

THE OBJECTIVES OF THE ARGO WORKSHOP

By

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1. INTRODUCTION

The Atlantic coastal area of Africa forms one of the most important socio-economic areas of the continent due to the abundance of natural resources, including oil and gas deposits, extensive wetlands and fisheries resources. One of the most important socio-economic activities on the coast is the fishery resources, which is impacted upon by variations of sea surface temperature, oxygen and nutrient content. Major upwelling zones off the coasts of Gambia, Ghana, Cote d'Ivoire, Equatorial Guinea, southern Angola, Namibia and South Africa and minor upwelling off the coast of Togo, Nigeria and Cameroon for example are linked to biogeochemical processes, which affect plankton production and the seasonal migration of fish.

Apart from these resources which contribute a large proportion to the GDP, the ocean plays very important roles in moderating coastal climate and even areas farther inland. Rainfall variability over much of western Africa, both north and south of the equator is linked to variability in upper ocean temperature heat content. Hence, modes of climate variability in the Atlantic such as the meridional gradient mode, the Atlantic Niño or zonal mode, and the Benguela Niño, are all known to impact on the climate and fisheries of Africa.

The Argo programme is ideally suited to monitor intra-seasonal and longer time scale variations in ocean temperature, heat content, mixed layer depth, circulation and other properties that strongly influence the climate and fisheries of global oceans.

2. OBJECTIVES

The Argo programme has been successfully implemented in other ocean bodies like the Pacific, however African coastal States are yet to effectively participate in this global activity.

The main objective of this workshop is to initiate the Argo programme in the Western coast of Africa and hence improve our capacity to monitor, predict and mitigate the adverse impacts of variations in ocean temperatures, salinity and currents. This workshop will hence focus on the following topics:

- Argo technology
- Accessing information on temperature and salinity profile data from the numerous Argo profilers deployed
- Management of the Argo data and provision of data products.
- Analysis of the data in combination with other in-situ and remotely sensed data,
- Modeling methods for hindcasting and forecasting ocean variables using Argo data,
- Integration of Argo data and derived products into management policies in the region

3. CONCLUDING REMARKS

In the past, African coastal areas have lacked behind in several global ocean programmes. This has been due to several reasons which include sparse human resources, infrastructure and lack of involvement of local expertise at all levels of implementation. It is hoped that the series of lectures and training received during this workshop will stimulate firstly regional cooperation and international cooperation that will enhance Argo activities in the region.

I hence implore all participants to use this opportunity to contribute effectively to the activities during his workshop and follow-up activities. Africa can no longer lag behind in global ocean programmes because global programmes cannot be truly global without full coverage of all oceans.