

Report of the Argo Atlantic Implementation Meeting

An Implementation Planning Meeting for Argo in the Atlantic Ocean was held in Paris on July 10 and 11, 2000. Conceived just two and a half years ago, Argo—an international program to provide real-time observations of the upper-ocean temperature and salinity field—has made significant progress toward its goal of deploying 3,000 profiling floats to cover the global ocean.

Co-hosted by IFREMER and NOAA, this meeting initiated formal planning for coverage of the Atlantic Ocean by Argo floats, an activity which has been endorsed by the two meeting sponsors, the World Meteorological Organization and the Intergovernmental Oceanographic Commission (IOC). Argo has been recognized by its sponsors as an important “operational” ocean observing system, capable of serving both the research planned by the Climate Variability and Predictability Program (CLIVAR) and the operational demonstrations as part of the Global Ocean Data Assimilation Experiment (GODAE).

Meeting participants included representatives from twelve countries (Argentina, Brazil, Canada, France, Germany, Japan, Norway, Portugal, South Africa, Spain, United Kingdom, United States), four European organizations (European Center for Medium-range Weather Forecasting, European Commission, European Science Foundation, and EuroGOOS) and the IOC.

Argo is very timely, given existing and planned satellite coverage of the sea surface, a communications capability to collect observations in real time, and the computer power to assimilate the resulting data to produce improved analyses and forecasts. What is required is a routine capability to collect real-time subsurface observations of the ocean—over the long term—to complement satellite observations, so that the job of assimilation may begin in earnest. Argo is planned to meet that requirement, and as such is a first step toward the implementation of an operational observing system for the global ocean.

Argo is not an exclusive international club; countries can participate in a variety of ways and at whatever level is possible; ways to contribute in addition to providing floats include deploying floats, as well as utilizing their resulting data.

Participants were in agreement that the Argo data policy will be ‘full and open,’ making data accessible to all and with no period of exclusive use—both in real-time and delayed modes. Real-time data will be subjected to automated quality control (QC) and made available via the Global Telecommunications System within 12 to 24 hours, with faster access possible without QC. Delayed-mode data will be subjected to scientific QC and made available via the Internet within three months of collection.

At this meeting, both Spain and Norway announced their intention to request funding to provide floats for the Atlantic, joining efforts planned by Canada, E.C., France, Germany, U.K., and U.S. In addition, South Africa and Portugal expressed an interest in helping deploy floats. While this meeting focused on the Atlantic (and its sector of the Southern Ocean), participants noted the importance of implementing Argo globally.

The meeting ended with a discussion of anticipated deployments in the Atlantic, including the Atlantic sector of the Southern Ocean and the Norwegian Sea, for the period 2000-2002. The Atlantic should be well covered as a result of the plans identified at this meeting. Therefore, it is essential that funding be secured in a timely manner within each respective country, so that these plans can become actual commitments. At the rate anticipated for float deployments, full coverage of the Atlantic (and its sector of the Southern Ocean) could occur as soon as 2003.

At the conclusion of the meeting, participants agreed that operational oceanography is becoming a reality; it is no longer just a dream.

Planned deployments for Atlantic Ocean, 2000-2002

| | Subpolar >48°N | N.Subtrop. 20°N-48°N | Eq/Tropic 20°S-20°N | S.Subtrop. 20°S-40°S | So.Ocean >40°S | Total |
|---------------|-------------------|-------------------------|------------------------|-------------------------|-------------------|-------|
| Canada | | 10 | | | 10 | 20 |
| EU | 18 | 62 | | | | 80 |
| France | | 20 | 30 | 60 | | 110 |
| Germany* | 33 | | 20 | | 20 | 73 |
| Spain | | | 12 | | | 12 |
| UK | 10 | | | | 20 | 30 |
| USA | 10 | 40 | 65 | 35 | 25 | 175 |
| <i>Total</i> | 71 | 132 | 127 | 95 | 75 | 500 |
| <i>Target</i> | 71 | 155 | 192 | 133 | 140 | 691 |

* includes 8 for the Norwegian Sea.

The table includes deployments funded for 2000. The target number of 691 floats operating in 2003, will be reached if the rate of deployment anticipated for 2000-2002 is maintained in 2003.

Prepared by: Yves Desaubies, François Madelain, and Stan Wilson.