3rd Deep-Argo Meeting

Virtual meeting 28 september - 1 october 2021

Session 2 - Tuesday 28/09/2021 - Scientific motivation, results and requirements 3h

- → Science motivation and design of Deep-Argo, objectives of the workshop 10' Nathalie Zilberman
- → Status of the array, national plan and funding status 10' Nathalie Zilberman
- → Scientific highlights 1h
 - Estimation of regional deep temperature trends from Deep Argo and historical hydrographic transect data Greg Johnson
 - ♦ Jamstec group TBD
 - Science results from the Deep Argo array in the subpolar gyre of the North-Atlantic Damien Desbruyères and Virginie Thierry
 - Science results from the Deep Argo array in the Australian Antarctic Basin 10' Annie Foppert
 - Other TBD
- → Requirements from users 1h
 - How to reveal the present deep ocean circulation with Deep-Argo 10' TBD
 - Climate change and variability in ocean heat content, what does deep argo have to do in order to contribute to GOOS and what are the requirements 10' Karina von Schuckman and Sabrina Speich (to be confirmed)
 - Sea level 10' William Llovel
 - Modelling community and operational oceanography 10' Peter Oke
 - Bottom topography 10' Mathias Jonas
- → Discussion 30'

Session 3 - Wednesday 29/09/2021 - Interactions : BGC/Deep Argo and cross networks 3h

- → Implementing O2 sensor on Deep-Argo 1h45
 - Scientific motivation and users need (sampling, accuracy) (biological community, water mass identification). 10' Laurent Coppola
 - Scientific results 30' (5 min each)
 - Sensors readiness (performance versus needed accuracy from the users) and QC 30'
 - Aanderaa and SBE63: 20' Henry Bittig
 - SBE83 : 10' Steve Riser and Seabird
 - AROD-FT: 10' Hiroshi Ushida/Kanako Sato and Hua LI (JFE)
 - Discussion 20'

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- → Cross networks interactions (presentation of the program, 2 slides on what they can do for and expect from Deep Argo, 2 slide on what they can do for and expect from BGC Argo) 1h15
 - EOV shared by various platforms: T, S, O2 (Deep) and Chla, bbp, pH, O2, UVP (BGC) (including data management) 15' Hervé Claustre, Virginie Thierry
 - DOOS presentation 10' Lisa Levin
 - OceanGlider presentation 10' Pierre Testor
 - ♦ GO-SHIP presentation 10' TBD
 - EMSO/Ocean-sites presentation 10' TBD
 - Discussion on the way forward 20'

Session 5 - Friday 01/10/2021 - Implementation plan

- → Floats technology: performances (including actual and expected longevity), issues, and future plans 25'
 - Deep-SOLO 5' Nathalie Zilberman
 - Deep-APEX 5' Brian King, Shigeki Hosoda
 - Deep-NINJA 5' Taiyo Kobayashi
 - Deep-ARVOR 5' Xavier André
 - ♦ HM4000 5' Zhaoui Chen
- → Performances and issues of CTD sensors (accuracy and stability)
 - SBE61 presentation 5' Nathalie Zilbernan and Dave Murphy
 - RBR presentation 5' Brian King and Mat Dever
 - SBE41 presentation <u>5</u>' Taiyo Kobayashi
- → DMQC strategy (progress on CPcor, addition of oxygen to existing temperature/salinity/pressure data) 1h
 - Presentation of the current strategy 5' Cécile Cabanes
 - ◆ 3-head float experiment results 5' Virginie Thierry
 - Feedback from DM operator about CPcor, long term stability and reference data (5' per group)
 - Feedback from Ifremer 5' Cécile Cabanes
 - Feedback from Jamstec 5' Kanako Sato
 - other groups
 - ..
 - Existing status and future evolution of reference dataset 10' TBD
 - Discussion
- → Review and finalize the Deep-Argo implementation plan (mission, float and sensor requirements, cost/profile) 1h