



WISE 2010

Agenda

25-29 April 2010

Brest - France

Hosted by Ifremer
Salle de Conférence

Partly supported by the Office of Naval Research Global,
Ifremer, European Union and Région Bretagne



Sunday, 25 April 2010

18.00 - 20.00 Registration & Ice breaker at the Cercle Naval in Brest

Monday, 26 April 2010

07.50 - Departure from Brest city centre to Ifremer institute (bus) (see the joint city map)

08.30 - 09.00 Registration & fee payment

09.00 - 09.15 Welcome & practical informations

Philippe Marchand, Fabrice Ardhuin, Fanny Girard-Ardhuin

Source Functions - Chair: Hendrik Tolman

09.15 - 09.45 **Jean-Francois Filipot, Fabrice Ardhuin, Rudy Magne**

A new, physically based breaking dissipation source term, applicable from deep ocean to shallow water

09.45 - 10.15 **Alex Babanin, Kakha Tsagareli, Ian Young, and David Walker**

Modelling spectral evolution with new observation-based wind-input and dissipation terms

10.15 - 10.45 **Andre J. van der Westhuijsen**

Wave dissipation on counter current

10.45 - 11.15 Coffee Break

11.15 - 11.45 **Andrej Pushkarev, Donald Resio, and Vladimir E. Zakharov**

New understanding of wind input parameterizations

11.45- 12.15 **Erick Rogers, Alex Babanin, and David Wang**

Decoupled sea/swell dissipation with two-phase formula

12.15 - 12.45 **Elodie Gagnaire-Renou, Michel Benoit, and Philippe Forget**

Modeling wave growth in fetch-limited and slanting fetch conditions

12.45 - 14.00 Lunch Break

Experiments - Chair: Yuliya Troitskaya

14.00 - 14.30 **Guillemette Caulliez**
Spatio-temporal analysis of short wind wave dynamics

14.30 - 15.00 **M. Kosnik, Vladimir Dulov, and V. Kudryavtsev**
Spectra of short wind waves: model and experimental studies

15.00 - 15.30 **G.N. Balandina, O.S. Ermakova, Daniil A. Sergeev, and Yuliya I. Troitskaya**
Novel PIV-system for measurements airflow fields in the boundary layer above wavy surface

15.30 - 16.00 Coffee Break

Nonlinear Processes - Chair: Takuji Waseda

16.00 - 16.30 **Victor Shira, and Sergei Annenkov**
Evolution of higher momenta of wind waves

16.30 - 17.00 **Miguel Onorato and Don Resio**
Interaction between short and long gravity waves in finite depth

17.00 - 17.30 **Yaron Toledo, Yehuda Agnon, and Aaron Roland**
Nonlinear wave-bottom interactions in stochastic wave models

17.30 - 18.00 Coffee Break

18.00 – 18.30 Introduction to the Molène Island trip (Serge Suanes, Bernard Fichaut)

18.30 - Bus departure for Brest city

Tuesday, 27 April 2010

Field trip and lectures on the island

07.45 - Departure from Brest city centre to the harbour (bus)

08.30 - Boat departure for Molène Island

11.00 - 12.00 Visit of the island

12.00 - Lunch

Physics - Chair: Sergej Badulin

13.30 - 14.00 **Iam young and Alex Babanin**
The asymptotic wavenumber spectrum of depth-limited waves

14.00 - 14.30 **Peter A.E.M. Janssen and Yuhei Takaya**
Diurnal cycle in SST and sea state effects

14.30 - 15.00 **Dmitry Chalikov**
Coupled modelling of waves and Wave Boundary Layer and calculation of momentum and energy exchange between waves and wind

15.00 - 15.30 Coffee Break

Modelling - Chair: Richard Gorman

15.30 - 16.00 **Luigi Cavaleri, and Luciana Bertotti**
An intercomparison between seven different model systems

16.00 - 16.30 **Francisco J. Ocampo-Torres, H. Garcia Nava, Pedro Osuna, and G.Diaz Mendez**
Sea and swell interactions as responsible for inhibited wind stress: the influence of significant swell steepness under moderate to strong opposing wind

16.30 - 17.00 **Judith Wolf, Jenny Brown, and Rodolfo Bolanos**
Coupled wave-current modelling and validation in Liverpool Bay

17.30 - Boat returns

19.00 - Bus departure for Brest city

Wednesday, 28 April 2010

07.50 - Departure from Brest city centre to Ifremer institute (bus)

Short course on scatterometer

08.30 - 10.00 **Marcos Portabella**
First principles and influence of physical parameters

10.00 - 10.30 Coffee Break

10.30 - 12.00 **Marcos Portabella**
Applications, accuracy and data sources

Remote sensing - Chair: Christine Gommenginger

12.00 - 12.30 **Stefan Zieger, Ian Young, and Alex Babanin**
Long term trends in wind speed and wave height

12.30 - 14.00 Lunch Break

Physics - Chair: Peter Janssen

14.00 - 14.30 **George L. Mellor**
Wave radiation stress

14.30 - 15.00 **Johannes Gemmrich**
Spectral energy dissipation inferred from breaking crest length distributions

15.00 - 15.30 **Sergej I. Badulin**
ABC of wind wave growth

15.30 - 16.30 Coffee Break and Poster Session



Experiments - Chair: Alexander Babanin

16.30 - 17.00 **Yuliya Troitskaya, V. Kazakov, N. Bogatov, O.Ermakova, M.Salin, Daniil Sergeev, M.Vdovin, and E.Ezhova**

Laboratory modelling of air-sea interaction under severe wind conditions

17.00 - 17.30 **Alessandro Toffoli, Fabrice Ardhuin, Alex V. Babanin, Michel Benoit, Elzbieta M. Bitner-Gregersen, Luigi Cavaleri, Jaak Monbaliu, Miguel Onorato, Al R. Osborne, and Carl T. Stanberg**

The instability of wave trains propagating over an oblique current: a laboratory experiment in a directional wave basin

17.30 - 18.00 **Leonel Romero, and W.Kendall Melville**

Spatial wave statistics in fetch-limited conditions

18.00 - Bus departure for Brest city

19.30 - 22.00 Official Dinner at the Cercle Naval in Brest

Thursday, 29 April 2010

07.50 - Departure from Brest city center to Ifremer institute (bus)

Physics - Chair: Ian Young

08.30 - 09.00 **A.-C. Bennis, Fabrice Ardhuin, and T.Odaka**

On the development of MARS-WW3 - a new coupled wave-current model.

09.00 - 9.30 **Alexey Mironov, Vladimir Dulov, and Yury Yurovsky**

Statistical properties of breaking waves in field conditions

09.30 - 10.00 **Alina Galchenko, Alexander V. Babanin, Dmitry Chalikov, and I.R. Young**

Progression to breaking and breaking severity of deep water wave

10.00 - 10.30 *Coffee Break*

10.30 - 11.00 **Fabrice Ardhuin, Rudy Magne, and Lucia Pineau-Guillou**

Waves in the Iroise sea and cliff run-up

11.00 - 11.30 **Jean-Raymond Bidlot, Saleh Abdalla, and Peter Janssen**

Latest development in wave data assimilation at ECMWF

11.30 - 12.00 **Aron Roland, Tai-Wen Hsu, Jian-Ming Liao, Yaron Toledo, and Ulrich Zanke**

On the ongoing progress and the future challenges in the development of the wind wave model

12.00 - 12.30 **Jane McKee Smith**

Fast forecasting of hurricane waves and water levels in Hawaii

12.30 - 14.00 *Lunch Break*

Remote sensing - Chair: Jean-R. Bidlot

14.00 - 14.30 **Lucy Wyatt, R., J.J.Green**

Latest developments in HF radar wave measurement

14.30 - 15.00 **Jose-Carlos Nieto-Borge, and Konstanze Reichert**

Detection of individual wave features derived from X-band marine radar images of the sea surface

15.00 - 15.30 *Coffee Break*

GlobWave project - Chair: Fabrice Ardhuin

15.30 - 16.00 **Geoff Buswell, Logica**
Project Globwave

16.00 - 16.30 **Fabrice Collard, CLS**
GlobWave SAR data products and error characterisation methodologies

16.30 - 17.00 **Ellis Ash, SatOC**
GlobWave altimeter L2P products and error characterisation methodologies

17.00 - 17.30 Coffee Break

17.30 - 18.00 **Dave Poulter, NOCS**
HR-DDS & pilot spatial wave forecast verification scheme

18.00 - 18.20 **Fabrice Collard, CLS**
GlobWave demonstration products - Soprano and Fireworks

18.20 - 18.30 **Ellis Ash, SatOC**
Detection GlobWave demonstration products - Hs:Tz scatterplots

18.30 - Meeting closed

19.00 - 22.00 Buffet dinner at Ifremer offered by the GlobWave project team

22.00 - Bus departure for Brest city

Posters List

Alomar, Marta, A. Sanchez-Arcilla, A.Bolanos Sanchez, A.Sairouni

Wave growth uncertainties under variable wind conditions

Alves, Jose-Henique

Southern and Indian ocean swell contribution to the Western Australian wave climate

Bunney, Chris, J.-G. Li

Advection diffusion in the Met Office 2nd order propagation scheme

Chawla, Arun

Operational wave modelling at NCEP

Collard, F., F.Ardhuin, B.Chapron, R.Husson, M.Delpey

Swell observation from SAR and applications from storm source localisation to swell dissipation rate estimation and near-shore assessment

Cromwell, David, C.Gommerginger

Developing long-term calibrated satellite altimeter datasets and climatology of ocean wave measurements

Dodet, Guillaume, X.Bertin, R.Taborda

Wave climate and storminess variability in the North-East Atlantic Ocean over the last six decades

Furevik, Birgitte R., O.Breivik, A.Carasco, H.Engedahl

Impact of currents and changes in boundary conditions to a coastal wave forecasting system

Gorman, Richard, S.Popinet

An adaptive spectral wave model applied to cyclone simulations

Guan, Changlong, S.Lei

Byspectral characteristics of breaking wind waves

Gunther, Heinz, A.Plestachevsky, M.Dobrynin

Ocean surface wave motion and suspended particulate matter dynamic

Hanson, Jeffrey L., H.C.Friebel, K.K.Hathaway

Coastal wave energy dissipation: observations and modelling

Holthuijsen, L.H., J.Salmon

Scaling of surf breaking

Jayaratnam, Vinoth, I.Young

Global estimates of extreme wind speed and wave height

Kalantzi, G.D., C.Gommerginger, M.Srokosz, F.Ardhuin

Spectral validation of different dissipation schemes in WAVEWATCHIIITM using collocated model output and wave buoy data

Kuznetsov, Sergey, Y.Saprykina

Evolution of waves in deep water: field experiment on Black Sea (“Katsyveli-2009”)

Lefèvre, Jean-Michel, A.Toffoli

Sea state conditions during the Prestige casualty

Li, Jian-Guo, A.Saulter

Validation of the updated Envisat ASAR ocean surface wave spectra with buoy and altimeter data

Liu, Pul.C., C.H.Wu, A.J.Bechle, K.R.MacHutchon, H.S.Chen

What do we know about frequency waves in the ocean and lakes and how do we know it?

Loffredo, Layla, J.Monbaliu, C.Anderson

An application of the queuing model for sea states

Mattarolo, Giovanni, M.Benoit

A 20-year nearshore sea-state database off Reunion Island based on third generation spectral model hindcast simulations

Mazas, Franck, L.Hamm

Estimation of extreme wave heights by P.O.T. method revisited: sensitivity analysis to thresholds and statistical laws

Osorio Arias, A., R.D.Montoya, J.C.Mesa, G.R.Bernal Franco

Forty years of wave hindcast using Wave Watch III model and calibration with several data sources at the Caribbean Sea.

Perignon, Yves, F.Bonnefoy, G.Ducrozet, P.Ferrant

Wind forcing and dissipation in three-dimensional high order spectra deterministic sea state modelling

Polnikov, Vladislav G.

Spectral theory of dissipation mechanism for wind waves

Portilla, Jesus

On the specification of the background error covariance matrix for data assimilation systems

Queffoulou, Pierre, A.Benthamy, D.Croizé-Fillon

Status of a global wind and wave altimeter data base and its applications

Sanchez-Arcilla, Agustin, M.Alomar, R.Tolosana, M.Sclavo, J.Wolf, H.Gunther, J.Monbaliu

Wave fields in restricted coastal domains. Limited predictability and knowledge

Shen, Lian, D.Yang

Direct simulation of wind-wave interaction

Shugan, Igor V., R.-Y. Yang

Exposure of internal waves on the sea surface

Tolman, Hendrik

Does the DIA work in shallow water?

Tolosana-Delgado, R., A.Sanchez-Arcilla, J.J.Egozcue

Kalman assimilation in WAM: using past forecasts to ease computations

Tournadre, Jean, F. Ardhuin, P. Queffoulou, Girard-Ardhuin, Fanny,

Influence of icebergs on global wave parameters

Tuomi, Laura, K.Kahma, C.Fortelius

Fetch limited growth - Bothnian Sea 1976 revisited using high resolution WAM



Violante-Carvalho

Wind wave spectra retrievals in coastal areas from ERS-2 synthetic aperture radar precision images

Van Vledder, Gerbrant, M.Zijlema, I.Holthuijsen

Revisiting the JONSWAP bottom friction coefficient

Waseda, Takuji, K.Ozaki, M.Hallerstig, H.Tomita

Freak waves in the North Sea and meteorological causes

Zijlema, Marcel

Parallel, unstructured mesh implementation for SWAN with applications