



# An International Seminar to Celebrate the Brussels Maritime Conference of 1853

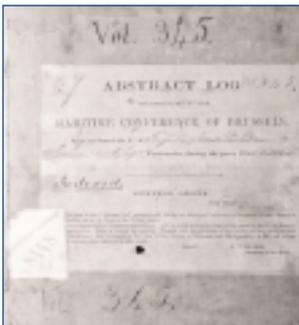
## *An Historical Perspective of Operational Marine Meteorology and Oceanography*

*Under the High Patronage of HM King Albert II of Belgium*

Residence Palace, Brussels, Belgium, 17–18 November 2003

### Background

In August–September 1853, a Maritime Conference was convened in Brussels by Lt. Matthew Fontaine Maury (US Navy) for the purpose of “establishing a uniform system of meteorological observations at sea, and of concurring in a general plan of observation on the winds and currents of the ocean”. This was the first international meteorological conference and the precursor of international cooperation and coordination in operational meteorology and oceanography. It led more or less directly to the First International Meteorological Congress in Vienna in 1873 and to the establishment of the International Meteorological Organization (IMO), the predecessor of WMO. As such, it was a key milestone in the development of present-day operational meteorology and oceanography.



The year 2003 marks the 150th anniversary of this landmark conference. A special seminar is being organized as a celebration of this anniversary. This seminar will take place in association with the second International Workshop on Advances in Marine Climatology, CLIMAR-II.

### Organization

The seminar has been conceived to include historical reviews of the 1853 Conference, and 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). It also covers burgeoning issues in operational ocean observations, and the role of existing programmes and institutions in dealing with these. The seminar concludes with a vision of future operational oceanography and marine meteorology, based on the lessons learned over the past 150 years. It comprises invited keynote papers by eminent meteorologists and oceanographers, together with some contributed posters. There are also displays of equipment highlighting the development of meteorological and oceanographic instrumentation over the past 150 years, as well as displays of other historical material, such as old log books, reports, etc. The displays include some by corporate sponsors.

### Participating Agencies

World Meteorological Organization (WMO), Intergovernmental Oceanographic Commission (IOC) of UNESCO, Royal Meteorological Institute (RMI) of Belgium (*host institution*), National Oceanic and Atmospheric Administration (NOAA) USA, US Navy, Météo-France, Royal Meteorological Society (RMS) UK, American Meteorological Society (AMS), Société Météorologique de France (SMF), European Meteorological Society.

## Poster Papers and Display

There will be a display of poster papers related to the theme of the seminar, as well as those being presented to CLIMAR-II.

There will also be displays by sponsors of the event, which will include both historical and modern equipment and documents.

## Programme Organizing Committee

### *Co-chairs*

Dr Patricio Bernal (IOC)  
Mr Michel Jarraud (WMO)  
VADM Conrad Lautenbacher (NOAA)  
Dr Henri Malcorps (RMI, Belgium)

### *Members*

Capt. Victor Addison (USN)  
Dr Philippe Dandin (Météo-France)  
Dr Lee Dantzler (NOAA)  
Dr Cynthia Decker (USN)  
Dr Peter Dexter (WMO)  
Mr Ron McPherson (AMS)  
Mr Robert Shearman (RMS and the Met Office)  
Dr Richard Spinrad (NOAA)  
Dr Colin Summerhayes (IOC)  
Dr Stan Wilson (NOAA)  
Mr Scott Woodruff (NOAA and also Chair of CLIMAR-II)



## Local Organizing Committee

Chaired by Dr H. Malcorps, Director of the RMI, Belgium, and including representatives from RMI, other Belgian agencies and organizations.

## Proceedings

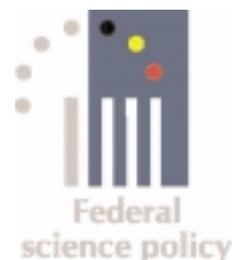
The full proceedings of the seminar will be published as a JCOMM Technical Report to be issued after the seminar in both hard copy and CD-ROM formats.

## Sponsors

National Oceanic and Atmospheric Administration (NOAA) USA, Fugro-Geos, Vaisala, the Met Office (UK), Waterways and Maritime Affairs Administration – Waterways Division (AWZ) Belgium, Belgian Federal Science Policy, Japan Meteorological Agency, Environment Canada.



Environment  
Canada



# Programme

Monday 17 November

## 1. Formal opening ceremony – Part I (10:00–10:45, Theater, Résidence Palace)

In the presence of HM King Albert II of Belgium

**Master of Ceremonies** *Dr H. Malcorps*, Director of the Royal Meteorological Institute of Belgium

*Dr Rudy Aernoudt*, representing Mrs F. Moerman, Minister of Economy, Energy, Foreign Trade and Science Policy

*Dr P. Mettens*, President of Federal Science Policy

*Dr P. Bernal*, Assistant Director General of UNESCO and Executive Secretary of IOC

*Rear Admiral Steven Tomaszewski*, Oceanographer of the Navy, USA

*Professor G.O.P. Obasi*, Secretary-General of the World Meteorological Organization

**Coffee break and press conference (10:45–11:15)**

### Formal opening ceremony – Part II (11:15–12:30)

*Dr Richard Spinrad*, Assistant Administrator, National Ocean Service, NOAA, USA

*Mr P. Ewins*, Chief Executive, the Met Office, UK

*Mr J.-P. Beysson*, Président-Directeur Général, Météo-France

*Dr U. Gartner*, Director General of the Deutscher Wetterdienst, Germany

*Dr H. Cattle*, President of the Royal Meteorological Society, UK

*Mr R. Morin*, Société Météorologique de France

*Professor Dr Werner Wehry*, President of the European Meteorological Society

*Mr R. Landis*, representative of the American Meteorological Society

*The ceremony will be followed by a reception in the “Foyer Room” of the Residence Palace*

## 2. The Maritime Conference of 1853, its antecedents and impacts (14:00–18:00)

Chair: Mr Francois Gerard, Météo-France and former President of the Commission for Marine Meteorology

- \* The First International Meteorological Congress and the formation of the IMO – *Dr H. Cattle, RMS President*
- \* The IMO in the first half of the 20<sup>th</sup> century – *Dr E. Sarukhanian, Acting Director World Weather Watch-Applications Department, WMO*
- \* The development of operational meteorology and challenges for the future – *Mr M. Jarraud, Deputy Secretary-General, WMO*

**Coffee break (15:30–16:00)**

- \* Issues in operational ocean observing systems and the role of existing programmes and institutions – *Dr R. Spinrad, Assistant Administrator, NOAA/NOS*
- \* Matthew Maury: His life and work – *Capt. G. Gillard, Naval Observatory, USA*
- \* Impacts of the 1853 conference on European meteorological services – *Dr G. Demarée, RMI, Belgium*

Tuesday 18 November

## 3. The development of operational meteorology and oceanography, WMO, WWW, GOOS, GCOS and JCOMM (9:00–12:30)

Chair: Mr Robert Shearman, the Met Office, UK and former President of the Commission for Marine Meteorology

- \* The IOC and international cooperation in oceanography – *Mr G. Holland, Past-Chairman, IOC*
- \* The development of operational oceanography: IGOS the foundation – *Mr R. Landis, former Assistant Secretary IOC and American Meteorological Society representative*
- \* The role of Meteorological Societies – *Mr S. Cornford, European Meteorological Society*

**Coffee break (10:30–11:00)**

- \* Early ship observational data and global climate studies – *Mr S. Woodruff, NOAA/CDC and Chairman, Organizing Committee, CLIMAR-II*
- \* US Navy International Cooperative Programmes in Hydrography and Oceanography – *Rear Admiral Thomas Q. Donaldson, Commander, Naval Meteorology and Oceanography Command, USN*
- \* Operational meteorology in the 20<sup>th</sup> century, progress and future frontiers – *Mr F. Gérard, Météo-France*

**Lunch break (12:30–14:00)**

## 4. Lessons learned and a future vision of operational meteorology and oceanography (14:00–17:30)

Chair: Dr Savi Narayanan, Marine Environmental Data Service, Canada and Co-President of the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology

- \* The Met Office forecasting strategy for the 21<sup>st</sup> century – *Mr E. McCallum, Director of Forecasting, the Met Office, UK*
- \* The Brussels Conference and its legacy – *Dr G. Konnen, KNMI, Netherlands*
- \* The Brussels Conference and the development of meteorological services in Norway – *Mr J. Guddal, DMI, Norway and Co-President of JCOMM*

**Coffee break (15:30–16:00)**

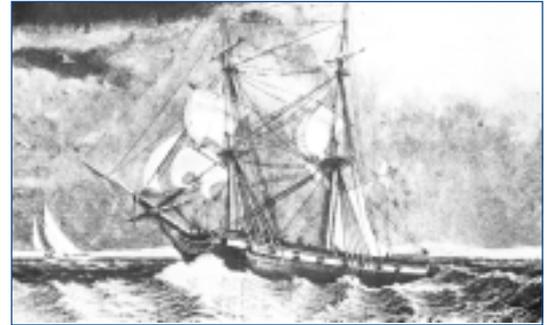
- \* Role of satellites in marine meteorology and operational oceanography – *Dr A. Ratier, EUMETSAT and Dr M. Colton, NOAA/NESDIS*
- \* A future vision of operational oceanography – *Dr J.-F. Minster, President Director-General, IFREMER and Dr D. James Baker, President and Chief Executive Officer, The Academy of Natural Sciences of Philadelphia*
- \* Discussion session

## CLIMAR-II

In September 1999, a “Workshop on Advances in Marine Climatology” (CLIMAR99) took place in Vancouver, with the major objective of receiving input for a new “dynamic” part of the WMO *Guide to the Applications of Marine Climatology* (WMO-No. 781), emphasizing new technologies. This Guide provides comprehensive documentation of knowledge and techniques in the processing of marine climatological data and details the diverse data applications in the service of the marine user community. An additional workshop goal was to foster development of the Comprehensive Ocean-Atmosphere Data Set (COADS).

Based on the success of CLIMAR99, the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology, at its first session, agreed on the desirability of convening a second workshop. The Commission also suggested merger of CLIMAR-II with a 150th anniversary celebration of the Maritime Conference held at Brussels in 1853.

CLIMAR-II will also follow-up on the “Workshop on Advances in the Use of Historical Marine Climate Data” (Boulder, USA, January–February 2002). Major goals of that workshop were to create a timetable for enhancing *in situ* marine data; to develop a strategy for creating alternative SST, sea-ice and marine air temperature analyses, including appropriate satellite data; to test models against the legitimate uncertainties in “reasonable” alternative analysis methods; and to consider strategies for the joint analysis of surface pressure and wind data, taking account of time-varying biases in the wind data. In recognition of its multinational basis, that workshop also agreed to rename the marine archive as the International Comprehensive Ocean-Atmosphere Data Set (I-COADS).



## Objectives

- To receive appropriate input for the dynamic part of the WMO *Guide to the Applications of Marine Climatology*, emphasizing new technologies.
- To provide guidance/technical support for National Meteorological Services.
- To make further contributions to the data and metadata of I-COADS.

## Website

The website for CLIMAR-II is at:  
<http://www.cdc.noaa.gov/coads/climar2>

Details of Brussels 150 are available on the CLIMAR-II website at:  
[http://www.cdc.noaa.gov/coads/climar2/climar2\\_cele.html](http://www.cdc.noaa.gov/coads/climar2/climar2_cele.html)

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