



CLIVAR Ocean Observation and Synthesis Efforts

A. C. Catalbiano (1), **R. Boscolo** (2)

(1) CLIVAR IPO, NOC Southampton UK, (2) CLIVAR IPO, c/o IIM-CSIC, Vigo Spain
(rbos@iim.csic.es)

Ocean observations are a key element of the CLIVAR programme. CLIVAR aims to establish the appropriate mix of measurement platforms and synthesis techniques to determine the full suite of ocean variables, including air-sea fluxes, required for CLIVAR research, taking into account existing and new technologies. To achieve this goal, CLIVAR is working with GOOS, JCOMM, OOPC and POGO. The planning of CLIVAR ocean observations and their synthesis through assimilation is mainly coordinated through the new CLIVAR Global Synthesis and Observations Panel (GSOP) and the regional basin panels: The Atlantic, Pacific, Southern Ocean region and Indian Ocean Panels. GSOP is also coordinating the development of global ocean reanalyses which will synthesise all available ocean observations by merging them with global circulation models. CLIVAR needs those efforts in particular to:

- Develop an improved data base and reference data sets for climate research;
- Describe the state of the time-varying ocean over the past several decades;
- Quantify the interaction of the ocean with the atmosphere;
- Study climate dynamics associated with the global ocean over the last several decades;
- Deliver improved boundary conditions for regional/basin scale modelling and assimilation efforts that are being planned or performed as part of CLIVAR's regional process studies in individual basins;
- Facilitate the initialization of coupled models for studies and prediction of seasonal-to-decadal variability.

The poster will summarise the present status of climate-relevant observations and highlight the need for an internationally co-ordinated approach for ocean synthesis.