Expansion of the Argo array of profiling floats in the tropical Atlantic

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Objectives:
The objective of Argo is to deploy and maintain an array of profiling floats that measures the upper ocean temperature and salinity on a 3° by 3° grid globally in real-time. The resulting data set is used by modelers for data assimilation and model validation. It is also used for the analysis of the temporal variability in the ocean and of ocean-atmosphere interactions (e.g. the heat budget). In addition the quasi-Lagrangian data from the floats are used to study the subsurface flow.

Measurement program:
The deployment of Argo floats are planned to fill in gaps in the existing array of profiling floats. Most deployments are done from Voluntary Observing Ships and Research Vessels. The US Argo Data Center at AOML receives the deployment information and processes the float data received from satellites. After an automatic quality control the collected profiles are distributed to users via GTS and the Argo Global Data Centers.

The USA plans to deploy 98 floats in the Atlantic in 2005, about one third of these will be deployed in the tropical Atlantic (within 20° of the equator, Fig. 1). Additional deployments will be undertaken by other Argo partners (e.g. France, United Kingdom)

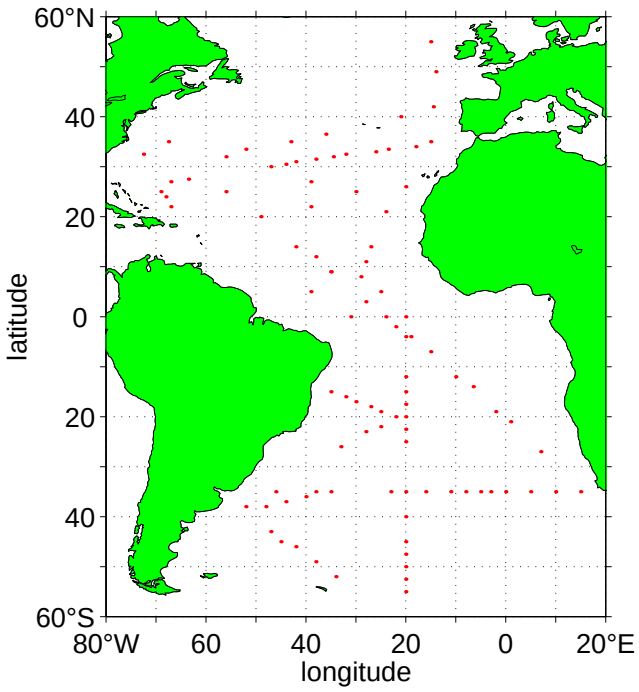

Figure 1: Planned deployment positions for US Argo Floats for 2005.