

Tropical Moored Buoy Implementation Panel (TIP) Report

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Michael McPhaden, chairman of the Tropical Moored Buoy Implementation Panel (TIP), briefed the panel on three topics: 1) the current successes of the TAO/TRITON partnership in maintaining the moored buoy array in the tropical Pacific; 2) recent scientific and organizational efforts that provide an international framework for developing a sustained ocean observing system, including moored buoys, in the Indian Ocean; and 3) the recent request from the NOAA Executive Council (NEC) for a new plan to transfer operational responsibility for the TAO portion of the TAO/TRITON array from NOAA's Pacific Marine Environmental Laboratory (PMEL) to the National Data Buoy Center (NDBC). Specific issues regarding TRITON and PIRATA were presented by Yukata Michida and Edmo Campos, respectively, in separate presentations.

The TAO/TRITON partnership continues to function well, providing a seamless real-time data stream for ENSO forecasting and analysis. During the recent 2002-03 El Niño, TAO/TRITON data proved to be valuable for characterizing the evolution of the event and for coupled ocean-atmosphere model forecast initialization. The data are disseminated to the operational and research communities via the GTS and the World Wide Web. Between August 2002 and July 2003, a total of 119,170 data files were downloaded from TAO/TRITON web sites at PMEL and JAMSTEC in 10,551 separate user requests. For August 2002-July 2003, real-time data return for the array was 86%.

Planning for an Indian Ocean moored buoy array has progressed over the past year. At the IOGOOS meeting in Mauritius in November 2002, representatives from several nations reviewed recent scientific progress, discussed array design concepts and implementation strategies, and produced a summary document on the status of Indian Ocean moored buoy activities. An informal working group of the TIP was formed at the end of the meeting to continue the planning effort. Subsequently, the CLIVAR Asian Australian Monsoon Panel in February 2003 recommended the establishment of a Indian Ocean Panel to guide the design and implementation of a sustained integrated ocean observing system in the region. This recommendation was endorsed at the CLIVAR Scientific Steering Group meeting in Victoria, BC in May 2003. Thus, a new Indian Ocean Panel is in the process of being established with sponsorship by CLIVAR, GOOS, and the IOC/WMO Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM). The TIP will work with this new panel (as well as other existing CLIVAR and IOC/WMO panels) to advance the implementation of a moored buoy network in the context of other observing system elements in the Indian Ocean for climate purposes.

The NOAA Executive Council (NEC), which advises the Administrator of NOAA on management and policy issues, has requested submission of a new transition plan by 31 October 2003 to transfer responsibility for TAO array operations from PMEL and NDBC. While at one level NOAA's management of the TAO array is an internal affair, the OOPC and other international bodies should be aware of potential impending changes in management practices because 1) the TAO array was developed over a 20 year period with intellectual, organizational, and financial support from the international community; 2) it is presently maintained as a contribution to GOOS, GCOS, and the WCRP through international partnerships; and 3) it is universally recognized as a key element of the ENSO observing system. McPhaden briefed the OOPC on the history and status of TAO transition planning within NOAA and discussed some of the possible implications for how the array might be operated in the future.