

Argo core activities

Argo is an array of approximately 3000 autonomous instruments (floats), primarily measuring profiles of temperature and salinity between the surface layer and mid-ocean depths at approximately 3 degree spacing and 10-day intervals in the open oceans between 60°N and 60°S. The data acquired can also be used to determine subsurface velocities.

Data from Argo are made freely available in both real-time (typically within 24hrs of acquisition) and in delayed mode (after the careful correction of sensor offsets).

Argo floats are deployed by national projects and remain the responsibility of those projects throughout their life.

Monitoring of Argo deployments and the notification of positions and operations of Argo floats are the responsibility of the Argo Information Centre. This is carried out in accordance with IOC Resolution XX-6.

The core geographical domain of Argo was originally defined as the ice-free areas of the Atlantic, Pacific, Indian and Southern Oceans. The Argo profiling mission implies that the Argo domain is primarily restricted to areas where ocean depths are greater than 2000m

Extensions to the core Argo domain

Recent modifications to standard Argo floats and to their profiling mission allow measurements to be made in ice-infested regions. Regional interests have also led to deployments in marginal seas. These include the Mediterranean, Japan/East, Bering and Greenland/Iceland/Norwegian Seas. Since these regions were not included in the initially-planned Argo programme they imply the need for an increase in the size of the array above the core size of 3000 floats.

Argo-linked activities.

The array of profiling floats provides an attractive method for making other ocean measurements that presently lie outside the core Argo mission. These include the measurement of dissolved oxygen, nutrients, microstructure, ambient noise, measurements of biological activity and temperature and salinity measurements that differ from the standard Argo 10 day profiling mission. The Argo data system is used to handle some of these measurements (particularly dissolved oxygen) but these are not considered to be part of the core Argo mission.

Similarly it is convenient to handle the data from ocean gliders and from instrumented marine mammals using the Argo data system. Though these data may be distributed by the Argo data system they also are not considered core Argo measurements.

At present the Argo Steering Team views these measurements and the quality control and distribution of their data as lying outside Argo core activities. As such, additional non-Argo funding is required for these activities.