



Marginal Seas Argo DMQC workshop

The Argo-Poland, Argo-Germany and Argo-Finland consortia working together in the European Research Infrastructure Consortium Euro-Argo ERIC are organizing a two-day workshop 'Marginal Seas Argo Delayed Mode Quality Check'.

On the first day (April 18, 2023) we will focus on the issue of oceanographic measurements using autonomous Argo floats in the shelf and marginal seas. We will also review available oceanographic data that can be used for Delayed Mode Quality Check (DMQC), with particular emphasis on the Baltic Sea.

On the second day (April 19, 2023) of the workshop, methods of working with Argo data, including guide for DMQC procedures will be presented. Practical exercises are provided.

We invite everyone willing to expand their knowledge about this modern research tool, cooperate and present their own data useful for DMQC and methods of working with Argo data.

The workshop is free of charge and will be conducted in hybrid mode. Meeting place: Sopot (Poland), Institute of Oceanology of the Polish Academy of Sciences (IO PAN).

If you are interested, please submit your accession and questions to: ArgoPoland@iopan.pl

More information soon on the Institute's website:

<https://www.iopan.pl/en/blog/1/>

and Argo-Poland:

<https://old.iopan.pl/hydrodynamics/po/Argo/argo.html>

Please disseminate information among people potentially interested in participating in the workshop.

Preliminary workshop agenda:

Day 1. Tuesday, 18.04.2023

Session 1: 08:50 - 11:00

Argo in Marginal Seas

- 08:50-09:10 Welcome and overview of the organisation - Waldemar Walczowski (Argo-Poland)
- 09:10-09:30 Overview about Argo, float types, and implementation of OneArgo - Yann-Hervé de Roeck (Euro-Argo Office)
- 09:30-09:50 Challenges of using Argo in marginal seas - Simo-Matti Siiriä (Argo-Finland)
- 09:50-10:10 Argo Data System: access to data, structure of files, data quality controls, real time tests with considerations of marginal seas - Birgit Klein (Argo-Germany)
- 10:10-10:30 Integrating Argo into the observing system of the Baltic Sea - Laura Tuomi (Argo-Finland)
- 10:30-11:00 **Coffee break**

Session 2: 11:00 - 12:50

Argo in Marginal Seas: Argo Teams involved, examples of data, hydrographic properties.

- 11:00-11:40 Baltic Sea: northern part (Finland), southern part (Poland), BGC measurements (Germany) - joint presentation
- 11:40-12:00 Barents Sea - Norway, Poland, Finland
- 12:00-12:20 Other marginal seas (Mediterranean)
- 12:20-12:50 Discussion
- 12:50-14:00 **LUNCH**

Session 3: 14:00 – 16:30

Reference data for DMQC of Baltic Sea floats

- 14:00-14:20 Envisioned set-up of reference data base for DMQC - Simo-Matti Siiriä and Birgit Klein
- 14:20-14:30 Finland - FMI
- 14:30-14:40 Poland - IO PAN
- 14:40-14:50 Poland - IMGW
- 14:50-15:00 Poland - MIR
- 15:00-15:20 **Coffee break**
- 15:20-15:30 Germany - BSH, IOW
- 15:30-15:40 Denmark
- 15:40-15:50 Sweden
- 15:50-16:30 Discussion: Gather information on the hydrographic monitoring. Can we collect all data from HELCOM, ICES, CMEMS or do we need direct approaches to institutes. How to avoid time lags and get more timely data. Data formats. Uncertainties in data, accuracies

Day 2. Wednesday 19.04. 2023

Session 1: DMQC operations in the Baltic, introduction

- 09:00-9:30 Suggestion for adaption of Argo DMQC to Baltic DMQC Required activities for recovered floats and non-recovered floats. Step by step guide to the DMQC procedure using reference data, scripts and data needed - Birgit Klein with support from Gosia Merchel and Simo-Matti Siiriä
- 09:30-10:00 Considerations for DMQC of BGC data. Regional adaptations - Henry Bittig, Catherine Schmechtig)
- 10:00-10:30 Preparation for the hands-on-part - Download of data and scripts
- 10:30-11:00 **Coffee Break**

Session 2: DMQC operations in the Baltic, practical exercises

Joint trials of runs for actual float data for DMQC operators in the Baltic, based on scripts provided. Group discussions on DMQC decisions to take, input into the D-files, etc.

- 11:00-12:30 Hands-on-runs part I (floats in southern Baltic) - group activity
- 12:30-14:00 **LUNCH**
- 14:00-15:00 Hands-on-runs part II (floats in central Baltic) - group activity
- 15:00-15:30 Hands-on-runs part III (recovered float) - group activity
- 15:30-16:00 **Coffee break**
- 16:00-17:00 Summary and Close: get feedback from the participants what worked, what remains unclear, what needs to be adapted for example for the Barent Sea.