



The 50th Anniversary of the International Indian Ocean Expedition: An Update on Current Planning Efforts and Progress

Raleigh Hood (1), Nick D'Adamo (2), Peter Burkhill (3), Ed Urban (4), and Mitrasen Bhikajee (5)

(1) Horn Point Laboratory, University of Maryland Center for Environmental Science, Cambridge, USA (rhood@umces.edu),
(2) Perth Programme Office of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, Commonwealth Bureau of Meteorology, Perth, Western Australia (nick.dadamo@bom.gov.au), (3) Scientific Committee on Oceanic Research, Plymouth University, Plymouth, UK (peter.burkhill@scor-int.org), (4) Scientific Committee on Ocean Research, University of Delaware, Newark, USA (ed.urban@scor-int.org), (5) Intergovernmental Oceanographic Commission (IOC) of UNESCO, UNESCO Headquarters, Paris, France (mbhikajee@unesco.org)

The International Indian Ocean Expedition (IIOE) was one of the greatest international, interdisciplinary oceanographic research efforts of all time. Planning for the IIOE began in 1959 and the project officially continued through 1965, with forty-six research vessels participating under fourteen different flags. The IIOE motivated an unprecedented number of hydrographic surveys (and repeat surveys) over the course of the expedition covering the entire Indian Ocean basin. And it was an interdisciplinary endeavor that embraced physical oceanography, chemical oceanography, meteorology, marine biology, marine geology and geophysics.

The end of 2015 will mark the 50th Anniversary of the completion of the IIOE. In the 50 years since the IIOE three fundamental changes have taken place in ocean science. The first is the deployment of a broad suite of oceanographic sensors on satellites that have dramatically improved the characterization of both physical and biological oceanographic variability. The second is the emergence of new components of the ocean observing system, most notably remote sensing and Argo floats. And the third is the development of ocean modeling in all its facets from short-term forecasting to seasonal prediction to climate projections. These advances have revolutionized our understanding of the global oceans, including the Indian Ocean. Compared to the IIOE era, we now have the capacity to provide a much more integrated picture of the Indian Ocean, especially if these new technologies can be combined with targeted and well-coordinated in situ measurements.

In this presentation we report on current efforts to motivate an IIOE 50th Anniversary Celebration (IIOE-2). We envision this IIOE-2 as a 5-year expedition and effort beginning in 2015 and continuing through to 2020. An important objective of our planning efforts is assessing ongoing and planned research activities in the Indian Ocean in the 2015 to 2020 time frame, with the goal of embracing and helping to organize these activities as part of a larger coordinated 50th Anniversary research initiative. In addition we are working to motivate conferences, summer schools, data recovery, repeat line work and new process studies.