

Building Support for an Integrated Ocean Observing System

Bill Fornes

Research Associate, Consortium for Oceanographic Research and Education
wfornes@COREocean.org 202.332.0063

Penny Dalton

Consortium for Oceanographic Research and Education 202.332.0063

Abstract: Sustained observations over extended periods and large areas of the ocean have the potential to substantially increase our knowledge of the oceans. The goal of the Integrated Ocean Observing System (IOOS) is to establish a national infrastructure to provide ocean information so that individual user groups do not need to each maintain their own observing system to support their activities. User groups including academic researchers, educators, the general public, government agencies at all levels, marine fisheries, maritime transportation, and the energy industry each have different motivations and requirements for ocean information, but a sustained observational presence in the oceans will provide a common benefit. Fundamental issues that require a sustained presence in the oceans include climate and weather forecasts, increasing national security, sustaining living resources, and facilitating safer maritime operations, global climate change, dynamics of ocean circulation and mixing, relationships among physical processes and life in the ocean, and fluxes of sediments, carbon and contaminants in the coastal zone. As these examples

indicate, an observing system will need to obtain, on a routine basis, an extremely wide range of information covering the entire spectrum of ocean disciplines. Efforts to build support for the IOOS have been proceeding for the past 2 decades and provide unique challenges. One primary challenge in meeting this goal is that many different agencies, industries, and other organizations have a long history of maintaining such systems. It is neither possible nor reasonable to stop all the ongoing efforts in order to develop a single entity, so the planning may be more like assembling a patchwork quilt to a master design, rather than a single structure designed ab initio. An equally important challenge is translating growing consensus on the need for an integrated ocean and coastal observing system into support and understanding by Congress and the federal government, the oceanographic community and public that is necessary to make it a reality. This paper will address the current status of efforts to implement the IOOS and make recommendations for strategies to develop community consensus.