

41st International Liège Colloquium on Ocean Dynamics

(4-8 May 2009)

Science-based management of the coastal waters

ORAL SESSIONS (Building B7 - "Hall Petits Amphithéâtres")

Monday 4 May

09:00-09:50	Registration	
09:50-10:00	E. Delhez - welcome note	
Chairman: A. Barth		
10h30	Riethmüller R., Colijn F., Stanev E., Wirtz K.	COSYNA, an Integrated Coastal Observation System for Northern and Arctic Seas
11h00	Howarth M.J., C. A. Balfour, N. Greenwood, P.J. Knight, c. O'neill, M.R. Palmer, R.J. Player	The Irish Sea Coastal Observatory
11h30	Onken R. and R. Riethmuller	An integrated observation system for tidal flat areas
12h00	Zongo S.B. and Schmitt F.G.	Statistical analysis of coastal monitoring time series in the English Channel
12:30-14:00	Break	

Chairman: F. Colijn	
14h00	Coppini G., Pinardi N., Lyubarstev V., Colella S., Santoleri R., Tonani M., Fratianni C. and Marullo S. Development of environmental and climate indicators based on Marine Core Services in support to European Environment Agency and local authorities
14h20	De Cauwer K., Devolder M., Scory S. and Roose P. From monitoring to assessment: data management at BMDC
14h40	Meyer E., Weisse R., Günther H., Callies U., Von Storch H., Feser F., Woth K., Grabemann I. and Pohlmann T. The coastDat data set and its potential for coastal and offshore applications
15h00	Dufau C., F.Mercier, M. Ablain, G. Dibarboure, L.Carrere, S. Labroue, E. Obligis, P. Sicard, P.Thibaut, J. Bouffard, E. Bronner, A.Lombard, N. Picot Improved Jason-2 altimetry products for coastal ocean: PISTACH
15:20-15:40 Coffee Break & Posters	
15h40	Su Yan, Yuanzhi Zhang Three band model application in Remote Sensing of water quality monitoring on the coastal region of Hong Kong
16h00	Champenois W., B. Delille, J.-M. Beckers, M. Grégoire, A.V. Borges First two years of results from a mooring over a Posidonia Oceanica seagrass meadow (Corsica, France)
Cocktail	

Tuesday 5 May

Chairman: E. Stanev		
9h00	Arndt S., H. Savenije, P. Regnier	Towards a Biogeochemical Classification of Alluvial Estuaries
9h30	Lacroix G., Ruddick K., Gypens N and Lancelot C	Does reducing river nutrient loads impact on eutrophication and transboundary nutrient fluxes in the Belgian waters? A modeling study.
10h00	Thieu V., Polard A., Gypens N., Billen G., Garnier J., Hecq W., Rousseau V and Lancelot C	Impact assesment of nutrient reduction policies on coastal Phaeocystis blooms: an integrated modeling approach.
10h30-10h45 Coffee Break & Posters		
10h45	Van Lancker, V., Du Four, I., Degraer, S., Fettweis, M., Francken, F., Van den Eynde, D., Monbaliu, J., Toorman, E., Verwaest, T., Janssens, J., Vincx, M. and Houziaux, J.-S.	Changes in the marine environment: the Belgian part of the North Sea revisit
11h15	Gypens N , Lacroix G., Lancelot C and Borges A.V.	Modelling the effect of carbon and nutrient river loads variability on air-sea CO2 fluxes in the coastal Southern North Sea at different time and spatial scales
11h45	Spiteri C.	Quantification of surface and subterranean estuarine nutrient fluxes to the coastal zone
12h15-14h00 Break		

Chairman: Ch. Lancelot		
14h00	Brigolin D., Lovato T., Ciavatta S and Pastres R	Modelling the interactions of mussel farming with C, N and P biogeochemical cycles along the north western Adriatic coast
14h30	Barciela R., Mahdon R., Miller P., Shuttler J., Murdoch N. and Jonas P.	AlgaRisk: A pre-operational algal bloom monitoring and forecast tool.
15h00	Stanev E.V., Schultz-Stellenfleth J., Staneva J., Grayek S., Petersen W.	COSYNA: A step towards model supported monitoring of the German Bight
15:30-15:50 Coffee Break & Posters		
15h50	Suykens K., Deille and A.V. Borges	Benthic dissolved inorganic carbon dynamics in the Gulf of Biscay (June 2006-May 2007 and May 2008) - Surface dissolved inorganic carbon dynamics in the Gulf of Biscay (June 2006 – May 2007 – May 2008)
16h20	Debelius B., Forja J.M., Lubian L.M.	Toxicity of copper, nickel and zinc on picoplankton populations of natural water samples from the Strait of Gibraltar.
16h50	Posters	

Wednesday 6 May

Chairman: A. Souza		
9h00	Maes J., De kok J-L., Engelenand G., Hopkins T.S.	Scientific integrated coastal system assessment: a paradox?
9h30	Yanagi Tetsuo	“Sato - Umi” ; A new concept for coastal sea management
10h00	Wiese, Francis K., Wiseman, W., Pautzke, C., Eischens, C., Van Pelt, T	Understanding Ecosystem Processes in the Bering Sea
10h30-10h45 Coffee Break & Posters		
10h45	Souza A.J., Brown J., Wolf J., Williams J., Lymbery G.	Effects of Extreme Events in the Eastern Irish Sea.
11h15	Best S., E. Demirov, and J. Wroblewski	A climate sensitivity study of a Marine Protected Area in Labrador: regional projection of IPCC climate scenarios
11h45	Wild-Allen K., Thompson P., Volkman J. and Parslow J.	Model insights to coastal monitoring system design in regions with high inter-annual variability.
12h15-14h00 Break		

Chairman: T. Yanagi		
14h00	Diedrich A., and J. Tintoré	Science Based Integrated Coastal Zone Management in the Balearic Islands
14h30	Barton E.D., R. Torres, J. Largier, M. Sheridan, A. Trastiña, A. Souza, A. Valle-Levinson	Response of circulation and stratification within the Ria de Vigo to externally forced upwelling and downwelling.
15h00-15h20	Coffee Break & Posters	
15h20	F.Lenartz, L.Vandenbulcke, A.Barth, J.-M.Beckers and M.Rixen	3-D super-ensemble ocean forecasting.
15h40	Barth A., Alvera-Azcárate A., Staneva J., Stanev E., Beckers J-M	Weakly constrained ensemble perturbations and surface current assimilation in the German Bight
16h00	Posters	
20h00	Colloquium dinner at "Château de Colonster" the bus colloquium will pick up participants at their hotels	

Thursday 7 May

Chairman: E. Deleersnijder		
9h00	De Brauwere A., De Brye B., Gourgue O., Kama T., Lambrechts J., Comblen R. and Deleersnijder E.	A multi-scale, finite-element model for the transport and fate of contaminants in the Scheldt tributaries, River, Estuary and ROFI
9h30	Triantafyllou G.	A Management Tool for Coastal Waters based on Data Assimilation Techniques
10h00	Hu Z.-Y., A. M. Doglioli, A. A. Petrenko P. Marsaleix and I. Dekeyser	Coastal (Sub) Mesoscale Eddies in the Gulf of Lion
10h30-10h45	Coffee Break & Posters	
10h45	Pairaud I., Garreau P., Gatti J., Verney R., Thouvenin B., Petrenko, A. and Pinazo, C.	3D numerical modelling of the oceanic circulation in the bay of Marseilles: towards the evaluation of anthropogenic supply to the marine environment.
11h15	Grifoll M., M. Espino, M.G. Sotillo, G. Jordà, L. Ferrer	Operational forecast of circulation and water quality assessment in harbour domains.
11h45	Taramasso A.C., and A. Pedroncini	Analysis of possible pollution scenarios of risk in Vado Ligure harbour
12h05	Casella E., Ferraris L., Molcard A., Provenzale A., Zakardjian B.	Simulation of sub-mesoscale eddies in the Ligurian Sea
12h25-14h00	Break	

Chairman: J-M Beckers		
14h00	Legrand S., J. Ozer and G. Lacroix	Operational identification of water masses in the Southern North Sea.
14h30	Craneguy P., Lazure P., Monbet V., Cuzol A., Bertino L., Raynaud S., Pineau H., Dumas F., Lecornu F.	Assimilation of Sea Surface Temperature in the MARS3D modelling System using Ensemble Kalman Filte
15h00	Vandenbulcke L., A. Alvera-Azcarate, A. Capet, M. Rixen and JM. Beckers	Estimating errors of a hydrodynamic model.
15h30-15h50 Coffee Break & Posters		
15h50	De Dominicis M., N. Pinardi, G. Coppini, G. Zodiatis R. Lardner, R. Santoleri	First examples of operational support in oil spill emergency cases in the Mediterranean Sea
16h20	Nugrahadi M.S., Schroeder F.	The influence of Brantas River discharge on hydrodynamics and mixing in the Madura Strait coastal water
16h40	Hoitink A.J.F., D.S. Van Maren and P. Hoekstra	Topographic influence on mixing and stratification in a tropical tidal embayment
17h00	Posters	

Friday 8 May

Chairman: Howarth J.

9h00	Iosjpe M.	Problems of modeling of the processes controlling water-sediment interactions in the coastal zone: consequences to man and environment
9h30	F. Ribas, Huib De Swart, D. Calvete and A. Falques	Modelling the characteristics and dynamics of surfzone transverse sand bars observed on natural beaches
10h00	Verwaest T., Janssens J., Vanlede J., De Schutter J., Mostaert F., Fettweis M., Van den Eynde D., Francken F., Van Lancker V	The impact of maritime access works on coastal turbidity in the Belgian coastal zone (southern North Sea)
10h30-10h45 Coffee Break & Posters		
10h45	Graham Symonds and liejun zhong	Effects of wave exposure on nearshore benthic habitat and circulation in a complex reef dominated coastal environment off South West Western Australia.
11h15	van Duren L.A., S. Temmerman, T.J. Bouma, Mindert, B. de Vries, W. Vandenbruwaene, P.C. Klaassen, E. Martini, J. Dijkstra, T. Balke, G. Biermans, P. van Steeg, J.M. Cornelisse and R.E. Uittenbogaard	Analysis of water flow around patches of saltmarsh vegetation.
11h45	Van Den Berg N., Falques A., Ribas F.	Effect of large angles of wave incidence on beach nourishments.
12h05-14h00 Break		

Chairman: E. Delhez		
14h00	Khattabi A., Amini T., Ulazi E. and Ezzahiri M.	Evolution of coastal line of the strip dunes of the lagoon of Nador and the vulnerability of its ecosystems.
14h30	Politova N.V., Shevchenko V.P., Burenkov V.I., Zernova V.V.	Dynamics of suspended particulate matter and particle fluxes in western bays of the Novaya Zemlya Archipelago, Vaigach Island and the adjacent Barents Sea at the end of summer.
15h00-15h20	Coffee Break & Posters	
15h20	Soomere T., K. Parnell, I. Didenkulova	The implications of frequent high-speed vessel traffic on a medium-energy coast: a case study in Tallinn Bay, the Baltic Sea.
15h50	Kosyan R.D. and Krylenko M.V.	Recent coastal processes of the Taman shore of the Black Sea.

Posters

Borges A.V., K. Ruddick, B. Delille	Net ecosystem production and carbon dioxide fluxes in the Scheldt estuarine plume
Borges A.V., K. Suykens, B. Delille, R. Astoreca, V. Rousseau, C. Lancelot, K. Ruddick	Estimating pCO ₂ from remote sensing in the Case-II waters of the Belgian Coastal Zone – First results from the BELCOLOUR-II project
Best S., Graham S., Wroblewski J. and Demirov E.	Cold interannual variability of physical oceanographic characteristics in a Marine Protected Area of Labrador, Canada
Kravchishina M.D., Lisitzin A.P., Shevchenko V.P.	Grain size distribution of suspended particulate matter in the marginal filters of the Northern Dvina River (the White Sea basin) and the Ob River (the Kara Sea basin).
Souza A.J., Aveytua-Alcazar L. and Camacho-Ibar V.F.	Modeling nitrate and Chlorophyll variability in an upwelling influenced coastal Lagoon.
Wada S, Suzuki S	Zinc effect on bacterial mineralization process of dissolved organic matter in coastal seawater.
Borges A.V., L. Chou, B. Delille	Variability of the partial pressure of CO ₂ in the upper Scheldt estuary from 2003 to 2007
Borges A.V., B. Delille, J.-M. Beckers , M. Grégoire	Carbon dioxide dynamics and air-sea CO ₂ fluxes in several Southern European Seas ecosystems: results from the EU IP SESAME
Geilfus N.-X, Tison J.-L., Carnat G, Brabant F., Borges A. V., Delille B.	Air-ice CO ₂ fluxes in the Arctic coastal area (Amundsen Gulf).
Koné Y.J.M., G. Abril, B. Delille and A.V. Borges	Seasonal variability of carbon dioxide and methane in the rivers and lagoons of Ivory Coast (West Africa)
Tarya A., Hoitink A.J.F. and Van Der Vejt M.	Tidal and subtidal flow patterns at the Berau Inner Shelf, Indonesia.
Vousdoukas M.I., Verney R., Meulé S., Pinazo C., Grenz C.	A comparison of acoustic and optical turbidity sensors
Ferron S., Ortega T., Gomez-Parra and Forja J.M.	Benthic fluxes in the northeastern shelf of the Gulf of Cádiz (SW Iberian Peninsula).

A new mechanism of upwelling generated filaments based on potential vorticity balance	Troupin C., Mason E., Beckers J-M, Sangrà P.
S-T climatologies of the North Sea using the variational inverse method	Scory S., Ouberdous M., Troupin C., Beckers J-M
Champenois W., Delille B., Beckers J-M, Grégoire M., Borges A.	Results of two years of a mooring over a Posidonia Oceanica seagrass meadow (Corsica, France)