



SAPRI

South African Polar
Research Infrastructure



SAEON

South African Environmental
Observation Network

South African National Report - AST25

Southampton, UK, 18-22 March 2024

1. The status of implementation of the new global, full-depth, multidisciplinary Argo array (major achievements and problems in 2023)

- a. Floats deployed and their performance

Floats deployed on behalf of the UK, Germany and US teams

- b. Technical problems encountered and solved

None

- c. Status of contributions to Argo data management (including status of high salinity drift floats, decoding difficulties, ramping up to include BGC or Deep floats, etc)

None

- d. Status of delayed mode quality control process

None

2. Present level of and future prospects for national funding for Argo including a summary of the level of human resources devoted to Argo, and funding for sustaining the OneArgo mission: Core, BGC, Deep, Spatial (Polar, equator, WBCs)

Tamaryn Morris (SAEON) for Core Argo, with interest in WBC expansion for deployments. This is being explored further through the GOOS Co-Design Boundary Current Exemplar Programme. SAPRI is looking to employ a technician to work with Argo floats and gliders, which will include setups and data (metadata) management.

Sandy Thomalla (CSIR SOCCO) for BGC Argo.

With the implementation of SAPRI (South African Polar Research Infrastructure), we would be keen to become more involved with the Polar deployment mission of OneArgo.

Thomas Mtontsi and Tamaryn Morris (SAEON) for Ocean Observing outreach activities, including a South African “Adopt-a-Float” programme.

3. Summary of deployment plans

SAEON and SAPRI are procuring six Core Argo Floats fitted with RBR CTD sensors and these should arrive ~August 2024. Deployment plans are provisional.

4. Summary of national research and operational uses of Argo data as well as contributions to Argo Regional Centers. Please also include any links to national program Argo web pages to update links on the AST and AIC websites.

Research related to Boundary Currents (especially Agulhas Current) using Argo float technology.

No operational uses at this time.

No Argo webpage for South Africa at this time.

5. Issues that your country wishes to be considered and resolved by the Argo Steering Team regarding the international operation of Argo. These might include tasks performed by OceanOPS, the coordination of activities at an international level and the performance of the Argo data system. If you have specific comments, please include them in your national report. Also, during the AST-25 plenary, each national program will be asked to mention a single highlight or issue via a very brief oral report.

No specific issues. We do need to work with a DAC for our incoming six Core Argo floats this year and will discuss at AST-25 which DAC may have capacity to assist us. Ideally we would like to work on our float data ourselves, but we do not yet have that capacity.

6. To continue improving the quality and quantity of CTD cruise data being added to the reference database by Argo PIs, it is requested that you include any CTD station data that was taken at the time of float deployments this year. Additionally, please list CTD data (calibrated with bottle data) taken by your country in the past year that may be added to the reference database. These cruises could be ones designated for Argo calibration purposes only or could be cruises that are open to the public. To help CCHDO track down this data, please list the dates of the cruise and the PI to contact about the data.

None at this time.

7. Keeping the Argo bibliography ([Bibliography | Argo \(ucsd.edu\)](#)) up to date and accurate is an important part of the Argo website. This document helps demonstrate the value of Argo and can possibly help countries when applying for continued Argo funding. To help me with this effort, please include a list of all papers published by scientists within your country in the past year using Argo data, including non-English publications.

Core Argo Best Practice - <https://repository.oceanbestpractices.org/handle/11329/2387>

There is also the thesis citation list ([Thesis Citations | Argo \(ucsd.edu\)](#)). If you know of any doctorate theses published in your country that are missing from the list, please let me know.

None

Finally, if you haven't already sent me a list of Argo PIs in your country, please do so to help improve the statistics on how many papers are published including an Argo PI vs no Argo PIs.

As above - Tamaryn Morris (Core) and Sandy Thomalla (BGC).

8. How has COVID-19 impacted your National Program's ability to implement Argo in the past year? This can include impacts on deployments, procurements, data processing, budgets, etc.

None

9. Does your National Program have any deployment plans for RBR floats in the next couple years? If so, please indicate how many floats will you be buying in 2024 and 2025 (if known) and where they might be deployed.

South Africa is procuring six Core Argo floats with RBR CTD sensors. Deployments will be in the South Atlantic, Southern and South Indian Oceans, however exact coordinates have not been decided yet.