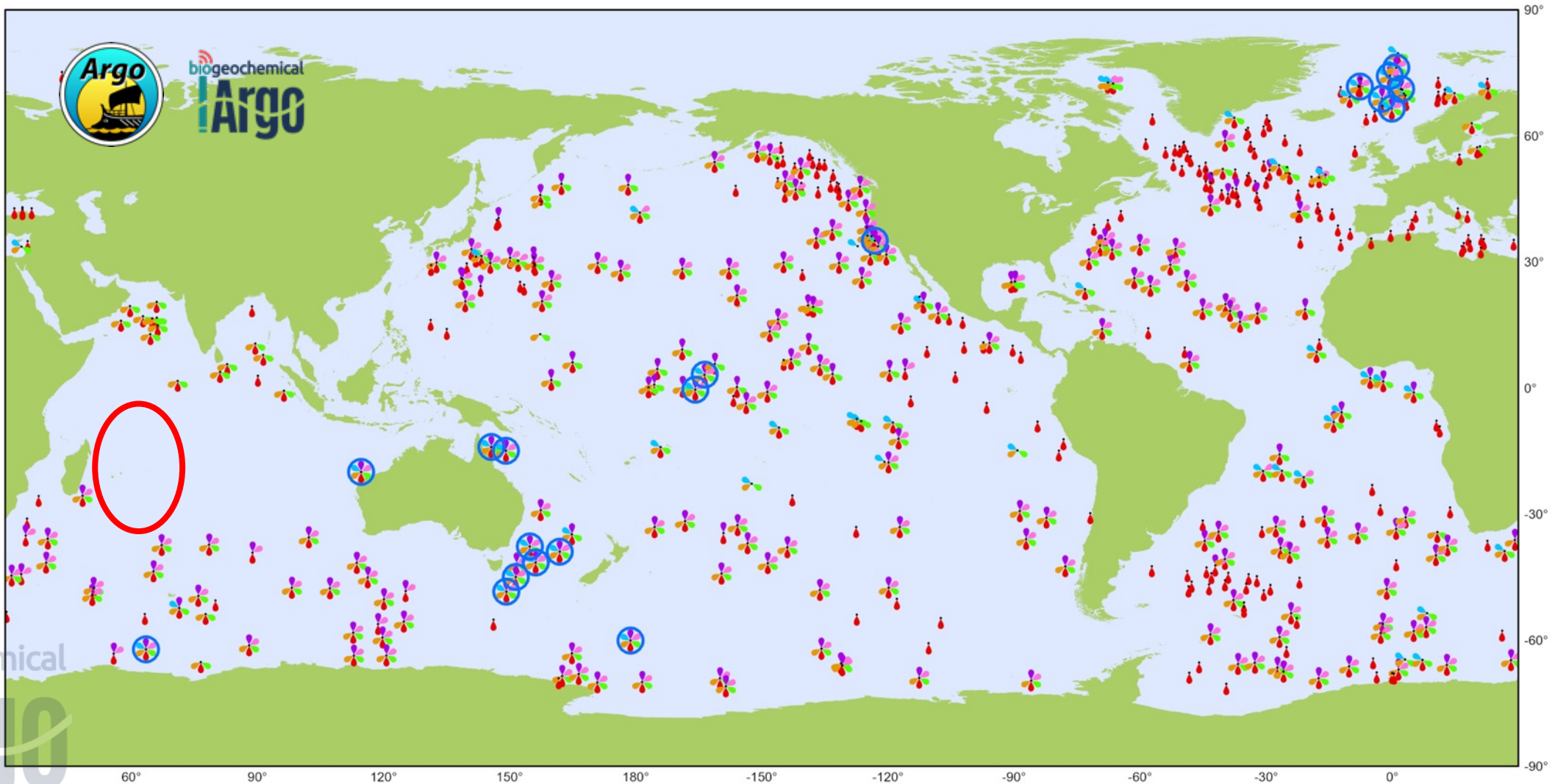
- **CNES + IR*Argo-France** (national funding) : **20 BGC-Argo** (O₂+ Bio-optics, Ed/Lu hyperspectral); *proposed to French community through yearly calls*
- **PIANO** (IFREMER Funding): **11 BGC-Argo** (5/6 variables)
+ Development of active acoustic for floats
- **Argo 2030** (PIA3-National Funding): **27 BGC-Argo** (5/6 variables)
9 floats with UVP & Transmissiometry & active acoustic.
- **CPER ObsOcean** (National/Brittany Region funding): **10 BGC-Argo** (5/6 variables)
- **REFINE** (ERC-EU) + **FEDER** (EU): **8 BGC-Argo** (5/6 variables) + *UVP & Transmissiometry*
- Still expected CPER (National / PACA region funding): **4-6 BGC-Argo**
UVP & Transmissiometry



- 22 CTS5 Jumbo 5 / 6 variables
- + UVP6 (22)
- + Transmissometer (22)
- + Ed / Lu hyperspectral (10)
- 14 floats deployed
- 8 to be deployed

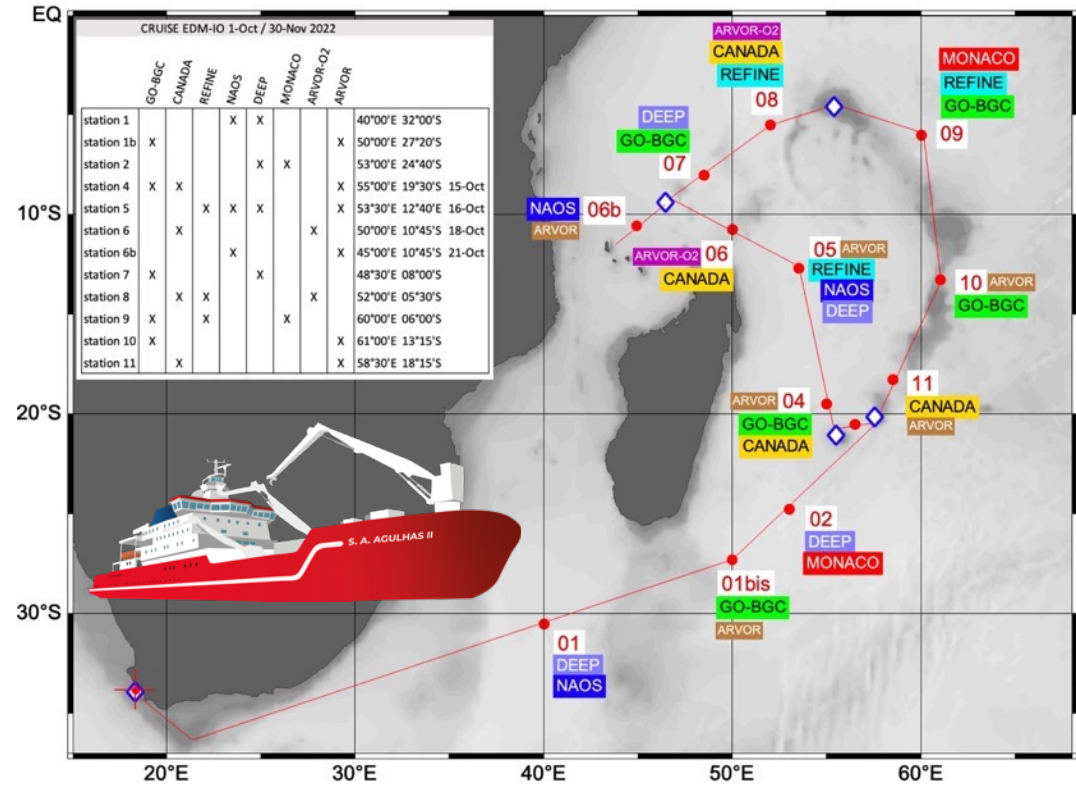


The Indian Ocean cruise was a unique opportunity to fill observational BGC-Argo gaps in the area



The BGC-Argo status in the area before and after the cruise

Total of 29 floats deployed



- ✓ 3 BGC-Argo from Argo-France (including 3 from ERC REFINE)
- ✓ 2 BGC-Argo from Monaco (dedicated to Mauritius and Seychelles)
- ✓ 5 BGC-Argo from US (GO-BGC-program)
- ✓ 4 BGC-Argo from Argo-Canada
- ✓ 4 Deep-Argo (0-4000 m) from Argo-France
- ✓ 8 Core-Argo (Temperature, salinity) floats from Argo France

A new *adopt a float* web site and dedicated interactive map have been released



<https://adoptafloat.com/>

<https://maps.biogeochemical-argo.com/adoptafloat/>



« French » BGC-Argo publications 2022-2023

1. Barbieux, M., et al. . (2022). *Biogeosciences* 19: 1165-1194 | DOI: 10.5194/bg-19-1165-2022
 2. Bock., N, et al. (2022). *Global Biogeochemical Cycles* 36 | DOI: 10.1029/2021GB007233
 3. Dall'Olmo, G., et al. (2022). *Open Research Europe*, 2, 118, | DOI:10.12688/openreseurope.15047.1
 4. Galí, M., et al. (2022). *Biogeosciences* 19: 1245-1275 | DOI: 10.5194/bg-19-1245-2022
 5. Organelli, E., et al. (2022). *Oceanography* 34: 90-91 | DOI: 10.5670/oceanog.2021.supplement.02-33
 6. Owens, W. B., et al. (2022), *Marine Technological Society Journal*| DOI: 10.4031/MTSJ.56.3.8
 7. Petit, F., (2022). *Frontiers in Marine Science*, 9, | DOI:10.3389/fmars.2022.959131
 8. Picheral, M., et al. (2022). *Limnology and Oceanography Methods*, | DOI:10.1002/lom3.10475
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1. Boyd, P., et al. (2023) *Oceanography* 36(Supplement 1)| DOI: 10.5670/oceanogr.2023.s1.2
 2. Lacour, L., et al. (2023). *Nature Communication* 14 | DOI: 10.1038/s41467-023-36954-7
 3. Mignot, A., et al. (2023). *Biogeochemistry*, in press.
 4. Neukermans, G., et al. (2023). *Earth-Science Reviews* 239: 104359, | DOI 10.1016/j.earscirev.2023.104359