Monday 23 June:

8:30 Welcome address by Chief Engineer Yves Morel, PhD., head of the naval research and development division, Hydrographic Service (on behalf of Engineer General Jean-Marc Chimot).

1. Wave – current coupling theories: momentum and mass transports
   Session chair: Fabrice Ardhuin

   9:00 The wave-driven ocean circulation: basic formalism and applications to surface drift. **Fabrice Ardhuin**

   9:30 Sources of momentum and turbulent kinetic energy for the ocean circulation, computed from a global operational wave model. **Peter Janssen**

10:00 Coffee break

10:20 The three-dimensional current and surface wave equations. **George Mellor**

10:50 Lagrangian and surface-following coordinate approaches to wave-current interactions and air-sea momentum flux in the open ocean. **Alastair Jenkins**

11:20 The nearshore problem: from waves to forecasting beach profile change, with wave-generated mean flows and infra-gravity waves. Applications of the Generalized Lagrangian Mean formalism, **Ad Reniers**

12:00 Discussion: the theoretical framework for coupling wave and circulation models. What is likely to work?

12:45 Lunch

**Operational oceanography today and tomorrow: from standard products to enhanced added value**

= 14:00 Operational wave forecasting at ECMWF: a coupled upper ocean – wave – atmosphere model. **Peter Janssen**

14:40 Operational wave and surface drift forecasting at Météo-France, **Jean-Michel Lefevre**

15:00 Coupling waves and currents in POLCOMS with measurements from the Coastal Observatory. **Judith Wolf**

15:40 Observations of vertical shear in the top meter of the ocean using instrumented drifters. **Pierre Poulain**.

16:05 Coffee Break

16:25 Discussion: Current problems in operational oceanography (waves and circulation), and expected problems in the coastal seas, potential for improvements in the products with better physics (mixed layer,
3. Air-sea interactions: wind, waves and the oceanic mixed layer

16:50 Surface mixing, Jeff Polton and Stephen Belcher

17:30 Wind generation of waves and the aerodynamic drag in high winds Mark Donelan

18:10 Effects of surface waves on air-sea momentum flux under tropical cyclones. Tetsu Hara

19:00 Meeting adjourned.
Sunset dinner at 20:15 at “La Pointe St Mathieu”. Speech by Mike Banner (From ‘Waves dreams and visions’ to real operational oceanography ?).

Tuesday 24 June:

8:30 Wave breaking and air-sea interactions. Ken Melville

9:10 Discussion: Air-sea processes and surface mixing

Perspectives in wave modelling: the art and science of source terms, going beyond WAM-type models? Session chair: Mark Donelan

9:30 Wave attenuation due to opposing winds William Peirson

10:00 Coffee break

10:20 Reliable breaking wave forecasts at sea, Mike Banner

10:40 XDIA: a practical improvement of today’s representation of waves non-linear interactions Gerbrant van Vledder

11:10 Comments on Hasselmann’s energy transfer model, Michael Stiassnie

11:40 Discussion: What can we expect from future wave models and when?

Radio remote sensing of the ocean surface: looking at the ocean through the wave prism Session chair: Danièle Hauser

12:00 Waves and surface drift currents from ENVISAT’s ASAR, Betrand Chapron

12:40 Lunch

14:10 Using global navigation systems signals for remote sensing of the ocean, Donald Thompson and Tanos Elfouhaily

14:40 Electromagnetic bias, inverse barometer, and other altimeter “fudge factors”: the true story on how the altimeter gets the ocean dynamic topography and what are these “ocean dynamics”. Patrick Vincent (talk given by Eric Thouvenot)

16:00 Perspectives for satellite oceanography. Eric Thouvenot
15:00 Impact of wave breaking on passive microwave remote sensing (including surface salinity). Nicolas Reul

15:30 Real Aperture Radars, from airborne to space : STORM and the SWIMSAT project, Danièle Hauser

16:20 Coffee break

17:30 Discussion: developments and new remote sensing techniques.

17:50 Where do we go from here?
In the panel, presided by Mark Donelan: Fabrice Ardhuin, Mike Banner, Bertrand Chapron, Peter Janssen, George Mellor. A debate on future modeling efforts, field experiments, space mission and operational use of ocean circulation and waves or combined products.

See the web forum (http://surfouest.free.fr/WOO2003/forum.html)

18:50 End of the sessions

20:30 Closing dinner at “Cercle Naval”.
List of speakers:
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We thank all those who have expressed their interest but will be physically absent:
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