

Input from WMO to the report of the Secretary-General on Oceans and the Law of the Sea 2003

Salient issues arising in 2003

- 1) Meteorological and oceanographic observations made by ships at sea (under the WMO Voluntary Observing Ship scheme, VOS) and transmitted to shore in real time are an essential component of the observational data used by National Meteorological Services in the preparation of maritime safety services. Such services directly support safety of navigation and of life and property at sea. The observations are also critical to an enhanced scientific understanding of fluxes at the air-sea interface, and eventually to the modelling and prediction of such fluxes in coupled atmosphere-ocean climate models. The availability of such observations has, unfortunately, been stable or decreasing for several years, for a number of reasons, and efforts are also required to enhance data quality.

In July 2003, the second session of the JCOMM Ship Observations Team took place in London, in conjunction with the VOS Climate Project Fourth Project Meeting and the Second International Workshop for Port Meteorological Officers, for the purpose of further enhancement and coordination of oceanographical and meteorological observations by ships. One of the primary objectives of the VOS Climate Project is to assess systematic and random errors in the various types of observations. It was therefore decided that participating countries should make efforts to recruit as many ships as possible, to obtain observations from as wide a range of observation systems as possible. The international network of Port Meteorological Officers (PMOs) has a significant and indispensable role to play in recruiting and servicing Voluntary Observing Ships. As recognized by the VOSClim project, PMO involvement is essential to maintain the value of ship-based observations. The workshop was attended by more than 40 participants from 20 countries and representatives from other related organizations such as the International Chamber of Shipping (ICS), and the International Maritime Organization (IMO). Participants found the workshop useful in many aspects, including especially the exchange of views and experiences between the various national PMO networks.

- 2) Ocean data buoys, both freely drifting and moored, constitute a valuable and sometimes unique source of essential meteorological and oceanographic data from remote ocean areas. Such data, which are reported in real time via satellite, are distributed globally and made freely available on the Global Telecommunication System (GTS) of the World Weather Watch of WMO. Observations directly support meteorological forecast and warning services including maritime safety, global climate and global change monitoring, research and prediction, and meteorological and oceanographic research.

Vandalism of these buoys, both deliberate and accidental, is a major ongoing problem in many parts of the world. The Data Buoy Cooperation Panel (DBCP, a JCOMM subsidiary body), at its nineteenth session held in October 2003, Brazil, addressed the problem. Suggested measures include collaboration with relevant international organizations, such as IHO, IMO, FAO, as well as international fishery bodies such as the International Tuna Commission, on the issue of vandalism, to provide them with an information leaflet and to request them to distribute it widely among their Member States and institutions.

- 3) WMO coordinates the dissemination of warnings and weather and sea bulletins according to a broadcast schedule, in conformity with procedures laid down under the Global Maritime Distress and Safety System (GMDSS) protocols, within the International Convention for the Safety of Life at Sea (SOLAS). In September 2003, a Global Maritime Distress and Safety System (GMDSS) weather information website (<http://weather.gmdss.org>) was established, hosted by Météo-France. The site provides, in real time and simple text format, the marine

weather information broadcast via Inmarsat-C SafetyNET by all NMSs appointed as Issuing Services within the framework of the WMO Marine Broadcast System for the GMDSS.

- 4) The year 2003 marked the 150th anniversary of the First International Meteorological Conference (Brussels, 1853), which led to the establishment, 20 years later, of the International Meteorological Organization, the predecessor of WMO. A celebration of this anniversary, attended by nearly 150 people, took place in Brussels in November, under the high patronage of His Majesty, King Albert II of Belgium. It included historical reviews by current meteorologists and oceanographers of the development of operational marine meteorology and oceanography, leading to the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) and the Global Ocean and Climate Observing Systems (GOOS and GCOS), as well as a future vision of operational oceanography and marine meteorology.