

Preface

Systematic studies on the Indian summer monsoon began in 1875 with the establishment of the India Meteorological Department (IMD). Almost a century later, between 1963 and 1979, several international field programmes were conducted with a goal to understand the role of the Indian Ocean in the monsoon. These experiments included the International Indian Ocean Expedition (IIOE) during 1963–65, Monsoon-73 in 1973, Monsoon-77 in 1977, and Monsoon Experiment-1979 (MONEX-79). Indian researchers played an active role in all the experiments.

By the 1980s the atmosphere-ocean science community in India had sufficient infrastructure to conduct large scale ocean-atmosphere experiments on its own. This was possible because of the initiatives taken by the IMD, New Delhi, Department of Science and Technology (DST), Department of Ocean Development (DOD), New Delhi, Department of Space (DOS) and Council for Scientific and Industrial Research (CSIR), New Delhi. The 'Monsoon Trough Boundary Layer Experiment' (MONTBLEX) was conducted during 1989–90 and the 'Land Surface Processes Experiment' (LASPEX) was carried out in 1997–98.

The successful completion of these experiments motivated the science community to propose to the DST the formulation of the Indian Climate Research Programme (ICRP) in 1995. The ICRP consists of different research components. One of these is process-oriented field observation pro-

grammes on the monsoon system. The first in the proposed series of experiments was the Bay of Bengal Monsoon Experiment (BOBMEX). It was implemented in two stages: BOBMEX-Pilot in October–November, 1998, and BOBMEX-1999 in July–August 1999. BOBMEX focused on intra-seasonal variability of organized convection in the atmosphere and on the role played by ocean-atmosphere interactions in monsoon variability. Special observational platforms like deep water meteorology-oceanography buoys, research ships, weather radars and satellites were used together with conventional meteorological observatories to collect data on the variability of the monsoon ocean-atmosphere system. The oceanographic data collected during BOBMEX are available from the Indian National Oceanographic Data Centre, National Institute of Oceanography (NIO), Goa, and the meteorological data are available from the Additional Director General (Research), IMD, Pune.

The results of the BOBMEX-Pilot were published in the June 2000 issue (vol. 109) of this journal. A workshop was organized in February 2001 at NIO, Goa, to discuss the results of BOBMEX-1999. Of the 30 papers that were presented during the workshop, 12 are being published in this special issue after peer-review. I express my thanks to the referees who reviewed the papers. I also wish to thank the DST, DOD, CSIR, DOS, and other participating agencies for their support.

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Guest Editor