

# **Status of Argo Norway, Feb-2010**

The Institute of Marine Research (IMR) is involved in the international Argo programme with contribution of Argo floats, ship time for deployment and user of the data. At present, IMR is the only institution in the Argo Norway.

## **1. The status of implementation**

At present we have in total deployed eleven Argo floats. Three floats were deployed in 2002, while six were deployed in 2003. Two more floats that included oxygen and fluorescence sensors were deployed in April 2006. These additional sensors performed well until the floats stopped sending data late 2009.

Regarding the “Delayed mode” the Argo German do delayed mode quality control for all floats in the Nordic Seas including our floats.

## **2. Present level of and future prospects for national funding for Argo**

The funding has so far been self-financed (i.e. funded by our institute). The total float purchase has cost about 160kEURO. There are not devoted any funding for scientific analysis, but a person is partly working with the Argo floats regarding data collection. The scientific analysis is done in other external financed projects.

IMR has running contact with the Norwegian Research Council (NRC) that supports the EU-funded ESFRI-project “Euro Argo”, which IMR is a partner in. In collaboration with IMR NRC will work to get a long-term commitment from the Ministry of Education and Research. We recently received funding from the IMR’s annual budget for purchasing four (4) floats which also will include oxygen and fluorescence sensors.

## **3. Summary of deployment plans**

In spring 2010 we will deploy four (4) Argo floats in the Nordic Seas, primarily in the Norwegian Sea. All floats include oxygen and fluorescence sensors, and will use Iridium communication.

## **4. Summary of national research and operational uses of Argo data**

ARGO Norway focuses on both research topics and marine climate monitoring of the Nordic Seas. Approximately 3 scientists in 3 projects are directly involved in Argo Norway but also other people contribute with technical expertise, data management, ship time for deployments, and processing and analysing the data. There is an increasing interest in using Argo data in Norway. Several institutes are involved in the EU-project MyOcean where Argo data are central, and within this project two climate centres are now using the data operationally in climate models.

The present scientific topics are mainly within the Nordic Seas (Norwegian, Iceland and Greenland Seas) and include:

- Studies of the deep ocean circulation in the Nordic Seas. These studies have so far brought new insights in the circulation of the Nordic Seas.
- Water mass changes and also in relation with biological activities. This topic is also one of the reasons that we have included both oxygen and fluorescence sensors on our Argo floats.

## **5. Issues we wish to be considered and resolved**

There is confusion about the oxygen unit. At two different Argo data bases I found two different units, and when looking at the specification for the oxygen optode from Aanderaa there is a third unit.