

EGU General Assembly 2011
Programme Group Programme
OS – Ocean Sciences

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Monday, 04 April

BG1.5 – Remote Sensing in the Biogeosciences (co-listed) – Orals

Convener: Frank Veroustraete | Co-Conveners: Willem Verstraeten, Klaus Scipal, Wolfgang Wagner, Inge Jonckheere

Room: 24

Chairperson: Dr. Frank Veroustraete/ Dr. Inge Jonckheere

- 13:30–13:45 EGU2011-8376
Jouni Jussila and Uwe Rascher
 Developments of Hyperspectral Remote Sensing Systems for Vegetation Research
- 13:45–14:00 EGU2011-1299
Vasileios Kalogirou, Paolo Ferrazzoli, Leila Guerriero, and Andrea Della Vecchia
 Coupling the Tor Vergata microwave scattering model with a plant architectural model
- 14:00–14:15 EGU2011-9160
Stefan Kraft, Bernardo Carnicero Dominguez, Matthias Drusch, Jean-Loup Bezy, Roland Meynart, Luis Guanter, Luis Alonso, and Jose Moreno
 Remote Sensing of Vegetation Fluorescence from Space within the ESA Earth Explorer Programme
- 14:15–14:30 EGU2011-11332
Gabriel Hmimina, Eric Dufrêne, Nicolas Delpierre, and Kamel Soudani
 Tower-Based Photochemical Reflectance Index measurements to assess ecophysiological responses in a mature deciduous forest.
- 14:30–14:45 EGU2011-1437
 Malcolm Davidson, **Dirk Schuettemeyer**, Remo Bianchi, and Klaus Scipal
 Campaigns in Support of ESA'S Earth Candidate Mission Concept BIOMASS
- 14:45–15:00 EGU2011-6011
Jasper Van doninck, Jan Peters, Bernard De Baets, Eva M. De Clercq, Els Ducheyne, and Niko E.C. Verhoest
 Topographic normalization of thermal infrared data
- Chairperson: Dr. Willem Verstraeten/ Dr. Wolfgang Wagner
- 15:30–15:45 EGU2011-173
Bernard Pinty, Jean-Luc Widlowski, Ioannis Andredakis, Michel Verstraete, Olivier Arino, Marco Clerici, Thomas Kaminski, and Malcolm Taberner
 Snowy backgrounds enhance the absorption of visible light in forest canopies
- 15:45–16:00 EGU2011-6710
Peter Caccetta, John Raison, Robert Waterworth, and Gary Richards
 Linking remote-sensing, ground observations and ecosystem models for improved GHG accounting in land systems
- 16:00–16:15 EGU2011-10704
Iryna Khlystova, Andreas Richter, Folkard Wittrock, Heinrich Bovensmann, John P. Burrows, Silvia Kloster, and Martin Schultz
 Emission Ratios from satellite measurements
- 16:15–16:30 EGU2011-11534
Eva Boegh and the NEU_C4 Team
 Mapping leaf nitrogen and leaf area index in European landscapes using high spatial resolution satellite data and the REGularized canopy reFLECTance (REGFLEC) model
- 16:30–16:45 EGU2011-8685
Sanna Kaasalainen, Teemu Hakala, Juha Suomalainen, and Eetu Puttonen
 Active hyperspectral LiDAR for the study of vegetation
- 16:45–17:00 EGU2011-5684
 Pasi Raumonen, **Mikko Kaasalainen**, Sanna Kaasalainen, and Harri Kaartinen
 Approximation of volume and branch size distribution of trees from laser scanner data

BG1.5 – Remote Sensing in the Biogeosciences (co-listed) – Posters

Convener: Frank Veroustraete | Co-Conveners: Willem Verstraeten, Klaus Scipal, Wolfgang Wagner, Inge Jonckheere

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dr. Klaus Scipal

- BG20 EGU2011-11663
Klaus Scipal and the BIOMASS Mission Advisory Group Team
 Measuring biomass from space - ESA'S BIOMASS Earth Explorer mission candidate

- BG21 EGU2011-12531
Temilola Fatoyinbo, Rafael Rincon, Guoqing Sun, and K. Jon Ranson
 EcoSAR: a P-band Interferometric Synthetic Aperture Radar for Forest structure and biomass measurements
- BG22 EGU2011-3288
Patrick Chazette, Kamel Soudani, Philippe Royer, Joseph Sanak, Melody Lardier, Tristan Allouis, Marc Bouvier, and Sylvie Durrieu
 Forest canopy attributes derived from airborne lidar above the Barbeau/Fontainebleau forest
- BG23 EGU2011-8801
Brenner Silva, Lukas Lehnert, Andreas Fries, and Jörg Bendix
 Monitoring vegetation growth in an experimental plot using balloon-air-photography
- BG24 EGU2011-6244
 Dimitry Van der Zande, **Willem W. Verstraeten**, and Pol Coppin
 A 3D model of the light interception in heterogeneous forest canopies
- BG25 EGU2011-13990
 Ali Reza Khavaninzadeh, **Frank Veroustraete**, Karen Wuyts, Fatima Kardel, and Roeland Samson
 Dorsiventral leaf reflectance properties of *Carpinus betulus* L.: An indicator of urban habitat quality
- BG26 EGU2011-6184
Willem Verstraeten, Miguel Barrios, Piet Maes, Jan Clement, Jean-Marie Aerts, Marc Van Ranst, and Pol Coppin
 Relating the satellite derived EVI and meteorology with the incidence of Lyme Disease in Belgium
- BG27 EGU2011-6115
 Miguel Barrios, **Willem W. Verstraeten**, Piet Maes, Jan Clement, Jean-Marie Aerts, Marc Van Ranst, and Pol Coppin
 Spatio-temporal patterns of Nephropathia epidemica and Lyme disease incidence in Belgium
- BG28 EGU2011-10677
Karol Szymankiewicz, Jaroslaw Zawadzki, and Karol Przedziecki
 Forest type inventory using MODIS and MERIS remote sensing images. Study case: Janowskie forest
- BG29 EGU2011-7566
Angela Harris and Jaduandan Dash
 A new approach for estimating northern peatland gross primary productivity using a satellite sensor derived chlorophyll index
- BG30 EGU2011-9455
Karsten Kotte and Fabian Löw
 Rapid change detection and salt classification as a promising tool to estimate emission of naturally produced organohalogens from saline ecosystems
- BG31 EGU2011-1729
Amani Al Abri and Ray N. Merton
 use of Hyperspectral imagery for mapping and monitoring coral reefs of Galapagos Island, Ecuador
- BG32 EGU2011-763
Alireza Sadeghi, Tilman Dinter, Marco Vountas, and Astrid Bracher
 Remote sensing of coccolithophore blooms in selected oceanic regions using PhytoDOAS method applied to hyper-spectral satellite data
- BG33 EGU2011-7369
Meiting Hou, Shunqian Zhang, Xiaodong Yan, and Qingtao Qing
 Remote sensing detection of droughts and impact assessment based on temperature vegetation dryness index: A case study in Sichuan province, China
- BG34 EGU2011-13684
Frank Veroustraete, Willem W. Verstraeten, Qin Li, Chen Xi, Anming Bao, Qinghan Dong, Tie Liu, and Patrick Willems
 Soil Moisture Content Retrieval based on Apparent Thermal Inertia for the Xinjiang province in China
- BG35 EGU2011-128
Armi May Torrechilla-Guzman
 Use of Geospatial Technologies in the Assessment of Coral Reefs and Abalone Distribution in Sagay Marine Reserve, Central Philippines
- BG36 EGU2011-13303
Tiziana Simoniello, Maria Lanfredi, Rosa Coppola, Vito Imbrenda, and Maria Macchiato
 Estimation of persistence properties of vegetation activity trends at regional scale
- BG37 EGU2011-9251
Daniel Doktor, Arlena Brosinsky, Angela Lausch, and Ines Merbach
 Comparison of imaging and non-imaging hyperspectral sensors observing vegetation in the laboratory
- BG38 EGU2011-7407
Inge Jonckheere, Danae Maniatis, and Danilo Mollicone
 Misrepresenting REDD+ to promote specific technological RS options

Convener: Monika Rhein | Co-Conveners: Richard Greatbatch

Room: D

Chairperson: Rhein

- 08:30–08:45 EGU2011-4416
Herle Mercier, Pascale Lherminier, Claire Gourcuff, Artem Sarafanov, Anastasia Falina, Nathalie Daniault, Bruno Ferron, Thierry Huck, and Virginie Thierry
 Variability of the circulation and heat transport from six occupations of the A25 Greenland-Portugal OVIDE section between 1997 and 2010
- 08:45–09:00 EGU2011-7199
Kjetil Våge, Robert S. Pickart, Michael A. Spall, Héðinn Valdimarsson, Steingrímur Jónsson, Daniel J. Torres, Svein Østerhus, and Tor Eldevik
 Formation of Denmark Strait Overflow Water via boundary currents and transformation in the central Iceland Sea
- 09:00–09:15 EGU2011-11489
Bogi Hansen, Karin Margretha Larsen, Svein Østerhus, and Detlef Quadfasel
 Mixing of the Faroe Bank Channel overflow by convective events
- 09:15–09:30 EGU2011-12484
Tor Eldevik and Jan Even Ø. Nilsen
 Northern constraints on the Atlantic thermohaline circulation
- 09:30–09:45 EGU2011-6002
Kerstin Jochumsen and Detlef Quadfasel
 Denmark Strait exchanges: structure and variability
- 09:45–10:00 EGU2011-2276
Achim Roessler, Monika Rhein, Christian Mertens, and Dagmar Kieke
 Four year transport and pathway time series of the subpolar gyre inferred by integral methods

COFFEE BREAK

Chairperson: Kieke

- 10:30–10:45 EGU2011-3122
Ilaria Stendardo and Nicolas Gruber
 Five decades of oxygen trends in the North Atlantic
- 10:45–11:00 EGU2011-3613
Michael A. Spall
 On the role of eddies in the heat transport and overturning circulation in the Nordic Seas
- 11:00–11:15 EGU2011-4645
Anne Marie Treguier, Julie Deshayes, Raphael Dussin, and Jean-Marc Molines
 Interannual variability of the subpolar Atlantic and role of eddies: contribution of numerical models at increasing spatial resolution.
- 11:15–11:30 EGU2011-5721
Erik Behrens, Claus W. Böning, and Arne Biastoch
 Can eddies affect the freshwater distribution and the reaction of the MOC in Greenland melting scenarios?
- 11:30–11:45 EGU2011-7175
Geoffrey Gebbie
 Tracking Glacial Ocean Waters from Surface Source to the Seafloor: An Inverse Method Applied to the Last 25,000 years
- 11:45–12:00 EGU2011-8680
Thomas Martin and Mojib Latif
 The long-term freshwater budget and the relation to the MOC in the North Atlantic.
- Chairperson: Roessler
- 15:30–15:45 EGU2011-3407
Dagmar Kieke, Monika Rhein, and Reiner Steinfeldt
 Revealing LSW formation from a decade of tracer measurements in the subpolar North Atlantic
- 15:45–16:00 EGU2011-2739
Amy Bower, Dan Amrhein, and Ross Hendry
 Are Labrador Sea Water eddies an important transport mechanism in the AMOC?
- 16:00–16:15 EGU2011-13214
Igor Yashayaev
 Hydrography of the Labrador Sea in the first decade of the 21st century

- 16:15–16:30 EGU2011-12805
Tatiana Rykova, **Fiamma Straneo**, and Amy Bower
The West Greenland Current System of the Labrador Sea from 1992-2008
- 16:30–16:45 EGU2011-3856
Reiner Steinfeldt, Monika Rhein, and Dagmar Kieke
Ventilation, formation, and export rates of North Atlantic Deep Water
- 16:45–17:00 EGU2011-548
Erik van Sebille, Molly O. Baringer, William E. Johns, Christopher S. Meinen, Lisa M. Beal, M. Femke de Jong, and Hendrik M. van Aken
The subtropical signal of Labrador Sea Water variability and the leakiness of the Deep Western Boundary Current

OS1.6/AS2.5/CL2.11 – Air-sea interactions from meso to regional scales within the tropics (co-organized) – Orals

Convener: Alban LAZAR | Co-Conveners: Marcus Dengler, Steve Woolnough, Ping Chang

Room: 7

Chairperson: Marcus Dengler, Alban Lazar

- 08:30–08:45 EGU2011-68
Malick Wade, **Guy Caniaux**, and Yves DuPenhoat
Oceanic mixed layer heat budget in the Eastern Equatorial Atlantic using ARGO floats and PIRATA buoys
- 08:45–09:00 EGU2011-1100
Rebecca Hummels, Marcus Dengler, and Bernard Boulès
On the variability of diapycnal mixing in the equatorial Atlantic ocean
- 09:00–09:15 EGU2011-8037
Catherine Guiavarc'h, John Siddorn, Dave Storkey, and Patrick Hyder
Sensitivity of the Met Office operational ocean forecasting system to atmospheric forcing
- 09:15–09:30 EGU2011-14196
Gilles Reverdin, Francesco d'Ovidio, Agnès Desprès, Bernard Bernier, and Nicolas Ferry
Summer-time modification of surface fronts in the North Atlantic Subpolar and Subtropical Gyres
- 09:30–09:45 EGU2011-5324
Emmanuel Vincent, Matthieu Lengaigne, Gurvan Madec, Jérôme Vialard, and Sebastien Masson
Sea surface cooling in the wake of Tropical Cyclones: atmospheric and oceanic controls
- 09:45–10:00 EGU2011-6697
enrico scoccimarro, silvio gualdi, alessio bellucci, antonella sanna, marcello vichi, elisa manzini, pier giuseppe fogli, paolo oddo, and antonio navarra
Tropical Cyclones - Ocean feedbacks: Effects on the Ocean Heat Transport as simulated by a High Resolution Coupled General Circulation Model

COFFEE BREAK

Chairperson: Alban Lazar, Ping Chang

- 10:30–10:45 EGU2011-11738
Ping Chang, Ramalingam Saravanan, Mingkui Li, Jenshan Hsieh, Christina M. Patricola, and Karthik Balaguru
A Study of Meso and Frontal Scale Air-Sea Interactions Using a High-Resolution Atlantic Regional Coupled Model
- 10:45–11:00 EGU2011-8924
Stefano Materia, Joseph Tribbia, William Large, Gokhan Danabasoglu, and Silvio Gualdi
Impacts of ocean temperature bias along the southwestern African coast
- 11:00–11:15 EGU2011-13363
Gaelle de Coëtlogon, **Alban Lazar**, and Serge Janicot
Intraseasonal variability of the ocean - atmosphere coupling in the eastern atlantique equatorial upwelling
- 11:15–11:30 EGU2011-14166
Ralf Hand, Noel Keenlyside, and Nour-Eddine Omrani
The Atmospheric Response to Gulf Stream Variability
- 11:30–11:45 EGU2011-1332
Marion Leduc-Leballeur, Laurence Eymard, and Gaëlle de Coëtlogon
Role of air-sea interactions in the onset of coastal rainfall in the Gulf of Guinea
- 11:45–12:00 EGU2011-14168
Wan-Ling Tseng, Ben-Jei Tsuang, Noel Keenlyside, and Chia-Ying Tu
Investigating the impact of the diurnal cycle of SST on the atmosphere

OS1.6/AS2.5/CL2.11 – Air-sea interactions from meso to regional scales within the tropics (co-organized) – Posters

Convener: Alban LAZAR | Co-Conveners: Marcus Dengler, Steve Woolnough, Ping Chang

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marcus Dengler, Alban Lazar

- XY583 EGU2011-14197
Gilles Reverdin, Jacqueline Boutin, Simon Morisset, Nicolas Martin, Claire Hénocq, Fabienne Gaillard, and Nicolas Reul
 Tropical near-surface stratification during intense rainfall
- XY584 EGU2011-1713
Lili Zeng
 Observed seasonal variability of barrier layer in the South China Sea, from meso to regional scales
- XY585 EGU2011-5016
Henrick Berger, Anne-Marie Tréguier, Nicolas Reul, and Philippe Craneguy
 Seasonal cycle of the low salinity waters in the gulf of Guinea described by satellite measurements and numerical modelling
- XY586 EGU2011-5102
Christophe Maes, Joël Sudre, and Véronique Garçon
 Detection of the eastern edge of the western Pacific warm pool
- XY587 EGU2011-3866
Ali Belmadani, Vincent Echevin, and Boris Dewitte
 Impact of intraseasonal equatorial Kelvin waves on eddy activity in an eddy-resolving model of the Humboldt system
- XY588 EGU2011-13205
Olaf Duteil, Alban Lazar, and Andreas Oschlies
 Realistic representation of light penetration in the upper ocean improves the representation of a structure coupled to the Atlantic Meridional Mode: the Guinea Dome
- XY589 EGU2011-1110
Dongseon Kim and SangHwa Choi
 Seasonal variability of sea-air CO₂ fluxes in the northern East China Sea
- XY590 EGU2011-5911
 Hervé Giordani and **Guy Caniaux**
 A diagnostic of the vertical velocity for the Equatorial Atlantic
- XY591 EGU2011-517
Moussa Diakhate, Alban Lazar, Gaelle de Coetlogon, and Amadou T. Gaye
 Local interactions between Sea Surface Temperature and Winds in the Tropical Atlantic at intraseasonal timescales.
- XY592 EGU2011-12287
Irene Polo, Alban Lazar, Belen Rodriguez-Fonseca, and Juliette Mignot
 Analysis of the time evolution of the Atlantic Equatorial Mode mixed layer heat budget with a coupled GCM
- XY593 EGU2011-6973
Charles Williams, Dominic Kniveton, and Russell Layberry
 Idealized SST anomaly regional climate model experiments: A note of caution.
- XY594 EGU2011-831
Alina Gainusa Bogdan and Pascale Braconnot
 Evaluation of the IPSL-CM5 Earth System Model air-sea fluxes in tropical regions
- XY595 EGU2011-11186
Jenny Glashoff, Hartmut Borth, and Klaus Fraedrich
 Tropical sea surface temperature variability in an idealized atmosphere-ocean column

OS2.1 – Open Session on Coastal and Shelf Seas – Orals

Conveners: Johan van der Molen, Huib E. de Swart, Georgy Shapiro

Room: 11

Chairperson: Johan van der Molen, Huib de Swart

- 08:30–08:45 EGU2011-2222
Sebastian Grashorn, Karsten Lettmann, and Jörg-Olaf Wolff
 Modelling wave propagation and wave-current interaction in the East-Frisian Wadden Sea with the unstructured-mesh modelling system FVCOM-SWAVE
- 08:45–09:00 EGU2011-1931
Svetla Miladinova and Adolf Stips
 Modelling of salinity and temperature variation in the Baltic Sea during the last two decades

- 09:00–09:15 EGU2011-3027
Fred Wobus, Georgy I. Shapiro, Miguel A. M. Maqueda, and John M. Huthnance
Modelling of shelf water cascades on the continental slope
- 09:15–09:30 EGU2011-7421
Kai Myrberg and Andreas Lehmann
Upwelling in the Baltic Sea -a review
- 09:30–09:45 EGU2011-5061
Angelo Rubino, Dmitry Romanenkov, Davide Zanchettin, Vanessa Cardin, Dagmar Hainbucher, Manuel Bensi, Alfredo Boldrin, Leonardo Langone, Stefano Miserocchi, and Margherita Turchetto
On the descent of dense water on a complex canyon system in the southern Adriatic basin
- 09:45–10:00 EGU2011-13063
Sonja van Leeuwen, Paul Tett, David Mills, Johan van der Molen, and Piet Ruardij
Hydrodynamic regimes in the North Sea: using model results to examine changes and variability in mixed, stratified and ROFI regions in the period 1958-2008

COFFEE BREAK

Chairperson: Johan van der Molen, Huib de Swart

- 10:30–10:45 EGU2011-9186
Yan Jia and Alexander Yankovsky
The impact of ambient stratification on freshwater transport in a river plume
- 10:45–11:00 EGU2011-12903
Julio Candela, Paula Perez, Manuel Lopez, Cesar Coronado, Alejandra Sanchez, Erasmo Miranda, and Jose-Maria Robles
Water exchange in Bahia Todos Santos, Baja California, Mexico.
- 11:00–11:30 EGU2011-4472
Fabrice Ardhuin, Aron Roland, Jean-François Filipot, and Fabien Leckler
Sea state modelling from the global ocean to the beach and coupling with coastal circulations
- 11:30–11:45 EGU2011-13431
Paolo Cipollini, **Jérôme Benveniste** and the COASTALT Team
COASTALT: an international effort to enable science with coastal altimetry
- 11:45–12:00 EGU2011-10187
Nikolaus Groll and Iris Grabemann
North Sea wave and storm surge conditions for an ensemble of climate change scenarios: an integrated analysis

LUNCH BREAK

Chairperson: Johan van der Molen, Huib de Swart

- 13:30–13:45 EGU2011-3854
Alexander Yankovsky and Ziming Ke
Relative role of subinertial and superinertial long waves in the continental shelf response to the landfall of a tropical cyclone
- 13:45–14:00 EGU2011-6662
Laura Tuomi and Kai Myrberg
The performance of vertical turbulence models in the modeling of hydrodynamics in the Baltic Sea
- 14:00–14:15 EGU2011-12582
Ana Rice, Jeffrey Book, Sandro Carniel, Hartmut Prandke, Katrin Schroeder, and Warren Wood
A qualitative study of the mixing dynamics in the Southern Adriatic Sea in March 2009
- 14:15–14:30 EGU2011-3398
John M. Huthnance
The state of UK seas
- 14:30–14:45 EGU2011-8832
Christian Appendini, Fernando Oropeza, **Alec Torres-Freyermuth**, Paulo Salles, Tonatiuh Mendoza, and José López-González
Wave modeling performance using different wind reanalysis

14:45–15:00 EGU2011-8488

Nils Schade, Anette Ganske, Sabine Hüttl-Kabus, Jens Möller, Holger Klein, Birgit Klein, Peter Löwe, Hartmut Heinrich, Gudrun Rosenhagen, and Birger Tinz
 KLIWAS - Project 1.03: Atmospheric and Oceanographic Reference Data and Climate Projections for Coastal and Open Sea Areas

OS2.1 – Open Session on Coastal and Shelf Seas – Posters

Conveners: Johan van der Molen, Huib E. de Swart, Georgy Shapiro

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Johan van der Molen, Huib de Swart

XY596 EGU2011-4618

Georgy Shapiro

Potential changes in the circulation pattern in the Celtic Sea due to tidal energy generation

XY597 EGU2011-3759

Andrea Doglioli, Jean Luc Fuda, Nicolas Grima, Francesco Nencioli, Anne A. Petrenko, and Gilles Rougier
 LATEX_tools : a software package for navigation in a Lagrangian reference frame

XY598 EGU2011-1641

Dae Choul Kim, **Gwang Soo Lee**, Young Kyo Seo, Hi Il Yi, and Sungho Bae

Chirp acoustic profiles and physical properties of late Quaternary sediments in the southeastern Yellow Sea

XY599 EGU2011-1863

Michaela Markovic, Sabine Hüttl-Kabus, Birgit Klein, Uwe Mikolajewicz, Holger Klein, and Dmitry Sein
 Influence of North Atlantic variability on the North Sea

XY600 EGU2011-2024

Kui Wang, Jianfang Chen, Haiyan Jin, Hongliang Li, Shengquan Gao, and Yong Lu

Nutrient Structure and Potential Limitation Factors of the Phytoplankton During Summer and Winter in Changjiang Estuary and Adjacent East China Sea

XY601 EGU2011-2025

Kui Wang, Jianfang Chen, Haiyan Jin, Hongliang Li, Shengquan Gao, and Yong Lu

Nutrient Structure and Potential Limitation Factors of the Phytoplankton During Summer and Winter in Changjiang Estuary and Adjacent East China Sea

XY602 EGU2011-2375

Nikesh Narayan, Birgit Klein, Holger Klein, Sabine Huetel-Kabus, Thomas Pohlmann, Xinping Chen, and Bernhard Mayer

Decadal to inter-annual variability of North Sea in a climate change scenario

XY603 EGU2011-2720

Amy S. Bower and Heather H. Furey

Mesoscale Eddies in the Gulf of Aden and Their Impact on the Spreading of Red Sea Outflow Water

XY604 EGU2011-2830

Yung-Yao Lan, Ben-Jei Tsuang, Noel Keenlyside, and Sheng Fong Lin

Error estimations of dry deposition velocities of air pollutants using 4-m depth temperature under common assumptions

XY605 EGU2011-4684

Raphael Stuhlmeier

Exact edge waves and stratified flow

XY606 EGU2011-5664

Justyna Meler, Dariusz Ficek, Barbara Lednicka, Joanna Stoż-Egiert, and Agnieszka Zdun

Absorption properties of suspended particulate matter in the Baltic Sea and Pomeranian lakes

XY607 EGU2011-5690

Barbara Lednicka, Karolina Borzycka, Justyna Meler, and Sławomir Sagan

Remote sensing reflectance in optical district areas of South Baltic

XY608 EGU2011-6516

Jaromir Jakacki, Maciej Janecki, Artur Nowicki, and Lidia Dzierzbicka-Glowacka

Modeling of the Baltic Sea

XY609 EGU2011-6728

Valeria Volpe, Sonia Silvestri, and Marco Marani

Remote sensing retrieval of suspended sediment concentration in shallow waters

XY610 EGU2011-6759

Maciej Janecki, Jaromir Jakacki, Lidia Dzierzbicka-Glowacka, and Artur Nowicki

Modeling of Baltic Sea ice cover using CESM model

XY611 EGU2011-8169

Ruben Alvarado Bustos, **John Huthnance**, and Ric Williams

Diapycnal mixing and water mass transformation in the Gulf of Cadiz

- XY612 EGU2011-8410
Ping Zhai and **Amy Bower**
Dipole generation in the Red Sea forced by the Tokar Wind Jet in summer
- XY613 EGU2011-8402
Elisa Bruque Pozas, Antonio Sánchez-Román, Jesús García-Lafuente, Javier Delgado, Cristina Naranjo, and Concepción Calero
Seasonal and spatial variability of tidal currents at the mid-west Strait of Gibraltar
- XY614 EGU2011-9796
Karsten Lettmann, Oliver Bleich, Steffen Rettig, Sebastian Grashorn, Dietmar Kraft, and Jörg-Olaf Wolff
Numerical modelling of cooling water inputs into the Jade bay using the unstructured-mesh model FVCOM
- XY615 EGU2011-10023
Audrey Pasquet, Yves Morel, Rémy Baraille, Tanguy Szekely, and Louis Marié
Dispersion of homogenized water plumes in coastal areas : The Ushant Front
- XY616 EGU2011-11022
Jens Möller, Sabine Hüttel-Kabus, Nils Schade, Anette Ganke, Holger Klein, Birgit Klein, Hartmut Heinrich, Peter Löwe, Gudrun Rosenhagen, and Birger Tinz
Trend of significant wave height in the North Sea
- XY617 EGU2011-11338
Ilker Fer and Mostafa Bakhoday Paskyabi
Moored turbulence measurements in the upper ocean: results from a test deployment
- XY618 EGU2011-6694
Kai Myrberg
Validation of three-dimensional hydrodynamic models of the Gulf of Finland based on a statistical analysis of a six-model ensemble
- XY619 EGU2011-325
Keith O' Sullivan and Jimmy Murphy
"3 Dimensional Hydrodynamics and Residence Time of a Marine Lough"
- XY620 EGU2011-2568
Ulf Gräwe
Implementation of high-order particle-tracking schemes in a water column model
- XY621 EGU2011-7300
Elodie Charles, Déborah Idier, Rodrigo Pedreros, Gonéri Le Cozannet, Jérôme Thiebot, Fabrice Ardhuin, and Serge Planton
Present and future wave climate analysis along the French mainland Atlantic coast, using wave dynamical downscaling
- XY622 EGU2011-2803
Vadim Navrotsky, Grigoriy Dolgikh, Elena Kholodkevich, **Valeriy Liapidevskii**, and Elena Pavlova
Internal waves in shelf zones: from generation till dissipation
- XY623 EGU2011-10832
Gaelle Herbert, Nadia Ayoub, Florent Lyard, Patrick Marsaleix, Anna Rubio, and Almudena Fontán
Ocean response to storm "Klaus" in the Bay of Biscay from numerical simulations and in situ observations.
- XY624 EGU2011-3996
Anne A. Petrenko, Ziyuan H. Hu, Andrea M. Doglioli, and Ivan Dekeyser
Generation of coastal mesoscale anticyclonic eddies in the Gulf of Lion (NW Mediterranean)

OS2.2/EG10 – Advances in understanding of the multi-disciplinary dynamics of the Southern European Seas (Mediterranean and Black Sea) (co-organized) – Orals

Convener: Nadia Pinardi | Co-Conveners: Samuel Somot, Emin Özsoy, Marilaure Gregoire

Room: 7

Chairperson: n.n.

- 13:30–13:45 EGU2011-6222
George Zodiatis, Dan Hayes, Isaac Gertman, Yianna Samuel-Rhoads, and Andreas Nicolaidis
The mesoscale circulation in the Levantine Basin
- 13:45–14:00 EGU2011-2491
Karine Béranger, Cindy Lebeaupin Brossier, Marie-Noëlle Houssais, Philippe Drobinski, Michel Crépon, Jonathan Beuvier, Romain Bourdallé-Badie, Yann Drillet, Nicolas Ferry, and Florent Lyard
Impact of the spatial distribution of the wind maximum on the deep convection in the Gulf of Lions and the Ligurian Sea (western Mediterranean)
- 14:00–14:15 EGU2011-9695
Nadia Pinardi, Mario Adani, Giovanni Coppini, Srdjan Dobricic, Claudia Fratianni, Vladislav Lyubartsev, Paolo Oddo, Marina Tonani, and Marco Zavatarelli
The Mediterranean Sea large scale low frequency ocean variability from 1987 to 2007: a retrospective analysis

- 14:15–14:30 EGU2011-5018
Gianmaria Sannino, José-Carlos Sanchez-Garrido, Luca Liberti, and Lawrence Pratt
 The effects of nonhydrostaticity on the simulated exchange flow through the Strait of Gibraltar
- 14:30–14:45 EGU2011-11148
Eleonora Rinaldi, Bruno Buongiorno Nardelli, Gianluca Volpe, and Rosalia Santoleri
 Phytoplankton distribution and variability sources Sicily Channel (Mediterranean Sea) from remote sensing data
- 14:45–15:00 EGU2011-4662
Svetlana Pakhomova, Elena Vinogradova, Evgeny Yakushev, Andrey Zatsepin, Galina Shtereva, Valery Chasovnikov, and Oleg Podymov
 On the recent interannual changes of the Black Sea nutrient regime and oxic/anoxic boundary position
- Chairperson: Nadia Pinardi ; Emin Özsoy
- 15:30–15:45 EGU2011-7121
Patrick Lehodey, Inna Senina, and Philippe Gaspar
 Modeling Atlantic bluefin tuna spawning habitat and larvae dynamics in the Mediterranean Sea
- 15:45–16:00 EGU2011-7478
Emanuela Clementi, Marco Zavatarelli, and Paolo Oddo
 Simulating the interannual variability of the Adriatic Sea ecosystem
- 16:00–16:15 EGU2011-14182
 Emin Özsoy, **Ali Aydoğdu**, Adil Sözer, and Murat Gündüz
 Multi-year variations in the Northern Levantine Basin based on coupled hydrodynamic and ecosystem modeling
- 16:15–16:30 EGU2011-11844
 Arthur Capet, Alexander Barth, Jean Marie Beckers, Alberto V. Borges, Pascal Joassin, Filip Meysman, Karline Soetart, and **Marilaure Gregoire**
 Multidecadal evolution of Black Sea hydrodynamics and biogeochemistry
- 16:30–16:45 EGU2011-9254
Viktor Dorofeyev, Temel Oguz, and Gennady Korotaev
 Modelling of the Long-Term Evolution of the Black Sea Ecosystem
- 16:45–17:00 EGU2011-9475
 Suleyman Tugrul, **James W. Murray**, Gernot E. Friederich, and Ilkay Salihoglu
 Long-term changes in the chemical properties of the Black Sea

OS2.2/EG10 – Advances in understanding of the multi-disciplinary dynamics of the Southern European Seas (Mediterranean and Black Sea) (co-organized) – Posters

Convener: Nadia Pinardi | Co-Conveners: Samuel Somot, Emin Özsoy, Marilaure Gregoire

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Nadia Pinardi ; Marilaure Gregoire

- XY625 EGU2011-2165
Jonathan Beuvier, Cindy Lebeaupin-Brossier, Romain Bourdallé-Badie, Florence Sevault, Samuel Somot, Karine Béranger, Yann Drillet, Nicolas Ferry, and Florent Lyard
 Modelling the spreading of the Western Mediterranean Deep Water formed during winter 2004-2005 : role of deep eddies
- XY626 EGU2011-7115
Javier Soto-Navarro, Jose C. Sánchez-Garrido, Francisco Criado-Aldeanueva, Jesús García-Lafuente, Cristina Naranjo-Rosa, Antonio Sánchez-Román, Elisa Bruque, Concepción Calero, Javier Delgado, and Juan Miguel Vargas
 Diagnosing termohaline trends of the Atlantic Inflow by Argo data
- XY627 EGU2011-11472
Samuel Somot, Florence Sevault, Jonathan Beuvier, Marine Herrmann, Benoit Meyssignac, Roland Aznar, Gabriel Jordà, Simon Josey, and Michel Déqué
 Towards a realistic climate modelling of the Mediterranean Sea over the last 50 years: method and result overview
- XY628 EGU2011-11493
Yannis Cuyppers, Pascale Bouruet-Aubertot, Claudie Marec, and Jean Luc Fuda
 Turbulent mixing in anticyclonic eddies during the BOUM experiment (Mediterranean sea)
- XY629 EGU2011-9115
Alexandra Pavlidou and Harilaos Kontoyiannis
 Dissolved oxygen and nutrient dynamics in East Mediterranean Sea (Aegean, Ionian and Levantine Seas)

- XY630 EGU2011-9233
Vasily Knysh, **Artem Miziouk**, Vladislav Moiseenko, Alexander Kubryakov, Natalia Inyushina, and Genndy Korotaev
Variability of the Black Sea Dynamics During 1971-1993
- XY631 EGU2011-9339
Georgy Shapiro, Dmitry Aleynik, Andrei Zatsepin, Valentina Khan, Valery Prostakishin, Tatiana Akivis, Vladimir Belokopytov, Anton Sviridov, and Vladimir Piotukh
Response of water temperature in the Black Sea to atmospheric forcing: the sensitivity study
- XY632 EGU2011-9423
Akif Korkmaz, Heather Cannaby, Viktor Dorofeev, Alexander Kubriyakov, **Baris Salihoglu**, and Temel Oguz
Interannual variability in the water column structure of the Black Sea (1971 - 2001)
- XY633 EGU2011-10195
Marco Marcelli, Viviana Piermattei, Simone Bonamano, and Angelo Perilli
Description of the primary production distribution in the Sardinian Sea (Western Mediterranean), between 2001 and 2004.
- XY634 EGU2011-11293
Manel Grifoll, Jordi Solé, and Manuel Espino
A nested model for a water harbour circulation. The case of Barcelona (NW Mediterranean Sea)
- XY635 EGU2011-13185
Bettina Fach, **Baris Salihoglu**, and Temel Oguz
Modeling the influence of hydrodynamic processes on anchovy distribution and connectivity in the Black Sea
- XY636 EGU2011-13102
Marina Locritani, Gan Pietro Gasparini, Cosmo Carmisciano, Michela Castellano, and Paolo Povero
The driving forces of the biotic processes along an offshore gradient in the Ligurian basin (Portofino Promontory) during 2008
- XY637 EGU2011-8125
gelsomina mattia, marcello vichi, byoung an, marco zavatarelli, and paolo oddo
Variability of the Mediterranean Sea biogeochemistry in the contemporary climate
- XY638 EGU2011-2866
Ivica Vilibic and Hrvoje Mihanovic
An application of Self-Organising Maps method in recent Adriatic environmental studies and its perspectives
- XY639 EGU2011-9580
John Kirkpatrick, Clara Fuchsman, James T. Staley, Evgeniy Yakushev, and **James W. Murray**
Anammox and Denitrification in the Black Sea

AS1.5/NP3.10/OS2.6 – Recent Developments in Geophysical Fluid Dynamics (co-organized) – Orals

Convener: Uwe Harlander | Co-Conveners: Andreas Will, Nils Wedi, Michael Kurgansky, Wolf-Gerrit Fruh, Jose M. Redondo, Allen Bateman, Stuart Dalziel, Rui Caldeira, Luis C. Cana Cascallar, Vanda Grubišić, Alexandre Stegner, Evan Mason

Room: 14

Chairperson: n.n.

- 13:30–13:45 EGU2011-13883
Ray Bates
On the relevance of Charney-Drazin (1961) for our understanding of the dynamical influence of the stratosphere on the troposphere.
- 13:45–14:00 EGU2011-13792
Nathan Paldor
Laplace's Tidal Equations: Revisiting a 400 year old basic problem of GFD
- 14:00–14:15 EGU2011-13246
Riwal Plougonven and Chris Snyder
Gravity waves emitted from jets: lessons from idealized simulations
- 14:15–14:30 EGU2011-1950
Nils Wedi and Piotr Smolarkiewicz
A nonlinear perspective on the dynamics of the MJO: idealized large-eddy simulations
- 14:30–14:45 EGU2011-4391
Bruno Ribstein and Vladimir Zeitlin
Inertial instability in the 2 layer rotating shallow water model
- 14:45–15:00 EGU2011-7474
Anna Rabitti and Leo R. M. Maas
Internal inertial wave characteristic paths in a sphere and in a spherical shell

Chairperson: Vanda Grubišić

- 15:30–15:45 EGU2011-8908
Andrew Stewart and Paul Dellar
 A numerical study of cross-equatorial abyssal ocean currents with a complete representation of the Coriolis force
- 15:45–16:00 EGU2011-513
Gaele Perret, Thomas Dubos, and Alexandre Stegner
 How oceanic anticyclones are favoured through large-scale and cyclogeostrophic barotropic instabilities
- 16:00–16:15 EGU2011-4070
Alexandre Stegner, Gaele Perret, Ayah Lazar, Rui Caldeira, and Charles Dong
 Island wake dynamics: various parameters and regimes of asymmetry
- 16:15–16:30 EGU2011-910
Ayah Lazar, Eyal Heifetz, and Alexandre Stegner
 Inertial instability in island wakes
- 16:30–16:45 EGU2011-2147
Rieke Heinze and Siegfried Raasch
 Atmospheric vortex streets: structure and properties derived from large eddy simulations
- 16:45–17:00 EGU2011-7492
Rui Caldeira, Maxime Schmerber, and Pablo Sangrá
 Oceanic eddy response to atmospheric forcing: near- and far-field consequences

AS1.5/NP3.10/OS2.6 – Recent Developments in Geophysical Fluid Dynamics (co-organized) – Posters

Convener: Uwe Harlander | Co-Conveners: Andreas Will, Nils Wedi, Michael Kurgansky, Wolf-Gerrit Fruh, Jose M. Redondo, Allen Bateman, Stuart Dalziel, Rui Caldeira, Luis C. Cana Cascallar, Vanda Grubišić, Alexandre Stegner, Evan Mason

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY1 EGU2011-8566
Ayah Lazar, Alexandre Stegner, Rui Caldeira, Samuel Viboud, and Henri Didelle
 Stability of submesoscale wake vortices in a rotating and stratified shallow-water layer: laboratory experiments.
- XY2 EGU2011-10164
Rui Caldeira, Alain Cheluis, Maxime Schmerber, and Pablo Sangrá
 Contribution of island asymmetry and neighboring islands to the formation of oceanic wakes: a quasi-geostrophic study of near- and far-field implications
- XY3 EGU2011-10304
Luis C. Cana Cascallar, Diana Grisolia-Santos, and Leopoldo Álvarez
 Firsts results on the modelling of the Gran Canaria atmospheric wake
- XY4 EGU2011-10328
Luis C. Cana Cascallar, Diana Grisolia-Santos, and Leopoldo Álvarez
 Local flow under weak trade wind flow regime
- XY5 EGU2011-3478
Marion Kersalé, Alvaro J. Peliz, Andrea M. Doglioli, and Anne A. Petrenko
 A numerical study on the collision of a Meddy with a seamount
- XY6 EGU2011-7405
Xavier Couvelard, Isabel B. Araujo, Rui Caldeira, and Ricardo Tome
 Atmospheric-induced effects on the sea surface: Madeira Island wake case study
- XY7 EGU2011-3691
Vanda Grubišić, Johannes Sachsperger, and Rui Caldeira
 The atmospheric wake of Madeira Island: i-WAKE Campaign
- XY8 EGU2011-7987
 Uwe Harlander, Yongtai Wang, **Kiril Alexandrov**, Torsten Seelig, Christoph Egbers and the MetStröm rotating annulus Team
 Intercomparison of numerical models simulating rotating annulus flows
- XY9 EGU2011-12553
Eckhard Dietze, Heiko Schmidt, Juan Pedro Mellado, and Bjorn Stevens
 Comparison of LES and DNS results for a two-dimensional evaporatively driven cloud-top mixing layer
- XY10 EGU2011-2063
Fabian Senf and Ulrich Achatz
 On generalized linear flows: from compressible to sound-proof dynamics
- XY11 EGU2011-5675
Michael Kurgansky
 Dynamical and statistical characteristics of atmospheric dust devils

- XY12 EGU2011-12473
Haraldur Ólafsson, Hálfán Ágústsson, and Ólafur Rögnvaldsson
Patterns of the fine-scale wind climatology of Iceland from numerical downscaling
- XY13 EGU2011-14096
Andreas Will and **Jack Ogaja**
Convergence properties of the spatial schemes in the COSMO model and requirements on higher order spatial convergence
- XY14 EGU2011-11619
Marcin Kurowski, Bogdan Rosa, and Michal Ziemianski
Upstream effects of the atmospheric flow over a mountain ridge as represented by the anelastic nonhydrostatic model EULAG
- XY15 EGU2011-3323
Urs Schaefer-Rolffs and Erich Becker
Scale-invariant Horizontal Diffusion in a Global Circulation Model
- XY16 EGU2011-6565
Liang Sun
General stability criteria for inviscid rotating flow
- XY17 EGU2011-9297
Melitta Fiebig-Wittmaack, Wolfgang Boersch-Supan, Ingeborg Bischoff-Gauss, and Orlando Astudillo
Convergence acceleration for difference equations with flat grids: Application to incompressible atmospheric flow
- XY18 EGU2011-10221
Remi Tailleux
Compressibility effects in nearly incompressible turbulent stratified fluids: Do they matter or do they not?
- XY19 EGU2011-1535
Jose M. Redondo, Otman Ben Mahjoub, Roberto Castilla, Margarita Diez, and Emil Sekula
Mixing and diffusion in buoyancy driven self-similar flows
- XY20 EGU2011-3207
Richard Blender
Instability of planetary flows based on Riemannian geometry
- XY21 EGU2011-9967
Christoph Egbers, Marcus Gellert, Uwe Harlander, Yongtai Wang, and Günther Rüdiger
Investigation of Stratorotational Instability (SRI) in Taylor-Couette flows with axial temperature gradient

AS3.11/OS3.5 – Ship Plumes: Impacts on atmospheric chemistry, climate and nutrient supply to the oceans (co-organized) – Posters

Convener: Roland von Glasow | Co-Conveners: Adina Paytan

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Roland von Glasow

- XY155 EGU2011-226
Geert C. M. Vinken, K. Folkert Boersma, Daniel J. Jacob, and Ernst W. Meijer
Accounting for non-linear chemistry of shipping plumes in the GEOS-Chem global chemistry transport model
- XY156 EGU2011-5302
Hyun Soo Kim, Chul Han Song, Roland von Glasow, Peter Brimblecombe, Jhoon Kim, Rokjin Park, Jung Hun Woo, and Yong Hoon Kim
A numerical study on elevated levels of HCHO within ship-plumes: Source identification and budget analysis
- XY157 EGU2011-5314
Yonghoon Kim, Hyun Soo Kim, and Chul Han Song
Ship-plume sulfur chemistry in the ITCT 2K2 experiment
- XY158 EGU2011-10764
Niklas Berg and Johan Mellqvist
Remote ship emission measurements of sulfur dioxide (SO₂) and nitrogen dioxide (NO₂) from airborne platforms
- XY159 EGU2011-10794
Mattia Righi, Carolin Klinger, Veronika Eyring, Johannes Hendricks, Axel Lauer, and Andreas Petzold
The climate impact of biofuels in shipping: global model studies of the aerosol indirect effect
- XY160 EGU2011-11568
Stig B. Dalsøren, Magnus S. Eide, Bjørn H. Samset, Gunnar Myhre, and Øyvind Endresen
Climate and environmental impacts of CO₂ reduction from shipping using a cost-effectiveness criterion

- XY161 EGU2011-11706
Nele Veldeman, Stijn Janssen, Felix Deutsch, Kris Vanherle, Pieter Lodewijks, Jan Duerinck, and Paul Campling
 Integrated Assessment of an Emission Trading Scheme to reduce emissions from international shipping and the related environmental impact over Europe
- XY162 EGU2011-11840
Samuele Masieri, Margherita Premuda, Ivan Kostadinov, Fabrizio Ravegnani, Daniele Bortoli, Andrea Petritoli, and Giorgio Giovanelli
 Flow rate emission and global impact study of ships plumes in Venice lagoon area
- XY163 EGU2011-12317
Jerome Hilaire and David Lee
 Towards a better representation of ship plume chemistry in a Global Chemistry-Transport Model
- XY164 EGU2011-12822
Jana Moldanova
 Parameterisation of ship plumes for regional and global models

BG1.6/OS3.7/SSS4.6 – Stabilization of organic matter in soils, sediments and marine dissolved organic matter (co-organized) – Orals

Convener: Samuel Abiven | Co-Conveners: Michael W. I. Schmidt, Thorsten Dittmar

Room: 23

Chairperson: Samuel Abiven

- 13:30–14:00 EGU2011-5784
Timothy Eglinton, Valier Galy, Bernhard Peucker-Ehrenbrink, Nicholas Drenzek, Angela Dickens, Xiaojuan Feng, Enno Schefuss, Britta Voss, Daniel Montlucon, and Ying Wu
 The origin and evolution of organic matter signatures carried by rivers to the oceans
- 14:00–14:15 EGU2011-1151
Christian Schurig, Rienk Smittenberg, Jürgen Berger, Peter Fittkau, Anja Miltner, and Matthias Kästner
 SOM genesis - microbial biomass fragments could be a significant source in newly exposed ecosystems
- 14:15–14:30 EGU2011-13801
Nimisha Singh, Samuel Abiven, Margaret S. Torn, and Michael W.I. Schmidt
 The uncertain future of pyrogenic carbon in terrestrial system
- 14:30–14:45 EGU2011-3675
Barros Nieves, César Pérez-Cruzado, Josefa Salgado, and Agustín Merino
 Monitoring changes in OM in afforested soils by calorespirometry, thermal analysis and NMR
- 14:45–15:00 EGU2011-8233
Xiaojuan Feng, Jorien E. Vonk, Örjan Gustafsson, Valier Galy, Daniel B. Montlucon, and Timothy I. Eglinton
 Fate of lignin in large river systems across different latitudes - Perspectives from compound-specific radiocarbon analysis
- Chairperson: Thorsten Dittmar
- 15:30–16:00 EGU2011-13657
Gerhard J. Herndl and Thomas Reinthaler
 Refractory deep-ocean dissolved organic matter: Enigmas and inconsistencies about its formation and transformation?
- 16:00–16:15 EGU2011-2445
Thorsten Dittmar, Jiyoung Paeng, Jutta Niggemann, and Aron Stubbins
 Millennium-scale stabilization of marine dissolved organic matter through thermogenesis
- 16:15–16:30 EGU2011-12611
Yves Gelinas, Karine Lalonde, Alfonso Mucci, and Alexandre Ouellet
 The Rusty Sink: Iron Promotes the Preservation of Organic Matter in Sediments
- 16:30–16:45 EGU2011-13891
Williams T. Cooper, Malek M. Tfaily, Rasha Hamdan, J. Elizabeth Corbett, and Jeffrey P. Chanton
 Reactive and Refractory Components of Organic Matter in Peat Soils and their Relation to Climate Change
- 16:45–17:00 EGU2011-10663
Norbert Hertkorn and Philippe Schmitt-Kopplin
 Natural Organic Matter and our Current Capacity to Depict Molecular Dissimilarity

BG1.6/OS3.7/SSS4.6 – Stabilization of organic matter in soils, sediments and marine dissolved organic matter (co-organized) – Posters

Convener: Samuel Abiven | Co-Conveners: Michael W. I. Schmidt, Thorsten Dittmar

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Thorsten Dittmar, Michael W.I. Schmidt, Samuel Abiven

- BG39 EGU2011-7060
Bjorn Erhagen, Ulrik Ilstedt, and Mats B Nilsson
Temperature response (Q₁₀) of heterotrophic CO₂ production in response to varying simple carbon sources and microbial metabolic status
- BG40 EGU2011-9361
Irina Perminova, Alexander Volikov, Sergey Ponomarenko, Vladimir Kholodov, Elena Lasareva, and Kirk Hatfield
Design of surface-active humic substances capable for stabilization of soil aggregates
- BG41 EGU2011-972
Carlos Rezende, Alex Mazurec, and Plinio Camargo
Carbon and Nitrogen Elemental and Isotopic Composition in Atlantic Forest Soils Submitted to Different Land Uses
- BG42 EGU2011-307
Muhammad Ibrahim, Anwar-ul Hassan, Muhammad Arshad, Sami Ullah, Muhammad Yamin, Sang-Keun Ha, and Keung-Hwa Han
Tillage and organic materials affects soil organic carbon under wheat-rice cropping system in Typic calciargids soils
- BG43 EGU2011-6194
Sarah De Baets, Kristof Van Oost, Karen Baumann, Veerle Vanacker, and Cornelia Rumpel
Lignin signature in response to land abandonment and erosion of dry luvisols in SE Spain
- BG44 EGU2011-422
Bernardo Maestrini, Nimisha Singh, Samuel Abiven, Margaret Torn, Jeffrey Bird, and Michael W I Schmidt
Pyrogenic carbon losses and related priming effect on soil organic matter in a forest topsoil
- BG45 EGU2011-719
Nimisha Singh, Eoin Brodie, Samuel Abiven, Bernardo Maestrini, Jeffery A Bird, Margaret Torn, and Michael W.I. Schmidt
Effect of pyrogenic carbon addition on microbial community structure in forest topsoil
- BG46 EGU2011-13802
Samuel Abiven, Nimisha Singh, and Bernardo Maestrini
Priming effect of pyrogenic carbon on soil organic matter and soil litter: facts, paradoxes and gaps in knowledge.
- BG47 EGU2011-725
Maximilian P.W. Schneider, Johannes Lehmann, and Michael W.I. Schmidt
Charcoal molecular marker quantity and pattern do not change over a century in a tropical climate
- BG48 EGU2011-4914
Stephanie Kloss, Franz Zehetner, Alex Dellantonio, Bernhard Wimmer, Raad Hamid, Volker Liedtke, Franz Ottner, Martin Gerzabek, and **Gerhard Soja**
Biochar for carbon sequestration in soil - Effect of feedstock and pyrolysis conditions on physical and chemical biochar characteristics
- BG49 EGU2011-10834
Guillermo Rein
Very Long-Term Sequestration of Solid-Phase Carbon: Geoengineering Facilities for Biochar Storage
- BG50 EGU2011-2161
Isabelle Basile-Doelsch, Pierre Bonnard, Thomas Delhay, Perrine Chaurrand, Christian Domneci, Daniel Borschneck, and Philippe Dussouillez
Exploring nanoSIMS technique for soil organic matter stabilization issues
- BG51 EGU2011-1029
Huiyu Zhao, Stephane Mounier, Roland Redon, and Cedric Garnier
Characterization of Dissolved Organic Matter 3D-Fluorescence Quenching treated by PARAFAC
- BG52 EGU2011-10940
Nadler Nahindy Simon, Pierre Benoit, Edith Parlanti, Jean-Philippe Croué, and Abbad Chabbi
Adsorption on subsoil horizons of dissolved organic matter (DOM) in agrosystems: inputs of fluorescence spectroscopy
- BG53 EGU2011-778
Malak Tfaily, Jane Corbet, Jeff Chanton, and William Cooper
DOM in Northern Peatlands: Correlating Bulk Spectroscopic Properties with Molecular Composition
- BG54 EGU2011-9338
Jutta Niggemann, Thorsten Dittmar, and Gunnar Gerdt
Assigning reactivities to individual molecules in marine dissolved organic matter
- BG55 EGU2011-2787
Zhuo Yi Zhu, Jing Zhang, Liang Shao, and Ying Wu
Particulate organic matter in the northwest East China Sea—implications from amino acids enantiomers

BG56 EGU2011-8708
Steffi Rothhardt, Reinhard Gaupp, and Gerd Gleixner
Microbial alteration of organic coatings on sand grains

Tuesday, 05 April

CL1.19 – Ocean climate viewed through deep-sea corals (co-listed) – Orals

Convener: Norbert Frank | Co-Conveners: Tina van de Flierdt, Andres Rüggeberg

Room: 13

Chairperson: Norbert Frank, Andres Rüggeberg, Tina van de Flierdt

- 15:30–15:45 EGU2011-5852
Armin Form and Ulf Riebesell
 Coping with ocean acidification during long-term exposure in the cold-water coral *Lophelia pertusa*
- 15:45–16:00 EGU2011-9518
Nancy Grumet Prouty, Brendan Roark, and Alan Koenig
 Sub-decadal records of surface water properties recorded in deep-sea corals spanning the last millennium from the Gulf of Mexico
- 16:00–16:15 EGU2011-7375
Marcus Gutjahr, Derek Vance, Claus-Dieter Hillenbrand, and Gerhard Kuhn
 Modern Amundsen Sea Circumpolar Deep Water Nd isotope composition and its evolution since the Antarctic Cold Reversal
- 16:15–16:30 EGU2011-8370
Eric Douville, Pascale Louvat, Jerome Gaillardet, Cecile Gonzalez, Norbert Frank, and Marion Gehlen
 Boron isotopes in deep sea corals over the last 10,000 years: evidence of ocean acidification at 750m of depth?
- 16:30–16:45 EGU2011-9132
Eleni Anagnostou, Robert Sherrell, and Jess Adkins
 Nutrient and carbonate ion change at intermediate depth North West Atlantic: a record from a 15.4ky D. dianthus fossil coral
- 16:45–17:00 EGU2011-11813
Jacek Raddatz, Volker Liebetrau, Anton Eisenhauer, Andres Rüggeberg, Ed Hathorne, Dirk Nürnberg, and Wolf-Christian Dullo
 Temperature reconstructions on carbonate mounds (IODP Site 1317) using elemental ratios (Mg/Ca, Mg/Li, Sr/Ca) as well as non-traditional isotope techniques

CL1.19 – Ocean climate viewed through deep-sea corals (co-listed) – Posters

Convener: Norbert Frank | Co-Conveners: Tina van de Flierdt, Andres Rüggeberg

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Norbert Frank, Andres Rüggeberg, Tina van de Flierdt

- XY230 EGU2011-5486
Norbert Frank, Freiwald André, Wienberg Claudia, Van Rooij David, Colin Christophe, de Haas Henk, Buhl-Mortensen Pal, Roberts J. Murray, De Mol Ben and the HERMIONE partners Team
 Northeastern Atlantic cold-water coral reefs and climate
- XY231 EGU2011-10346
Andres Rüggeberg, Paolo Montagna, Matthias López Correa, Jan-Rainer Riethdorf, Jacek Raddatz, Wolf-Christian Dullo, Malcolm McCulloch, Marco Taviani, and André Freiwald
 Problems and possibilities of Sr/Ca as a temperature proxy in cold-water coral *Lophelia pertusa*
- XY232 EGU2011-13385
Morten Bjerager, Bodil Wesenberg Lauridsen, Finn Surlyk, Lars Stemmerik, Holger Lykke-Andersen, Nicolas Thibault, Caterina Morigi, and Christoph Korte
 Development of cold-water coral reefs in the Early Paleocene of southern Scandinavia
- XY233 EGU2011-13946
Markus Eisele, Norbert Frank, Claudia Wienberg, Dierk Hebbeln, Matthias López Correa, Eric Douville, and André Freiwald
 Growth of a cold-water coral mound - coral framework accumulation versus the deposition of hemipelagic sediments
- XY234 EGU2011-13511
Bodil Wesenberg Lauridsen, Morten Bjerager, and Finn Surlyk
 Danien cold-water coral reefs from Faxe, Denmark - A unique preservation of aragonite faunas
- XY235 EGU2011-9222
Wolf-Christian Dullo, Sascha Flögel, Andres Rüggeberg, and Furu Mienis
 Ocean Chemistry reflected in Cold Water Coral Reef Occurrences

- XY236 EGU2011-13943
Julie Trotter, Paolo Montagna, Matthias López Correa, Agostina Vertino, Malcolm McCulloch, Steve Goldstein, Benedicte Ritt, Pierre Henry, and Marco Taviani
 Longevity and growth rates of *Desmophyllum dianthus* in the Marmara Sea and its potential as centennial scale geochemical deep-sea archive
- XY237 EGU2011-10788
Jean-Carlos Montero-Serrano and the LSCE-GEOTRAC, IDES, HISPEC, RCMG, LOCEAN-IPSL-UPMC Team
 Variability in the northeastern Atlantic intermediate water during the past 60 years as recorded by a cold-water coral from the Bay of Biscay
- XY238 EGU2011-11719
Paolo Montagna, Steve Goldstein, Marco Taviani, Norbert Frank, Malcolm McCulloch, and Helen McGregor
 Neodymium isotopes in biogenic carbonates: reliable archives of water mass circulation
- XY239 EGU2011-13944
Matthias López Correa, Owen Sherwood, Paolo Montagna, Andreas Rüggeberg, Brenden Roak, Evan Edinger, and Malcolm McCulloch
 Geochemical Records in Canadian Bamboo Corals, Potentials and Pitfalls
- XY240 EGU2011-10472
Jean-Carlos Montero-Serrano, Norbert Frank, and Christophe Colin
 On the evolution of Mediterranean Sea Water during climate warm stages (MIS 1, 5, 7)
- XY241 EGU2011-5994
Kirsty C. Crocket, Tina van de Flierdt, Laura F. Robinson, and Jess F. Adkins
 Ocean ventilation rates during the last deglaciation: paired radiocarbon and Nd isotope compositions in deep-water corals from the NW Atlantic

CL2.10 – Tropical Climate Variability and Teleconnections: past, present and future (co-listed) – Orals

Convener: Fred Kucharski | Co-Conveners: Belen Rodríguez Fonseca, Nerilie Abram, Teresa Losada, Javier Garcia-Serrano, Elsa Mohino, Irene Polo, Erin McClymont, Erica Hendy

Room: 17

Chairperson: n.n.

- 08:30–08:45 EGU2011-1306
Li Shi, Harry Hendon, Oscar Alves, Jing-Jia Luo, and Magdalena Balmaseda
 How Well can We Predict the Indian Ocean Dipole?
- 08:45–09:00 EGU2011-4599
Peter Brandt, Andreas Funk, Verena Hormann, Marcus Dengler, Richard J. Greatbatch, and John M. Toole
 A 4.5-year climate cycle of the tropical Atlantic forced by deep equatorial ocean dynamics?
- 09:00–09:15 EGU2011-11462
Franziska U. Schwarzkopf and Claus W. Böning
 Decadal subsurface cooling and sea level fall in the tropical south Indian Ocean caused by Pacific wind forcing
- 09:15–09:30 EGU2011-13112
Marta Martin del Rey, Irene Polo, Belén Rodríguez-Fonseca, and Fred Kucharski
 Multidecadal Variability of El Niño types due to Atlantic remote influence
- 09:30–09:45 EGU2011-9682
Ingo Richter, Swadhin Behera, Hideharu Sasaki, and Toshio Yamagata
 Decadal modulation of the relation between equatorial wind anomalies and Atlantic Niños - implications for predictability
- 09:45–10:00 EGU2011-6640
Robin Chadwick and Peili Wu
 Changes to the tropical circulation in a CO₂ ramp-up/ramp-down simulation

COFFEE BREAK

Chairperson: Javier Garcia-Serrano, Teresa Losada, Fred Kucharski

- 10:30–10:45 EGU2011-11453
Craig Grove, Jens Zinke, Frank Peeters, Tim Scheufen, Sebastian Kasper, Malcolm McCulloch, and Geert-Jan Brummer
 Is African rainfall forced from the Pacific on multidecadal timescales?

- 10:45–11:00 EGU2011-8923
Teresa Losada, Belén Rodríguez-Fonseca, Elsa Mohino, Serge Janicot, and Juergen Bader
 Impact of the Atlantic-Pacific Niños connection over Sahelian rainfall
- 11:00–11:15 EGU2011-4880
Alice Grimm and Christopher Reason
 Teleconnections between South American monsoon, Benguela Niño and southern Africa rainfall
- 11:15–11:30 EGU2011-10234
Thomas Toniazzo
 The role of tropical-extratropical teleconnections in the seasonal march of the southern Spring circulation.
- 11:30–11:45 EGU2011-3359
Reindert Haarsma and Frank Selten
 Anthropogenic changes in the Walker Circulation and the impact on extra-tropical planetary wave structure
- 11:45–12:00 EGU2011-619
Isabel Iglesias, Nieves Lorenzo, Belén Rodríguez-Fonseca, Juan Taboada, and Moncho Gómez-Gesteira
 The ENSO signal over Southwestern Europe and its impact on spring rainfall

CL2.10 – Tropical Climate Variability and Teleconnections: past, present and future (co-listed) – Posters

Convener: Fred Kucharski | Co-Conveners: Belén Rodríguez Fonseca, Nerilie Abram, Teresa Losada, Javier García-Serrano, Elsa Mohino, Irene Polo, Erin McClymont, Erica Hendy

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY242 EGU2011-5880
Polina Afonina and Dariya Gushchina
 Simulation of El Niño Modoki in the INM_CM5 model.
- XY243 EGU2011-627
Marta Martín-Rey, Irene Polo, Belén Rodríguez-Fonseca, Javier García-Serrano, Teresa Losada, Elsa Mohino, Carlos Roberto Mechoso, and Fred Kucharski
 Analysis of El Niño events from the Atlantic remote influence
- XY244 EGU2011-13607
Tony Lee and Michael McPhaden
 Increasing intensity of El Niño in the central equatorial Pacific
- XY245 EGU2011-3394
 Regina Rodrigues, **Reindert Haarsma**, Edmo Campos, and Tercio Ambrizzi
 The impacts of inter-El Niño variability on the Tropical Atlantic and Northeast Brazil climate
- XY246 EGU2011-10330
Irene Polo, Buwen W. Dong, and Rowan T. Sutton
 Effects of Atlantic Meridional Overturning Circulation Change on Interannual Variability in the Tropical Atlantic and Pacific
- XY247 EGU2011-8240
Deepthi Marathayil, Len Shaffrey, Andrew Turner, and Julia Slingo
 Seasonal evolution of IOD and its sensitivity to the mean state in the HiGEM High Resolution Coupled Climate Model
- XY248 EGU2011-7679
Giovanni Dalu and Marina Baldi
 Nonlinear dynamics in the tropics in the shallow water approximation
- XY249 EGU2011-12882
Christopher Dancel
 A Simple Mechanism to explain the Zonal Dipole Pattern of Surface Salinity across the Atlantic and Pacific Tropics within a Global Warming Scenario
- XY250 EGU2011-4733
Rondrotiana Barimalala, Annalisa Bracco, and Fred Kucharski
 The representation of the South Tropical Atlantic teleconnection to the Indian Ocean in the AR4 coupled models
- XY251 EGU2011-4593
Fred Kucharski, In-Sik Kang, Riccardo Farneti, and Laura Feudale
 Tropical Pacific response to 20th century Atlantic warming
- XY252 EGU2011-6487
 Laura Feudale and **Fred Kucharski**
 Mechanism Connecting African and Indian Monsoon Megadroughts

- XY253 EGU2011-7109
Cristina Peña-Ortiz, David Gallego, Pedro Ribera, **Maria del Carmen Álvarez**, and Paulina Ordóñez
Decreasing trend of the Tropical Easterly Jet over Africa
- XY254 EGU2011-4604
Sara A. Rauscher, **Fred Kucharski**, and David B. Enfield
The role of regional SST warming variations in the drying of Meso-America in future climate projections
- XY255 EGU2011-13505
Maria Elisa Silva, Teresinha Xavier, and **Sergio Gadelha**
Oceanic influence on Brazilian river outflow
- XY256 EGU2011-7697
Petr Pisoft, Eva Holtanova, Jaroslava Kalvova, and Jiri Miksovsky
Global study of the quasi-biennial oscillation by the pseudo-2D wavelet transform
- XY257 EGU2011-7551
Jorge A. Amador, Eric J. Alfaro, Erick R. Rivera, and Blanca Calderon
Climatic Features and Their Relationship with Tropical Cyclones Over the Intra-Americas Seas
- XY258 EGU2011-143
Ayansina Ayanlade
Climate change monitoring and its impacts assessment: How can GIS help?
- XY259 EGU2011-5923
Hans-F. Graf
Two El Niño Types and their Teleconnections with Europe
- XY260 EGU2011-5953
Annalisa Cherchi, Simona Masina, and Antonio Navarra
Tropical Pacific - North Pacific teleconnection in a coupled GCM: Is ENSO a crucial player?
- XY261 EGU2011-2864
Jinhee Yoon and Sang-Wook Yeh
Strengthening the Relation between the Tropical Pacific SST and the Mid-latitude Atmospheric Variability since the Mid-1980's
- XY262 EGU2011-7378
Julien Crétat, Yves Richard, Benjamin Pohl, Mathieu Rouault, Chris Reason, and Nicolas Fauchereau
Recurrent daily rainfall patterns over South Africa and associated dynamics during the core of the austral summer
- XY263 EGU2011-10616
Pascale Braconnot, Charline Marzin, Masa Kageyama, Didier Swingedouw, and Weipeng Zheng
Relative impact of insolation changes, fresh water fluxes and ice sheet on African and Asian monsoon characteristics
- XY264 EGU2011-11817
Ivana Herceg Bulić and Fred Kucharski
Delayed ENSO impact on spring precipitation over North Atlantic/European region
- XY265 EGU2011-12725
Javier Garcia-Serrano and Teresa Losada
SST-forced ENSO response and internally-driven NAO variability in the Northern Hemisphere midwinter

ESSI7 – Earth System Modeling: Strategies and Software (co-listed) – Posters

Convener: Reinhard Budich | Co-Conveners: Dan Lunt

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL159 EGU2011-3358
Sven Kralisch, Peter Krause, and Christian Fischer
JAMS - a Software Framework for Integrated Environmental Modelling
- XL160 EGU2011-5803
Paolo Mazzetti, Stefano Nativi, Mattia Santoro, and Gary Geller
The GEO Model Web Initiative for Environmental Model Access Interoperability
- XL161 EGU2011-9753
Oliver Schmitz, Derek Karssenbergh, Kor de Jong, and Jean-Luc de Kok
Constructing integrated models: a scheduler to execute coupled components
- XL162 EGU2011-8459
Sarah Callaghan, Mark Morgan, Eric Guilyardi, Sophie Valcke, Charlotte Pascoe, Bryan Lawrence and the METAFOR Project Team
Supporting the climate community by providing common metadata for climate modelling digital repositories: the METAFOR project.

- XL163 EGU2011-10324
Alessandro Spinuso, Luca Trani, Malcolm Atkinson, and Michelle Galea
 Infrastructure for Data-Intensive Seismology: Cross-correlation of distributed seismic traces through the ADMIRE framework
- XL164 EGU2011-11152
Raffaele Guarino and Mirko Albani
 LTDP/FIRST Earth Science User Requirements
- XL165 EGU2011-8307
Lars Hoffmann, Paul Gibbon, Ole Kirner, and Stefan Versick
 Simulation Laboratories for Climate Sciences and Environmental Research
- XL166 EGU2011-9128
Arnaud Caubel, Yann Meurdesoif, Alexis Canevet, Marie-Alice Foujols, Olivier Marti, Sebastien Masson, and Sophie Valcke
 Parallel optimization of IPSL climate model
- XL167 EGU2011-12320
Claudio Schifani, Rudy Rossetto, and Iacopo Borsi
 Open Source GIS tools for Water Resources Management
- XL168 EGU2011-6341
Thomas Jung, Sergey Danilov, Kerstin Fieg, Wolfgang Hiller, Jens Schroeter, Dmitry Sidorenko, and Qiang Wang
 Towards a coupled climate model with a finite-element sea ice-ocean representation
- XL169 EGU2011-7726
Jon Hill and the Applied Modelling and Computation Group Team
 Fluidity - an open-source, next-generation, fluid dynamics framework

HS6.7 – SMOS Data Exploitation: Beyond soil moisture and ocean salinity (co-listed) – Posters

Convener: Susanne Mecklenburg | Co-Conveners: Lars Kaleschke, Jouni Pulliainen, Matthias Drusch

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A384 EGU2011-4975
Lars Kaleschke, Xiangshan Tian-Kunze, and Nina Maaß
 Sea ice thickness temporal evolution during the Arctic freeze-up as seen by SMOS
- A385 EGU2011-8409
 Alok Sahoo, **Eric Wood**, Justin Sheffield, Ming Pan, Ahmad Albitar, Delphine Leroux, and Yann Kerr
 A strategy for global drought monitoring using SMOS soil moisture observations
- A386 EGU2011-6102
Nina Maass, Lars Kaleschke, Xiangshan Tian-Kunze, and Marko Mäkynen
 Sea ice thickness retrieval in the Baltic Sea using SMOS
- A387 EGU2011-10248
Joaquin Muñoz-Sabater, Patricia de Rosnay, Mohamed Dahoui, and Matthias Drusch
 Monitoring SMOS data at ECMWF
- A388 EGU2011-12623
Kimmo Rautiainen, Jouni Pulliainen, Juha Lemmetyinen, Juho Vehviläinen, and Anna Kontu
 Boreal Soil Measurements Using L-band Radiometers, SMOS and ELBARA-II
- A389 EGU2011-14099
Roger Oliva, Rita Castro, Jose Barbosa, Yann Kerr, Manuel Martin-Neira, and Elena Daganzo
 Dealing with Radio Frequency Interference in SMOS Data

OS1.2/CL2.2 – The North Atlantic and climate (co-organized) – Orals

Convener: Monika Rhein | Co-Conveners: Richard Greatbatch

Room: D

Chairperson: Rhein

- 08:30–08:45 EGU2011-4373
Sergey Gulev, Mojib Latif, and Noel Keenlyside
 Role of air-sea fluxes in the North Atlantic climate variability on interdecadal and interannual time scales
- 08:45–09:00 EGU2011-3787
Sydney Levitus
 Multidecadal variability of the subpolar gyre of the North Atlantic

- 09:00–09:15 EGU2011-1658
Katja Lohmann, Johann Jungclauss, Michael Botzet, Helmuth Haak, Stephan Lorenz, and Daniela Matei
 Response of the (multi)decadal variability of the Atlantic meridional overturning circulation to suppressed variability in subpolar deep water formation (and overflows)
- 09:15–09:30 EGU2011-2779
Shane Elipot, Chris Hughes, Eleanor Frajka-Williams, and Miguel Angel Morales Maqueda
 Observed latitudinal coherence of the North Atlantic Meridional Overturning Circulation
- 09:30–09:45 EGU2011-10199
Paul Halloran, Ian Totterdell, Matthew Mennary, Ben Booth, and Nick Dunstone
 The Rise and Fall of the North Atlantic CO₂ Sink
- 09:45–10:00 EGU2011-11566
Daniela Matei, Johanna Baehr, Johann Jungclauss, Helmuth Haak, Wolfgang Müller, and Jochem Marotzke
 Interannual predictions of the Atlantic Meridional Overturning Circulation at 26.5°N

OS1.2/CL2.2 – The North Atlantic and climate (co-organized) – Posters

Convener: Monika Rhein | Co-Conveners: Richard Greatbatch

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Steinfeldt

- XY677 EGU2011-3595
Dmitry Sein, Uwe Mikolajewicz, Ernst Maier-Reimer, and Matthias Groeger
 Downscaling of climate change A1B scenario projection on North Atlantic - European shelves ocean - atmosphere system
- XY678 EGU2011-9138
Dorotea Iovino, Christophe Herbaut, and Marie-Noelle Houssais
 High-resolution modelling of sea-ice and ocean dynamics in the Nordic Seas
- XY679 EGU2011-1482
George Vanyushin, Anatoly Troshkov, Michail Kruzhalov, and Tatiana Bulatova
 The Norwegian and Barents Seas: current temperature conditions (based on satellite data).
- XY680 EGU2011-2239
Steingrímur Jonsson and Hedinn Valdimarsson
 Variability of volume and heat transport of water masses on the north Icelandic shelf
- XY681 EGU2011-3703
 Eric de Boisseson, Virginie Thierry, **Herle Mercier**, and Guy Caniaux
 Origin, formation and variability of the Subpolar Mode Water observed over the Reykjanes Ridge
- XY682 EGU2011-2354
John 'Paul' Spence, Oleg Saenko, Willem Sijp, and Mathew England
 The role of bottom pressure torques on the interior pathways of North Atlantic Deep Water
- XY683 EGU2011-1262
Monika Rhein, Dagmar Kieke, and Reiner Steinfeldt
 The Deep Western Boundary Current and its role for the propagation of newly formed deep water in the North Atlantic
- XY684 EGU2011-3019
Claudia Denker, Dagmar Kieke, Birgit Klein, Holger Klein, and Monika Rhein
 Transport over the Mid-Atlantic-Ridge through the Faraday Fracture Zone
- XY685 EGU2011-2895
Damien Desbruyeres, Virginie Thierry, and Herlé Mercier
 Long-term variability of the North Atlantic Current system in a realistic simulation
- XY686 EGU2011-2594
 Linn Schneider, **Dagmar Kieke**, Monika Rhein, and Birgit Klein
 Mixed layer evolution in the subpolar North Atlantic measured by Argo floats
- XY687 EGU2011-3217
Christian Uhe, Achim Roessler, and Monika Rhein
 Transport variability in the North Atlantic Current inferred from satellite altimetry
- XY688 EGU2011-3428
Sandrine Mulet, Stéphanie Guinehut, Marie-Hélène Rio, Anne-Lise Dhomp, Laurent Bessieres, Gaël Nicolas, and Gilles Larnicol
 Combination of in-situ and satellite observations to monitor the Ocean State: Application to the North Atlantic Ocean
- XY689 EGU2011-3666
Vassil Roussenov, Richard G. Williams, M. Susan Lozier, and Doug M. Smith
 The effect of gyre-scale property changes on the North Atlantic overturning over the last 50 years

- XY690 EGU2011-3682
David Brayshaw, Brian Hoskins, and Michael Blackburn
North Atlantic sea surface temperatures and the structure of the atmospheric storm track
- XY691 EGU2011-3481
Mingming Li, Christian Mertens, Maren Walter, and Monika Rhein
Estimate of Diapycnal Mixing from eight Hydrographic Surveys in the Subpolar North Atlantic
- XY692 EGU2011-3788
Christopher Piecuch and Rui Ponte
Attributing Climate-Scale Variability in Atlantic Ocean Heat Storage
- XY693 EGU2011-14188
Matthias Koeller
Decadal Subpolar Gyre variability and relation to heat exchange in the Nordic Seas
- XY694 EGU2011-12600
Francisco Alvarez-Garcia, Maria J. OrtizBevia, and William CabosNarvaez
North Atlantic decadal variability: deconstructing the SST tripole
- XY695 EGU2011-11358
ben booth, **paul halloran**, and nick dunstone
Role of external drivers in historical Atlantic Temperature changes
- XY696 EGU2011-13366
Rita Lecci, Simona Masina, Annalisa Cherchi, and Marcelo Barreiro
Sensitivity of the Atlantic Thermohaline Circulation to extreme CO2 forcing
- XY697 EGU2011-10105
Christian Rodehacke, Steffen Olsen, Gao Yongqi, Didier Swingedouw, Matthew Menary, Erik Behrens, Arne Biastoch, and Uwe Mikolajewicz
First glance on simulated fresh water releases around Greenland's coast and its impacts on the ocean circulation
- XY698 EGU2011-5182
Florian Sévellec and Alexey Fedorov
An Interdecadal Oscillatory Eigenmode of the Atlantic Meridional Overturning Circulation in a realistic Ocean GCM
- XY699 EGU2011-5155
Shoshiro Minobe, Masato Miyashita, Akira Kuwano-Yoshida, Hiroki Tokinaga, and Shang-Ping Xie
Atmospheric response to the Gulf Stream: Shallow & Deep Heating Modes
- XY700 EGU2011-5098
Joseph Holden and Tim Burt
Long-term change in temperature and rainfall with altitude in Britain
- XY701 EGU2011-6339
Charles Troupin and Francisco Machín
Wind-induced temperature anomalies in the tropical and subtropical North Atlantic Ocean in 2010
- XY702 EGU2011-885
Anastase Alexandre Charantonis, Sylvie Thiria, Cyril Moulin, and Julien Brajard
Inversion of sea surface data to retrieve the vertical distribution of phytoplankton using a statistical methodology
- XY703 EGU2011-2757
Ursula Quillmann, Anne E. Jennings, Tom M. Marchitto, Vivian Underhill, and John T. Andrews
Holocene Evolution of the Irminger Current: a Perspective from the Southwest Iceland Shelf
- XY704 EGU2011-2822
Mi-Kyung Sung, Yoo-Geun Ham, Soon-Il An, and Jong-Seong Kug
Intraseasonal Phase Transition of the NAO-Like Response to El Nino and Its Alteration by the Tropical North Atlantic SST
- XY705 EGU2011-3552
Willem Sijp
Precise calculations of the existence of multiple AMOC equilibria in coupled climate models
- XY706 EGU2011-3869
Aixue Hu, Gerald Meehl, and Weiqing Han
Impact of the background conditions on the climate response to external forcings
- XY707 EGU2011-3887
Holly Dail and Carl Wunsch
Synthesizing Benthic and Planktonic Proxy Records: State Estimation of the Last Glacial Maximum North Atlantic Circulation
- XY708 EGU2011-4142
Jacek Piskozub and Dorota Gutowska
Constraining the MOC influence on the 20th century global temperature trends
- XY709 EGU2011-4408
Patrick Scholz and Gerrit Lohmann
Decadal variability in a new high-resolution model of the North Atlantic ocean

- XY710 EGU2011-4442
Grant Buffett, Ramon Carbonell, Valenti Sallarès, and Jose Lluís Pelegrí
Seismic oceanography as a tool to monitor climate change
- XY711 EGU2011-5515
Vasiliy Melnikov, Lidija Moskalenko, and Natalija Kuzevanova
North-East Black Sea climate system decadal variability
- XY712 EGU2011-5867
Fritz Richard Karbe, Monika Rhein, Christian Mertens, Dagmar Kieke, and Maren Walter
Deep Western Boundary Current observations off Flemish Cap during 2009/2010
- XY713 EGU2011-6687
Fran Santos, Moncho Gómez-Gesteira, Maite deCastro, and **Isabel Iglesias**
Coastal and Oceanic SST variability along the western Iberian Peninsula.
- XY714 EGU2011-7259
Takasumi Kurahashi-Nakamura, Martin Losch, André Paul, Stefan Mulitza, and Michael Schulz
Reconstruction of the LGM ocean circulation from data with the adjoint method
- XY715 EGU2011-7994
Harald Bartenstein, Ben Marzeion, and Helen Johnson
Stratification-dependent Mixing in Box Model of a Wind-Driven Atlantic Overturning under Thermohaline Forcing
- XY716 EGU2011-8357
Kristin Richter and Sönke Maus
Interannual variability in the hydrography of the Norwegian Atlantic Current: local forcing versus advection
- XY717 EGU2011-8691
Sarah Taws, Robert Marsh, and Neil Wells
Decadal Changes in the Re-emergence of Sea Surface Temperature Anomalies in the Northeast Atlantic
- XY718 EGU2011-8900
Yves Tanguy, Sylvie Thiria, and Sabine Arnault
Inversion of temperature profiles from satellite data in the tropical Atlantic based on Self Organizing Map
- XY719 EGU2011-9215
Laure Zanna
Variability and Predictability of observed Atlantic sea surface temperatures
- XY720 EGU2011-9444
Christopher W. Hughes, Shane Elipot, Miguel Angel Morales Maqueda, and Rory Bingham
A window on the deep ocean: Demonstration that the steep western Atlantic continental slope acts to filter out mesoscale noise and provides a quiet window into the deep circulation.
- XY721 EGU2011-9490
Paulo Oliveira and Álvaro Peliz
Azores Current Winter Pathways
- XY722 EGU2011-9574
Maureen Conte and John C Weber
Seasonal, interannual and decadal patterns in deep ocean particle flux in the Sargasso Sea and linkage with upper ocean physics and biology
- XY723 EGU2011-10610
Ilker Fer, Elin Darelius, and Detlef Quadfasel
Mesoscale variability of the Faroe Bank Channel Overflow
- XY724 EGU2011-13059
Bente Tiedje, Armin Köhl, and Johanna Baehr
Potential predictability of the North Atlantic heat transport based on an oceanic state estimate

OS1.3 – Changes in Arctic sea ice and ocean: observations, models and perspectives (including Fridtjof Nansen Medal Lecture) – Orals

Convener: Ursula Schauer | Co-Conveners: Takashi Kikuchi, Yevgeny Aksenov

Room: D

Chairperson: Ursula Schauer

- 10:30–11:30 EGU2011-14180
Bert Rudels
Arctic Ocean circulation and variability - advection and external forcing encounter constraints and local processes (Fridtjof Nansen Medal Lecture)
- 11:30–12:00 **Discussions**

LUNCH BREAK

Room: 6

Chairperson: n.n.

- 13:30–13:45 EGU2011-8821
Igor Polyakov and the jpo4339 Team
Arctic Ocean warming contributes to reduced polar ice cap
- 13:45–14:00 EGU2011-10748
Steffen Tietsche, Dirk Notz, Johann Jungclaus, and Jochem Marotzke
Sea-ice data assimilation in coupled climate models - are ice concentration observations sufficient?
- 14:00–14:15 EGU2011-2186
Chao Li, Dirk Notz, and Jochem Marotzke
CO₂ as a driver of sea ice tipping points
- 14:15–14:30 EGU2011-3460
Torge Martin, Rüdiger Gerdes, and Frank Kauker
On trends in Arctic sea-ice motion: spatial distribution, significance, and the role of the ocean
- 14:30–14:45 EGU2011-11233
Michael J. Karcher
Should we modify our understanding of surface and mid-depth circulation of the Arctic Ocean?
- 14:45–15:00 EGU2011-10598
Yevgeny Aksenov, Beverly de Cuevas, Ruediger Gerdes, Elena Golubeva, Michael Karcher, Frank Kauker, An Nguyen, Gennady Platov, Andrey Proshutinsky, Eiji Watanabe and the Martin Wadley (7) and Rebecca Woodgate (8). The Arctic Ocean Model Intercomparison Project, The Pacific Water Experiment Team
Arctic Pathways of the Pacific Water: the Arctic Ocean Model Intercomparison Experiments
- Chairperson: Yevgeny Aksenov and Markus Janout
- 15:30–15:45 EGU2011-5190
Mary-Louise Timmermans, **Andrey Proshutinsky**, Richard Krishfield, Donald Perovich, Jacqueline Richter-Menge, and John Toole
Surface freshening in the Arctic Ocean's Eurasian Basin: an apparent consequence of recent change in the wind-driven circulation
- 15:45–16:00 EGU2011-7476
Benjamin Rabe, Michael Karcher, Ursula Schauer, John M. Toole, Richard A. Krishfield, Sergey Pisarev, Frank Kauker, Rüdiger Gerdes, and Takashi Kikuchi
An assessment of Arctic Ocean freshwater content changes from the 1990s to the 2006 - 2008 period and beyond
- 16:00–16:15 EGU2011-11854
Peter Schlosser, Rebecca Chan, Robert Newton, William Smethie, and Ronny Friedrich
Changes in age structure and freshwater composition in the Switchyard region of the Arctic Ocean
- 16:15–16:30 EGU2011-687
Ekaterina Chernyavskaya and Leonid Timokhov
Climatic variability of the thermohaline structure of the Arctic Ocean surface layer and its conditioning factors
- 16:30–16:45 EGU2011-4643
Gennady Platov, Elena Golubeva, and Viktor Kuzin
Model simulations of Arctic fresh water balance variability
- 16:45–17:00 EGU2011-10719
Laura Niederdrenk, Dmitry Sein, and Uwe Mikolajewicz
Modeling the Arctic hydrologic cycle and its variability

OS3.1 – IMBER/SOLAS special session. Sensitivity of marine ecosystems and biogeochemical cycles to global change – Orals

Convener: Baris Salihoglu | Co-Conveners: Christoph Garbe, Emilie Brévière

Room: 11

Chairperson: Baris Salihoglu, Emilie Breviere, Christoph Garbe

- 08:30–08:45 EGU2011-1564
Jean-Pierre Gattuso, Jelle Bijma, Gehlen Marion, Riebesell Ulf, and Turley Carol
Ocean acidification: knowns, unknowns and perspectives
- 08:45–09:00 EGU2011-5462
Karen Marie Hilligsøe, **Katherine Richardson**, Jørgen Bendtsen, Jens Tang Christensen, Lise Lotte Sørensen, Torkel Gissel Nielsen, and Maren Molke Lyngsgaard
Changing ocean temperature and phytoplankton community size structure

- 09:00–09:15 EGU2011-1445
Diana Zuniga, Carmen G. Castro, Fernando Alonso, Eleonora Anfuso, Belen Arbones, Maria Frojan, and Francisco G. Figueiras
 Vertical export of particulate organic carbon in the Ría de Vigo (NW Atlantic upwelling system): the role of physical forcing and phytoplankton community structure
- 09:15–09:30 EGU2011-10225
James Harle, Jason Holt, Robert Holmes, Icarus Allen, and Manuel Barange
 The sensitivity of the coastal and shelf seas and their primary production to changes in the climate.
- 09:30–09:45 EGU2011-6248
Bronwyn Cahill, Katja Fennel, and John Wilkin
 Interannual Variability of Primary Production and Carbon Fluxes on Northeast North American Shelf: Sensitivity to Climate Change?
- 09:45–10:00 EGU2011-9810
Johan van der Molen, John Aldridge, Clare Coughlan, and Piet Ruardij
 Modelling marine ecosystem response to climate change and trawling in the North Sea

COFFEE BREAK

Chairperson: Christoph Garbe, Baris Salihoglu, Emilie Breviere

- 13:30–13:45 EGU2011-8011
Ragu Murtugudde, John Dunne, and Keith Rodgers
 Dynamic and Thermodynamic Coupling: Implications for ecosystem-BGC response to climate change
- 13:45–14:00 EGU2011-6569
Jason Holt, Sarah Wakelin, Momme Butenschön, Yuri Artioli, and Icarus Allen
 The sensitivity of physical and ecosystem processes of the northwest European continental shelf to climate change via oceanic, terrestrial and atmospheric vectors.
- 14:00–14:15 EGU2011-8730
Inga Hense, Sebastian Sonntag, and H. E. Markus Meier
 The future development of Baltic Sea cyanobacteria blooms: A scenario
- 14:15–14:30 EGU2011-12913
Ioanna Bouloubassi, Dimitri Gutiérrez, Abdelfettah Sifeddine, Sara Purca, Katerina Goubanova, Michelle Graco, David Field, Federico Velazco, Boris Dewitte, and Luc Ortlieb
 Trends of sea surface temperatures and productivity in the Peru upwelling since the mid-twentieth century
- 14:30–14:45 EGU2011-6482
Astrid Bracher, Tilman Dinter, Bettina Taylor, Alireza Sadeghi, and Elena Torrecilla
 Phytoplankton composition and distribution in the Western Pacific - insights on temporal and spatial dynamics from in-situ and satellite data
- 14:45–15:00 EGU2011-10076
Anna Dammshäuser, Thibaut Wagener, Diego Gaiero, Maija I. Heller, Peter Streu, and Peter L. Croot
 Atmospheric supply of Al, Fe and Ti to the Atlantic Ocean

Chairperson: Emilie Breviere, Christoph Garbe, Baris Salihoglu

- 15:30–15:45 EGU2011-3700
John Plane, Ravi Kumar, Samantha MacDonald, Russell Saunders, Benjamin Murray, Anoop Mahajan, Juan Carlos Gomez Martin, and Alfonso Saiz-Lopez
 Halogen Chemistry in the Marine Boundary Layer
- 15:45–16:00 EGU2011-5207
David Ho, Rik Wanninkhof, Peter Schlosser, David S. Ullman, and David Hebert
 Towards a universal relationship between wind speed and gas exchange: Gas transfer velocities measured with ³He/SF₆ during the Southern Ocean Gas Exchange Experiment
- 16:00–16:15 EGU2011-6809
Anna Rutgersson, Maria Norman, and Anders Omstedt
 Oceanic convective mixing and the improved air-sea gas transfer velocity applied to the Baltic Sea biogeochemical cycle
- 16:15–16:30 EGU2011-6012
Séférián Roland, Iudicone Daniele, and Bopp Laurent
 Water mass analysis of effect of climate change on air-sea CO₂ fluxes. The Southern Ocean.
- 16:30–16:45 EGU2011-1957
Matthew Woodhouse, Graham Mann, Ken Carslaw, and Olivier Boucher
 Weak response of CCN to changes in DMS flux: implications for the CLAW feedback in current climate assessments

16:45–17:00 EGU2011-2019

Masanori Ito, Yutaka Watanabe, Shinichi Tanaka, Tsuneo Ono, Jun Nishioka, and Takeshi Nakatsuka
The estimate of the denitrification using nitrogen gas excess in the Sea of Okhotsk

GM8.4/OS3.6/SSP1.6/TS4.7 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Orals

Convener: Sebastian Krastel | Co-Conveners: John K. Hillier, C.L. Jacobs, Dina Vachtman

Room: 22

Chairperson: S. Krastel, J.K. Hillier

10:30–10:45 EGU2011-1706

Myriam Janin, Christophe Hemond, and Marcia Maia
The Capricorn/Australian plates' suture highlighted by seamounts morphology

10:45–11:00 EGU2011-8329

Ian Watkinson, Robert Hall, and Farid Ferdian
Structural evolution of the southern Molucca Sea, Indonesia: Insights from multibeam bathymetry

11:00–11:15 EGU2011-1831

Kan-Hsi Hsiung and Ho-Shing Yu
Comparison of the sediment dispersal routes between offshore SW Taiwan and Huon Gulf west of Papua New Guinea in incipient oblique arc-continental collision zones

11:15–11:30 EGU2011-9926

Gueorgui Ratzov, Jean-Yves Collot, Sébastien Migeon, Boris Marcaillou, and Jean-Frédéric Lebrun
Evidences for a sub-marine active fault along the North-Ecuador South Colombia oblique-convergent margin: implication for fault maturity and tectonic escape

11:30–11:45 EGU2011-9731

Domenico Ridente, Eleonora Martorelli, and Francesco L. Chiocci
The problem of the 1908 Reggio and Messina earthquake and tsunami sources. A geomorphic perspective

11:45–12:00 EGU2011-491

Mustafa Ergin, Emel Bayhan, and Abidin Temel
Variations in sedimentation rates in the eastern Marmara Sea (Turkey) as related to bottom morphology, active tectonism, sea-level changes and sediment input patterns

GM8.4/OS3.6/SSP1.6/TS4.7 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Posters

Convener: Sebastian Krastel | Co-Conveners: John K. Hillier, C.L. Jacobs, Dina Vachtman

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: C.L. Jacobs, D. Vachtman

A136 EGU2011-8478

Antonio Cattaneo, Nathalie Babonneau, Alessandra Asioli, Karim Yelles, Jacques Déverchère, Guillaume Jamet, and Ricardo Silva Jacinto
Searching for the seafloor signature of the May 21, 2003 Boumerdès earthquake offshore central Algeria

A137 EGU2011-6394

Hsui-may Lin and Char-Shine Liu
Deep Structures of the Forearc Region at the Western End of the Ryukyu Subduction-Collision Zone Offshore Eastern Taiwan

A138 EGU2011-10019

Anne Krabbenhoeft, Wilhelm Weinrebe, Heidrun Kopp, Ernst Flueh, Stefan Ladage, Cord Papenberg, and Lars Planert
Morphological structures relate to the location and extent of the seismogenic zone - bathymetric studies of the Sunda margin, Indonesia

A139 EGU2011-1832

Ho-Shing Yu and Kan-Hsi Hsiung
Morpho-sedimentary features and longitudinal sediment transport in the Taiwan-Luzon region

A140 EGU2011-3166

Monika Breitzke, Wilfried Jokat, Ralph Krockner, Mike Watkeys, and Errol Wiles
High-resolution bathymetry and shallow acoustic images of current-controlled sedimentary processes in the Southern Mozambique Channel

A141 EGU2011-8058

Benedikt Weiß, Christian Hübscher, Luis Batista, Ali Dehghani, Thomas Lüdmann, and Jonas Wagner
Hotspot dominated rifting - The instance of São Miguel (south-eastern Terceira Rift, Azores)

- A142 EGU2011-11755
Anne Bernhardt, Zane R. Jobe, Marty Grove, and Donald R. Lowe
 Paleogeography of an Ancient Deep-Marine Foreland Basin, Upper Cretaceous Cerro Toro Formation, Magallanes Basin - Insights from U/Pb Geochronology and Strontium Isotope Stratigraphy
- A143 EGU2011-10032
Gemma Fay, Andrew Fowler, and Peter Howell
 Prediction of Ignition of a Turbidity Current in a Submarine Canyon Using a Reduced Model
- A144 EGU2011-3033
László Körtvélyessy
 Prediction of earthquakes

OS4.3 – Ocean Remote Sensing – Orals

Convener: Aida Alvera-Azcárate | Co-Conveners: Guoqi Han, Christine Gommenginger

Room: 7

Chairperson: Aida Alvera-Azcárate and Christine Gommenginger

- 13:30–13:45 EGU2011-8456
Klaus-Werner Gurgel, Thomas Schlick, Jörg Seemann, and Friedwart Ziemer
 Remote Sensing Ocean Currents in the German Bight: HF Radar Measurements and Quality Control
- 13:45–14:00 EGU2011-8393
Amanda Mims, Chris Ruf, and Darren McKague
 Development of a Passive Microwave Ocean Wind Vector Retrieval Algorithm in Tropical Cyclones
- 14:00–14:15 EGU2011-10476
Salam Sawadogo, Ousmane Farikou, Awa Niang, Julien Brajard, Michel Crépon, and Sylvie Thiria
 Spatio-temporal variability of the Senegalo-Mauritanian upwelling from satellite observations
- 14:15–14:30 EGU2011-10317
Marina Evdoshenko
 Meteorological Waves in the Caspian Sea by MODIS Data
- 14:30–14:45 EGU2011-5939
Aida Alvera-Azcárate, Alexander Barth, and Jean-Marie Beckers
 Merging satellite and in situ sea surface temperature data using DINEOF
- 14:45–15:00 EGU2011-8719
Guoqi Han and Nancy Chen
 Climatic sea level variability along the Northwest Atlantic continental slope
- Chairperson: Guoqi Han and Aida Alvera-Azcárate
- 15:30–15:45 EGU2011-3189
Chun Hoe Chow and Qinyu Liu
 Quasi-four-month variation of sea surface height along the continental slope in northern South China Sea
- 15:45–16:00 EGU2011-6762
Joana Fernandes, Nelson Pires, Clara Lázaro, Alexandra L. Nunes, Paolo Cipollini, and Jérôme Benveniste
 Zenith tropospheric delays from GNSS and its application to coastal altimetry
- 16:00–16:15 EGU2011-2968
Grit Freiwald, Martin Losch, Wolf-Dieter Schuh, and Silvia Becker
 Synthesis of Mean Dynamic Topography Data and a North Atlantic Ocean Model
- 16:15–16:30 EGU2011-3599
Karen Guihou, Clothilde Langlais, Peter Oke, Richard Coleman, and Florence Birol
 Study of the Leeuwin Current from JASON-1 high rate Altimeter SLA processed with the X-TRACK software
- 16:30–16:45 EGU2011-11419
 Nicolas Picot and **Jean-Damien Desjonqueres**
 Jason-2 altimeter transponder calibration experiment
- 16:45–17:00 EGU2011-3742
Christine Gommenginger, Cristina Martín-Puig, Salvatore Dinardo, R. Keith Raney, David Cotton, and Jérôme Benveniste
 An open ocean retracker for Sentinel-3 and Cryosat altimeter waveforms

Wednesday, 06 April

HS10.1/GM8.1 – Coasts, Estuaries and Deltas (co-listed) – Orals

Convener: Hubert H.G. Savenije | Co-Conveners: Andreas Baas, Andrea Rinaldo, Marco Toffolon, Liviu Giosan, Stefan Constantinescu, Carles Ibañez

Room: 38

Chairperson: n.n.

- 08:30–08:45 EGU2011-4867
Ping Wang, Tiffany M. Roberts, and Mark H. Horwitz
 Deposition of Deepwater Horizon oil spill on Florida and Alabama beaches: At the surface and beneath
- 08:45–09:00 EGU2011-8101
David Kelly, Nicholas Dodd, and Michiel Knaapen
 Modelling Tsunami Hydro- Morphodynamics For Real World Applications
- 09:00–09:15 EGU2011-1616
Thorsten Albers and Nicole von Lieberman
 Limits of sediment transport formulas in the Wadden Sea - Comparison of measured and computed transport rates
- 09:15–09:30 EGU2011-7627
Andrea D'Alpaos, Simon Marius Mudd, and Luca Carniello
 Analytical solutions for salt-marsh equilibrium states and transient dynamics
- 09:30–09:45 EGU2011-6644
Luana Stefanon, Luca Carniello, Andrea D'Alpaos, and Stefano Lanzoni
 Laboratory observations on tidal network growth and development
- 09:45–10:00 EGU2011-13210
Fantina Madricardo, Jaroslaw Tegowski, and Sandra Donnici
 A multidisciplinary approach for tidal palaeochannel reconstruction: a case study from the lagoon of Venice

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-7081
Albert Kettner, Fei Xing, Andrew Ashton, Mark Hannon, Carles Ibañez, and Liviu Giosan
 Unraveling the impact of humans versus climate on the morphological evolution of the Ebro Delta, Spain.
- 10:45–11:00 EGU2011-8495
Gilles Erkens, Kim Cohen, and Hans Middelkoop
 Quantification of the impact of pre-historic land use on suspended sediment accumulation in the Rhine delta
- 11:00–11:15 EGU2011-4564
Liviu Giosan
 Are Old World Deltas Human Constructs?
- 11:15–11:30 EGU2011-1760
Carles Ibañez, Liviu Giosan, Enrique Reyes, and John W. Day
 The Response of Deltas to Sea Level Rise under Natural- and Human-impacted Conditions
- 11:30–11:45 EGU2011-5250
Paul Liu
 Fates of River-Derived Sediments to the Sea: Longshore vs cross-shelf transport
- 11:45–12:00 EGU2011-5305
Andrew Ashton, Liviu Giosan, Albert Kettner, Eric Hutton, and Carles Ibanez
 Influence of wave angle distribution and sediment supply variation on plan-view delta morphology: application to the Ebro Delta, Spain

HS10.1/GM8.1 – Coasts, Estuaries and Deltas (co-listed) – Posters

Convener: Hubert H.G. Savenije | Co-Conveners: Andreas Baas, Andrea Rinaldo, Marco Toffolon, Liviu Giosan, Stefan Constantinescu, Carles Ibañez

Hall A | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- A391 EGU2011-6464
Kwang Hee Choi, Yeong Bae Seong, Pil Mo Jung, and Su Yong Lee
Pleistocene origin of the shore platforms defined by cosmogenic ^{10}Be exposure dating, west coast of Korea
- A392 EGU2011-3176
Antonio Jabaloy Sánchez, Francisco José Lobo, Antonio Azor, Patricia Bárcenas, Luis Miguel Fernández-Salas, Víctor Díaz del Río, José Vicente Pérez-Peña, and Mercedes Vázquez-Vílchez
Holocene coastline changes in the Guadalfeo River deltaic system of SE Spain
- A393 EGU2011-3392
Sukran Acikel, Mehmet Ekmekci, Levent Tezcan, Turker Kurttas, and Deniz Ozbek
Conceptualization of a Brackish Coastal Karst System: Implications For Resilience of a Groundwater Dependent Wetland
- A394 EGU2011-3293
Elena Brambilla, Frédéric Bouchette, Georgios Sylaios, Nicolas Robin, and Raphael Certain
Net Seaward sEdiment Transport during Storms (NESTS) at the beach of Sète, NW Mediterranean Sea
- A395 EGU2011-4953
Philippe Larroudé, Mehdi Daoui, Nicolas Robin, and Raphaël Certain
Comparison of sediment transport formulae 2DH simulation of several storms on a sandy beach
- A396 EGU2011-5335
Andrew Ashton and Alejandra Ortiz
Overwash controls of basic barrier response to sea-level rise and the potential for transgressive instabilities
- A397 EGU2011-6659
Oleg Andrejev, Alexander Sokolov, Tarmo Soomere, and Kai Myrberg
Construction of environmentally friendly fairways based on properties of Lagrangian surface transport
- A398 EGU2011-12551
Mohamed Maanan, Agnès Baltzer, and Marc Robin
Coastal sediment budget and shoreline changes for the Noirmoutier Island (France)
- A399 EGU2011-13848
Iris Möller, Jasmin Mantilla-Contreras, Tom Spencer, and Adrian Hayes
Wave-vegetation interactions within Baltic coastal reed beds
- A400 EGU2011-9759
David Hill, Sierd de Vries, Matthieu de Schipper, and Marcel Stive
Remote sensing of coastal waves using stereo imaging
- A401 EGU2011-7731
Ying Zhang and Huan Li
A New Method Exploration on the Measurements of the Sand Ridges Changes in Exposed Radial Sand Ridges Area by means of Remote
- A402 EGU2011-1697
Cristina Da Lio, Andrea D'Alpaos, and Marco Marani
Biomorphological modeling of tidal landscapes: the role of physical and biological processes in determining equilibrium states and transient dynamics
- A403 EGU2011-13255
Marco Marani, Andrea D'Alpaos, Marco Santalucia, and Stefano Lanzoni
Marsh margin retreat due to wind waves
- A404 EGU2011-2195
Christian Ferrarin, Franco Arena, Miro Ga?i?, Giuliano Lorenzetti, Isac Mancero-Mosquera, Giulia Manfé, Georg Umgieser, and Luca Zaggia
Hydrodynamic circulation and sediment transport along the Venice Lagoon littoral
- A405 EGU2011-12197
Chiara De Capitani di Vimercate, Nicoletta Tambroni, and Giovanni Seminara
Is tidal flat hydrodynamics dominantly dissipative?
- A406 EGU2011-2667
Axel Winterscheid
Analysis of the near-bed morphological processes in a sediment trap in the Tidal Elbe near Hamburg
- A407 EGU2011-6027
Nicolette D. Volp, Guus S. Stelling, and Bram C. van Prooijen
Accounting for a High Resolution Bathymetry in Shallow Water Simulations on a Coarse Grid
- A408 EGU2011-3070
Jacqueline Isabella Gisen and Hubert H.G. Savenije
Salt Intrusion in Malaysian Estuaries
- A409 EGU2011-4049
Huayang Cai, Hubert H.G. Savenije, Qingshu Yang, Suying Ou, and Yaping Lei
The influence of recent change in river discharge and bathymetry on tidal wave propagation in the Modaomen estuary, China
- A410 EGU2011-4052
Huayang Cai, Hubert H.G. Savenije, and Marco Toffolon
Exploring linear and nonlinear solutions to the tidal hydraulic equations

- A411 EGU2011-10155
Hou Wen-Shang, **Teng Te-Hui**, Hsieh Hwey-Lian, Chen Chang-Po, and Huang Shou-Chung
Performance of energy-saving water exchange device used in tidal wetland to improve water quality
- A412 EGU2011-10313
Aurelia Caldararu, Gabriel Murariu, Lucian P. Georgescu, and Catalina Iticescu
The interaction between taxa metrics and environmental variables, as indicator of aquatic ecosystem state
- A413 EGU2011-12989
Maximiliano Sassi and Ton Hoitink
Towards an extension of the hydraulic geometry concept to include tidal networks
- A414 EGU2011-9386
Toru Tamura, Mark Bateman, Yoshiki Saito, Van Lap Nguyen, Thi Kim Oanh Ta, Minh Dao Le, Dan Matsumoto, and Shota Yamashita
Constraining centennial to decadal changes of a deltaic coastline over the last millennia, Mekong River delta, Vietnam
- A415 EGU2011-12914
Mikhail Lychagin, Nikolay Kasimov, and Anna Kuryakova
Environmental Geochemistry of the Volga Delta
- A416 EGU2011-11057
albert Rovira and Carles Ibáñez
Sediment Budget of the Lowermost Ebro River Basin (Catalonia, Spain)
- A417 EGU2011-12339
Alfred Vespremeanu-Stroe, Stefan Constantinescu, Luminita Preoteasa, Florin Tatui, and Liviu Giosan
Present-day changes of Sf. Gheorghe (Danube) arm mouth long-term evolution pattern
- A418 EGU2011-6794
Stefan Constantinescu, Alfred Vespremeanu-Stroe, Ionut Ovejanu, Florin Filip, and Liviu Giosan
Natural and far-field anthropogenic effects on the evolution of Sf. Gheorghe mouth
- A419 EGU2011-4898
Florin Filip, Stefan Constantinescu, and Liviu Giosan
On the evolution of Chilia distributary in Danube delta

NP2.1 – ENSO: Dynamics, Predictability and Modelling (co-listed) – Orals

Convener: Eric Guilyardi | Co-Conveners: Andrew Wittenberg, A. Fedorov, Pascale Braconnot

Room: 18

Chairperson: Eric Guilyardi, Alexey Fedorov

- 08:30–08:45 EGU2011-4359
Michael McPhaden
The Changing Face of El Niño
- 08:45–09:00 EGU2011-2429
Tom Russon, Alexander Tudhope, Gabriele Hegerl, Mat Collins, and David Battisti
Towards evaluating natural forced and unforced variability in ENSO: strategies for model / paleo-proxy data inter-comparison
- 09:00–09:15 EGU2011-2362
Soon-Il An, Ji-Won Kim, Jae-Heung Park, and Seul-Hee Lim
Warming Trends of Tropical Pacific Warm Pool and Cold Tongue SSTs
- 09:15–09:30 EGU2011-2740
Benjamin Giese, Howard Seidel, and Sulagna Ray
Using SODA Ensemble Reanalyses to Describe ENSO 1871-2008
- 09:30–09:45 EGU2011-5104
James Lloyd, Eric Guilyardi, and Hilary Weller
The Role of Atmosphere Feedbacks During ENSO in AMIP CMIP3 Simulations
- 09:45–10:00 EGU2011-7236
Yukiko Imada, Jin Fei-Fei, Masahide Kimoto, and Masahiro Watanabe
ENSO amplitude change in doubled CO₂ experiments evaluated by the temperature variance equation
- 10:00–10:15 EGU2011-6529
Wilco Hazeleger, Geert Jan van Oldenborgh, Karin van der Wiel, Xueli Wang, and Bert Wouters
Changes in ENSO characteristics in EC-Earth

NP2.1 – ENSO: Dynamics, Predictability and Modelling (co-listed) – Posters

Convener: Eric Guilyardi | Co-Conveners: Andrew Wittenberg, A. Fedorov, Pascale Braconnot

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Eric Guilyardi, Alexey Fedorov

- XY417 EGU2011-4117
Sang-Wook Yeh, Jong-Yeon Park, Jong-Seong Kug, and Jinhee Yoon
Favorable conditions for Seasonal Footprinting Mechanism on ENSO
- XY418 EGU2011-1350
Jorgen Frederiksen, **Carsten Frederiksen**, and Stacey Osbrough
Ensemble Predictions of Seasonal Variability with a Coupled Ocean-Atmosphere Model
- XY419 EGU2011-1997
Michael Friedel
El Niño-Southern Oscillation (ENSO) phenomenon - event reconstruction and analysis over the past 2000 years
- XY420 EGU2011-2408
Renaud Barbero and Vincent Moron
Modoki vs classical ENSO impacts in New Caledonia (166°E, 22°S) and South West Pacific
- XY421 EGU2011-4092
Noel Keenlyside, Hui Ding, and Mojib Latif
Potential of equatorial Atlantic variability to enhance El Niño prediction
- XY422 EGU2011-4726
Alexey Fedorov, Jaci Brown, and Eric Guilyardi
How well do coupled models replicate ocean energetics relevant to ENSO?
- XY423 EGU2011-5041
Sukumaran Sandeep and **Frode Stordal**
Influence of ENSO on Extreme Precipitation
- XY424 EGU2011-5200
Dietmar Dommenges
The Slab Ocean El Niño
- XY425 EGU2011-5204
Mari Firpo and Clovis Sansigolo
Review of the relationships between ENSO and PDO
- XY426 EGU2011-5311
Jong-Seong Kug and Yoo-Geun Ham
How well do climate models simulate two-types of El Niño?
- XY427 EGU2011-5446
Yeon-Soo Jang, Jong-Seong Kug, Young-Ho Kim, and Dong-Hoon Kim
Two-types of El Niño simulated in climate model, its sensitivity to a physical parameterization
- XY428 EGU2011-5666
Benoît Vannière, Eric Guilyardi, Gurvan Madec, Francesco Doblas-Reyes, and Steve Woolnough
Understanding the origin of the Pacific cold tongue bias and its impact on ENSO using seasonal hindcasts
- XY429 EGU2011-5890
Martin Großhauser, Ben Marzeion, Thomas Mölg, Marlis Hofer, and Irmgard Juen
Influence of ENSO on the atmospheric circulation over the complex topography of Cordillera Blanca, Peru
- XY430 EGU2011-7802
Awneesh Singh, Thierry Delcroix, and Sophie Cravatte
Contrasting ENSO Events in the Tropical Pacific Using Sea Surface Salinity Observations
- XY431 EGU2011-9807
Yihua Luan, Pascale Braconnot, and Yongqiang Yu
Seasonal cycle and ENSO changes induced by ice-sheet and obliquity in Early Holocene
- XY432 EGU2011-9847
Jens Stoll, Katja Trachte, and Jörg Bendix
Simulations of ENSO and its impact on the tropical mountain rain forest in Ecuador
- XY433 EGU2011-11605
Koen Verbist, Andrew W. Robertson, **Wim M. Cornelis**, and Donald Gabriels
Seasonal precipitation predictability in central-northern Chile for dryland management
- XY434 EGU2011-11679
Gushchina Dasha and Dewitte Boris
Intraseasonal tropical atmosphere variability associated to canonical and Modoki El Niños

OS1.1 – Open Session on Ocean Circulation – Orals

Convener: Torsten Kanzow | Co-Conveners: Joel Hirschi

Room: 6

Chairperson: Torsten Kanzow

- 08:30–08:45 EGU2011-3911
John Osborne, **Alexander Kurapov**, Gary Egbert, and P. Michael Kosro
Tidally-induced mixing and enhanced cross-shore transport near coastal capes

- 08:45–09:00 EGU2011-1259
Maren Walter, Christian Mertens, Marcus Dengler, and Monika Rhein
 Fine structure variability associated with the North Atlantic Current crossing the Mid-Atlantic Ridge
- 09:00–09:15 EGU2011-5959
 Nicholas Beaird, **Ilker Fer**, and Peter Rhines
 Dissipation rate and vertical mixing inferred from Seagliders
- 09:15–09:30 EGU2011-351
Gillian Damerell, Karen Heywood, David Stevens, and Alberto Naveira Garabato
 Temporal Variability of Diapycnal Mixing in Shag Rocks Passage
- 09:30–09:45 EGU2011-1363
Janna Köhler, Christian Mertens, Maren Walter, Monika Rhein, and Torsten Kanzow
 Internal waves and associated mixing in the Deep Western Boundary Current at 16°N
- 09:45–10:00 EGU2011-2629
Mei-Man Lee, George Nurser, Ian Stevens, and Jean-Baptiste Sallee
 Winter mixed layer in the southern Indian Ocean in a high-resolution atmosphere-ocean coupled model

COFFEE BREAK

Chairperson: Joel Hirschi

- 10:30–10:45 EGU2011-1565
Raden Dwi Susanto, Guohong Fang, Rameyo Adi, and Zexun Wei
 SITE, western route of Indonesian Throughflow via the South China Sea
- 10:45–11:00 EGU2011-4195
Dewi Le Bars, Will de Ruijter, and Henk Dijkstra
 From the Indonesian Throughflow to the Agulhas Current leakage
- 11:00–11:15 EGU2011-12731
M. Susan Lozier, Stefan F. Gary, Kristi C. Burkholder, Amy S. Bower, and Claus W. Böning
 Lagrangian pathways connecting the subtropical and subpolar gyres in the North Atlantic
- 11:15–11:30 EGU2011-4754
Stuart Cunningham, Harry Bryden, and Christopher Atkinson
 Interannual variability in the Atlantic meridional overturning circulation at 26°N
- 11:30–11:45 EGU2011-8867
Torsten Kanzow and Stuart Cunningham
 Observed and simulated large-amplitude fluctuations of deep northward volume transports in the subtropical North Atlantic
- 11:45–12:00 EGU2011-7755
Adam Blaker, Joel Hirschi, Bablu Sinha, Beverly de Cuevas, Steven Alderson, Andrew Coward, and Gurvan Madec
 The impact of inertia-gravity waves on the MOC in a high resolution ocean model

OS1.1 – Open Session on Ocean Circulation – Posters

Convener: Torsten Kanzow | Co-Conveners: Joel Hirschi

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Torsten Kansow, Joel Hirshi

- XY524 EGU2011-1263
Artem Sarafanov, Anastasia Falina, Alexey Sokov, Herlé Mercier, Pascale Lherminier, and Claire Gourcuff
 Mean full-depth circulation and transports in the North Atlantic across 60N in the 2000s
- XY525 EGU2011-11589
Igor Yashayaev, John Loder, and Yuri Geshelin
 Hydrographic and Circulation Variability in Orphan Basin, 2004-2010
- XY526 EGU2011-1265
Artem Sarafanov, Anastasia Falina, Alexey Sokov, Herlé Mercier, Pascale Lherminier, and Claire Gourcuff
 Irminger Sea as a key site for the Atlantic Meridional Overturning Circulation
- XY527 EGU2011-8851
Stefan Gary, M. Susan Lozier, Arne Biastoch, and Claus W. Böning
 Reconciling tracer and float observations of the export pathways of Labrador Sea Water
- XY528 EGU2011-12060
Kevin Oliver
 The competition between Atlantic and Antarctic overturning cells

- XY529 EGU2011-1466
Anastasia Falina, Artem Sarafanov, Alexey Sokov, Herlé Mercier, and Pascale Lherminier
On the shelf water cascading in the Irminger Sea
- XY530 EGU2011-2567
Vladimir Ivchenko, Dmitry Sidorenko, Sergey Danilov, Martin Losch, and Jens Schröter
Can sea surface height be used to estimate oceanic transport variability?
- XY531 EGU2011-7908
Irina Dinu, Marco Bajo, Georg Umgiesser, and Adrian Stanica
Factors that influence the current circulation along the Romanian Black Sea coast
- XY532 EGU2011-2565
Ulf Gräwe, Rene Friedland, and Hans Burchard
The future of the Western Baltic Sea: two possible scenarios
- XY533 EGU2011-13133
Ricardo F. Sanchez Leal, César González-Pola Muñiz, Manuel Ruiz-Villarreal, Alicia Lavín Montero, M^a Paz Jiménez Gómez, and Ignacio Sobrino Yraola
Shallow traces of the Mediterranean outflow in the Eastern Gulf of Cádiz
- XY534 EGU2011-1260
Christian Mertens, Maren Walter, Janna Köhler, Jürgen Sültenfuß, and Monika Rhein
Hydrothermal Fluxes at the Mid-Atlantic Ridge, 5[°]N
- XY535 EGU2011-2388
Evgeny Krayushkin and Alexander Demidov
The origin of the North Atlantic Deep Water components in the South Atlantic
- XY536 EGU2011-13629
Gerard McCarthy, Elaine McDonagh, and Brian King
Variability of thermocline and Antarctic Intermediate Water (AAIW) in the South Atlantic
- XY537 EGU2011-2687
Dagmar Kieke, Monika Rhein, Oliver Huhn, Reiner Steinfeldt, and Birgit Klein
Formation of Antarctic Intermediate Water in the South Atlantic
- XY538 EGU2011-10237
Remi Tailleux and Angela Maharaj
On the dispersion relation of westward propagating signals in the oceans
- XY539 EGU2011-1769
Anders Levermann, **Matthias Mengel**, Andreas Born, and Carl Friedrich Schleussner
Dynamical threshold may enhance variability of subpolar gyre
- XY540 EGU2011-3689
Alex Warn-Varnas, Avijit Gangopadhyay, Andre Schmidt, and Jan-Kristian Jensen
Nonlinear studies of Norwegian Coastal Current from Eulerian and Lagrangian point of views.
- XY541 EGU2011-13498
Ángeles Marrero-Díaz, Pablo Sangrà, Mónica Hernández-Arencibia, Carolina Salinas, Borja Aguiar-González, Alexander Stegner, Angel Rodríguez-Santana, and Cristian Henríquez
Circulation on the slope of South Shetland Islands (Antartica)
- XY542 EGU2011-13523
Mónica Hernández-Arencibia, Alexander Stegner, **Ángeles Marrero-Díaz**, Pablo Sangrà, Borja Aguiar-González, and Carolina Salinas
A new view of the Bransfield Current: a study through rotating laboratory experiments
- XY543 EGU2011-5163
Robert Tenzer, Ahmed Abdalla, and Robert ?underlík
Comparison of the dynamic sea surface topography with the ocean currents in the Southwest Pacific Ocean and Tasman Sea
- XY544 EGU2011-9425
Alexandre Ganachaud, **Christophe Maes**, William Kessler, Gary Brassington and the SPICE contributors
Team
SPICE: Southwest Pacific Ocean Circulation and Climate Experiment
- XY545 EGU2011-5615
Patric Lindahl, Paul Worsfold, Miranda Keith-Roach, Ryuji Asami, and Yasufumi Iryu
Plutonium signature in the Northwest Pacific using modern coral archives
- XY546 EGU2011-5823
Lijuan Li and Tianjun Zhou
Interannual variation of Kuroshio east of Taiwan Island
- XY547 EGU2011-5628
Marie-Isabelle Pujol, Gérald Dibarboure, and Emilie Bronner
17 years of altimeter data record for climate and ocean studies
- XY548 EGU2011-5772
Mary Swapna George, Laurent Bertino, Annette Samuelsen, and Ola M Johannessen
Mini cold pool off the southern tip of India in a Hybrid Coordinate Ocean Model

- XY549 EGU2011-8207
M. Dolores Pérez-Hernández, Alonso Hernández-Guerra, Terrence Joyce, and Pedro Joaquín Vélez-Belchí
 Wind-Driven cross-equatorial flow in the Indian Ocean
- XY550 EGU2011-3245
Stefan Riha and Carsten Eden
 Components of the 3-d Lagrangian Diffusivity Tensor in a Periodic Channel Featuring Zonal Jets
- XY551 EGU2011-2806
Mehmet Ilıcak and Geoffrey K. Vallis
 Phenomenology and High-Rayleigh Number Simulations of Horizontal Convection
- XY552 EGU2011-12951
 Jorge Vazquez, **Holger Brix**, and Dimitris Menemenlis
 SST and Mixed Layer Depth Variability in Upwelling Regions
- XY553 EGU2011-337
Anatoly Gusev, Nikolay Diansky, Eugeny Volodin, and Vladimir Zalesny
 Ocean model INMOM as an oceanic component of the INM RAS Earth climate model INMCM

OS1.3 – Changes in Arctic sea ice and ocean: observations, models and perspectives (including Fridtjof Nansen Medal Lecture) – Posters

Convener: Ursula Schauer | Co-Conveners: Takashi Kikuchi, Yevgeny Aksenov

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY554 EGU2011-3562
Claudia Wekerle, Qiang Wang, Jens Schröter, and Sergey Danilov
 High resolution sea ice-ocean modeling of the Canadian Arctic Archipelago in a global setup: An unstructured mesh modeling approach
- XY555 EGU2011-2801
 Yusuke Kawaguchi, Jennifer Hutchings, **Takashi Kikuchi**, and James Morison
 Summertime sea-ice reduction related to a drastic change in mixed layer depth and ice deformation in the Eastern Arctic Ocean
- XY556 EGU2011-9698
Wieslaw Maslowski, Joanne Haynes, Robert Osinski, and William Shaw
 The importance of oceanic forcing on Arctic sea ice variability
- XY557 EGU2011-6500
Agathe Germe, Marie-Noëlle Houssais, Christophe Herbaut, and Christophe Cassou
 Greenland Sea sea ice variability over 1979-2007 and its link to the surface atmosphere
- XY558 EGU2011-196
Pascaline Bourgain and Jean Claude Gascard
 The Arctic Ocean Halocline and its variability from 1997 to 2009
- XY559 EGU2011-7274
Pascaline Bourgain and Jean Claude Gascard
 The Atlantic and Summer Pacific waters variability in the Arctic Ocean
- XY560 EGU2011-9026
Cornelia Koeberle and Ruediger Gerdes
 Pathways and modification of Atlantic Water in the 9km-resolution NAOSIM model
- XY561 EGU2011-4311
Takashi Kikuchi, Motoyo Itoh, Shigeto Nishino, Yusuke Kawaguchi, Benjamin Rabe, Ursula Schauer, and Sergey Pisarev
 Confluence, mixing, and circulation scheme of Atlantic, Pacific, and Siberian shelf water masses around the Mendeleyev ridge into the central Arctic Ocean
- XY562 EGU2011-1359
Florian Greil, Markus Janout, and Jens Hölemann
 Historical variability of the density stratification in the Laptev Sea
- XY563 EGU2011-10574
Benjamin Rabe, Paul Dodd, Edmond Hansen, Andreas Mackensen, Eva Falck, Agnieszca Beszczynska-Möller, Gerhard Kattner, Peter Jones, Katharine Cox, Johan Nilsson and the Fram Strait freshwater components Team
 Meteoric Water, sea ice melt and Pacific Water and freshwater transports in the western Fram Strait from 1998-2009
- XY564 EGU2011-4394
Hongliang Li
 Nutrients variation in the Pacific inflow of the western Arctic Ocean

- XY565 EGU2011-8360
Jim Carton, gennady Chepurin, James Reagan, and Sirpa Hakkinen
Decadal Atlantic Water variability in the Nordic Seas
- XY566 EGU2011-6603
Ursula Schauer and Sergey Pisarev
Change of heat in the Eurasian Basin of the Arctic Ocean in the last two decades
- XY567 EGU2011-4457
Vladimir Ivanov
How summer ice depletion in the Arctic Ocean may affect the global THC?
- XY568 EGU2011-8046
Viktor Kuzin, **Gennady Platov**, and Elena Golubeva
Influence that Interannual Variations in Siberian River Discharge have on Redistribution of Freshwater Fluxes in Arctic Ocean and North Atlantic
- XY569 EGU2011-9124
Elena Golubeva, Valentina Malakhova, and Dina Yusupova
Sensitivity studies of the Arctic-North Atlantic ice-ocean coupled model
- XY570 EGU2011-10990
Gilles Garric and Clément Bricaud
Use of ERAinterim Surface Conditions to drive the Arctic Sea Ice Cover modeled by a Global 1/4° OGCM.
- XY571 EGU2011-13048
Ilona Goszczko and Waldemar Walczowski
Variability of the Polar Front in the western Barents Sea in summers 1998-2010
- XY572 EGU2011-5673
Markus Janout, Jens Hoelemann, and Harper Simmons
Baroclinic tides and their impact on bottom boundary layer evolution and vertical mixing in the Laptev Sea
- XY573 EGU2011-1098
Yueng-Djern Lenn, **Tom Rippeth**, Chris P Old, Sheldon Bacon, Polyakov Igor, Ivanov Vladimir, and Hølemann Jens
Intermittant intense turbulent mixing under ice in the Laptev Sea Continental Shelf
- XY574 EGU2011-4466
Natalia Kuzmina, Bert Rudels, Victor Zhurbas, Tapani Stipa, and **Natalia Zhurbas**
On the structure and dynamical features of interleaving in the Arctic Ocean

NH5.3/NP7.3/OS2.5 – Nonlinear Dynamics of the Coastal Zone (co-organized) – Orals

Convener: Ira Didenkulova | Co-Conveners: Efim Pelinovsky

Room: 4

Chairperson: n.n.

- 13:30–13:45 EGU2011-3048
Geir Pedersen
Stationary runup patterns on a sloping beach
- 13:45–14:00 EGU2011-5389
Valery Liapidevskii
Shallow water equations for breaking surface waves
- 14:00–14:15 EGU2011-103
Ira Didenkulova and Efim Pelinovsky
Nonlinear wave evolution and runup in inclined channels
- 14:15–14:30 EGU2011-8891
Alec Torres-Freyermuth, Jack A. Puleo, Duvrabka Pokrajac, and Paulo Salles
RANS Modelling of Swash Zone Hydrodynamics
- 14:30–14:45 EGU2011-3200
Deepak Vatvani, Niels Zweers, Hans de Vries, Vladimir Makin, and Maarten van Ormondt
Storm surge and wave simulations in the Gulf of Mexico using a consistent drag relation for atmospheric and storm surge models
- 14:45–15:00 EGU2011-1692
Eugene Morozov, Alexey Marchenko, and Sergey Muzylev
Supercooling and water structure near the fjord glacier
- Chairperson: n.n.
- 15:30–15:45 EGU2011-13867
Chiang C. Mei, I-Chi Chan, Philip L.-F. Liu, Zhenhua Huang, and Weiguo Zhang
Long waves through emergent coastal vegetation
- 15:45–16:00 EGU2011-1935
Roger Grimshaw and Evans Osaisai
A simple model of the effect of bottom sediment transport on wave set-up

- 16:00–16:15 EGU2011-12030
Tatyana Lyubimova, Yanina Parshakova, Natalya Shumilova, Shengping Luo, and Bernard Roux
 Modeling of the near-field distribution of pollutants from a multi-port coastal outfall
- 16:15–16:30 EGU2011-4680
Boris Katsnelson, Mohsen Badiey, and James Lynch
 Observation of nonlinear internal waves in the Shallow Water 2006 experiment and interference of low-frequency sound waves in the long-range propagation
- 16:30–16:45 EGU2011-11369
Yannis Cuypers, Pascale Bouruet Aubertot, Pascal Lazure, Antonio Lourenço, Michel Lunven, Marc Sourriceau, and Lourdes Velo-Suarez
 Non linear internal tides, turbulent mixing and their impact on phytoplankton distribution in the continental shelf of South Brittany
- 16:45–17:00 EGU2011-3551
 Tim Boyd, **Mark Inall**, Dumont Estelle, and Griffiths Colin
 AUV observations of mixing in the tidal outflow from a Scottish sea loch

NH5.3/NP7.3/OS2.5 – Nonlinear Dynamics of the Coastal Zone (co-organized) – Posters

Convener: Ira Didenkulova | Co-Conveners: Efim Pelinovsky

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ira Didenkulova, Efim Pelinovsky

- XY342 EGU2011-44
Ekaterina Shurgalina and Efim Pelinovsky
 Formation of an abnormal wave in case of interaction with a vertical barrier
- XY343 EGU2011-4628
My Ha Dao, Eng Soon Chan, and Pavel Tklich
 Fine-scale processes of plunging wave in deep water
- XY344 EGU2011-8505
Erick Javier Lopez Sanchez and Gerardo Ruiz Chavarria
 Numerical study of particle transport due to periodic movement of water in a system of two oceanic basins connected by a channel
- XY345 EGU2011-4279
Olga Shishkina
 Linear and non-linear mechanisms of formation of edge internal waves in the shelf zone
- XY346 EGU2011-4865
Alexander Yankovsky, Legna Torres-Garcia, and Raymond Torres
 Interaction of tides, river discharge and bathymetric forms in the Santee River, SC, USA
- XY347 EGU2011-12323
Anatoliy Filonov and Iryna Tereshchenko
 The high amplitude internal waves generated at San Esteban sill in the Gulf of California
- XY348 EGU2011-62
Artem Rodin and Efim Pelinovsky
 Large-amplitude simple and shock waves in shallow water
- XY349 EGU2011-5069
Onno Bokhove, Elena Gagarina, Anthony Thornton, Jaap van der Vegt, and Wout Zweers
 Bore Soliton Splash
- XY350 EGU2011-830
Adrien Poupardin, Nicolas Bourneton, Grégory Pinon, Elie Rivoalen, Jérôme Brossard, and Gaële Perret
 Vortex dynamics around an immersed structure
- XY351 EGU2011-105
Ira Didenkulova and Efim Pelinovsky
 Long wave interaction with the sea wall in a basin of variable depth
- XY352 EGU2011-109
Irina Nikolkina, Ira Didenkulova, Efim Pelinovsky, and Narcisse Zahibo
 Runup of landslide-generated waves
- XY353 EGU2011-5111
Petr Denissenko, Irina Didenkulova, Jonathan Pearson, and Efim Pelinovsky
 Statistical characteristics of the non-linear run-up measured in a wave flume
- XY354 EGU2011-4484
Byung Ho Choi, Victor Kaistrenko, Efim Pelinovsky, Kyeong Ok Kim, and Byung Il Min
 Combination of 2D numerical simulations of long waves in a basin of variable depth with 1D analytical runup formulae

- XY355 EGU2011-104
Ira Didenkulova, Efim Pelinovsky, Tarmo Soomere, Kevin Parnell, and Maija Viška
 Beach response on the interplay of two wave systems: ship wakes and winds waves
- XY356 EGU2011-7894
claude Vella, François Demory, Victor Canut, Philippe Dussouillez, and Thomas Jules Fleury
 First evidence of accumulation of mega boulders on the Mediterranean rocky coast of Provence (southern France).

OS3.1 – IMBER/SOLAS special session. Sensitivity of marine ecosystems and biogeochemical cycles to global change – Posters

Convener: Baris Salihoglu | Co-Conveners: Christoph Garbe, Emilie Brévière

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Baris Salihoglu, Emilie Breviere, Christoph Garbe

- XY575 EGU2011-1875
Sergey Piontkovski and Michel Claereboudt
 Arabian Sea is getting less productive
- XY576 EGU2011-2973
Sebastian Rütten, Reiner Steinfeldt, Jürgen Sültenfuß, Marcus Dengler, and Monika Rhein
 Coastal upwelling off Mauritania inferred from helium isotope disequilibrium
- XY577 EGU2011-3221
Birgit Schneider
 Sensitivity of different formulations of the seawater CaCO_3 saturation state (pCO_2 , pH) to ocean acidification: implications for pelagic CaCO_3 dissolution in ocean biogeochemical models
- XY578 EGU2011-3258
 Anke Dürkop and **Birgit Schneider**
 Sensitivity of pelagic CaCO_3 dissolution to ocean acidification in an ocean biogeochemical model
- XY579 EGU2011-3305
Martin Vogt, Wolfgang Roether, Juergen Sueltenfuss, and Sandra Vogel
 Obtaining high-precision solubilities of helium and neon in fresh water and seawater
- XY580 EGU2011-3349
Qiang Shi, Gert Petrick, and Douglas Wallace
 a experimental study of volatile halocarbon production in seawater
- XY581 EGU2011-3566
Evridiki Mesarchaki, Jonathan Williams, Andrea Pozzer, Kerstin Richter, and Bernd Jähne
 Air-sea exchange of volatile organic compounds - Experimental results from a wind wave canal facility
- XY582 EGU2011-4170
Sophie Beauvais, Nicolas Metzl, Nicolas Gruber, and Jean-Pierre Gattuso
 The Integrated Marine Biogeochemistry and Ecosystem Research Project: Support of Ocean Carbon Research
- XY583 EGU2011-4826
Lavinia Patara, Martin Visbeck, Simona Masina, Gerd Krahnemann, and Marcello Vichi
 Marine biogeochemical responses to the North Atlantic Oscillation in a coupled climate model
- XY584 EGU2011-5278
Marc d'Orgeville, Matthew England, and Willem Sijp
 Sensitivity of atmospheric CO_2 to changes in ocean circulation: role of the surface chemistry
- XY585 EGU2011-7363
Aridane G. Gonzalez, J. Magdalena Santana-Casiano, Melchor González-Dávila, and Norma Pérez
 The effect of *Dunaliella tertiolecta* organic exudates on the Fe(II) oxidation kinetic in seawater
- XY586 EGU2011-7394
Sophie Tran, Bernard Bonsang, Valerie Gros, Ilka Peeken, and Roland Sarda-Estève
 The marine source of CO and NMHC in the Arctic Ocean in summer 2010: spatial variability, vertical distributions and impact of the biology.
- XY587 EGU2011-7796
Anna Orlikowska, Christian Stolle, Falk Pollehne, Klaus Jürgens, and Detlef E. Schulz-Bull
 Behaviour of VHOCS in a coastal sea surface during a short term mesocosm experiment
- XY588 EGU2011-9346
Baris Salihoglu, Bettina Fach, Heather Cannaby, Temel Oguz, Viktor Dorofeev, Alexander Kubriyakov, and Ekin Akoglu
 Seasonal variability of the Black-Sea ecosystem: A modelling study
- XY589 EGU2011-9388
 Ekin Akoglu, **Baris Salihoglu**, Simone Libralato, Temel Oguz, and Cosimo Solidoro
 Ecological Evolution of the Black Sea from 1960s to 1990s: An integrity check

- XY590 EGU2011-9770
Artur Nowicki, Lidia Dzierzbicka-Glowacka, Jaromir Jakacki, and Maciej Janecki
A new marine ecosystem model for Baltic Sea
- XY591 EGU2011-9931
Artur Nowicki, Anna Lemieszek, Lidia Dzierzbicka-Glowacka, and Iwona Maria Zmijewska
The effects of food concentration, temperature and salinity on reproductive of *Temora longicornis* in the Baltic Sea
- XY592 EGU2011-11306
Jean-Pierre Gattuso, **Lina Hansson** and the EPOCA consortium Team
European Project on Ocean Acidification (EPOCA)
- XY593 EGU2011-12174
Stefan Raimund, Yann Bozec, Marc Vernet, Vincent Rossi, Véronique Garçon, Yves Morel, and Pascal Morin
Distribution of volatile iodinated organic compounds in the Iberian upwelling system
- XY594 EGU2011-12796
Imke Grefe and Jan Kaiser
Measurements of N₂O concentrations in the surface ocean with an off-axis ICOS analyser
- XY595 EGU2011-13065
Sophie Chollet, Erik Buitenhuis, and Corinne Le Quere
Effect of temperature and light intensity on diatoms growth rate: impact on biogeochemical cycles
- XY596 EGU2011-13139
Li-Ping Hung, Christoph Garbe, and Wu-ting Tsai
On the impact of macroscale wave-current dynamics in the interfacial exchange processes

OS3.2 – From physical to biogeochemical processes: ocean mesoscale and sub-mesoscale impact on marine ecosystem and climate variability – Orals

Convener: Ananda Pascual | Co-Conveners: John Allen, Bruno Buongiorno Nardelli, Marina Levy, Anthony Kettle, Emma Young

Room: 7

Chairperson: Bruno Buongiorno Nardelli / Anthony Jamie Kettle

- 08:30–08:45 EGU2011-467
Romain Pennel, Alexandre Stegner, and Karine Béranger
Transport across and along the shelf induced by coastal eddies
- 08:45–09:00 EGU2011-8573
John Allen and Adrian Martin
Baroclinic Instability: the physical transport route through stratification
- 09:00–09:15 EGU2011-2661
Rosemary Morrow
Resolving small-scale ocean dynamics from altimetry
- 09:15–09:30 EGU2011-503
Romain Escudier, Ananda Pascual, Jérôme Bouffard, Bruno Buongiorno Nardelli, Isabelle Pujol, and Gilles Larnicol
Surface characterization of oceanic (sub)mesoscale through high resolution optimal interpolation : application to the NW Mediterranean Sea
- 09:30–09:45 EGU2011-5792
Cristóbal López, Emilie Tew Kai, Vincent Rossi, Joel Sudre, Emilio Hernandez-Garcia, and Veronique Garçon
Oceanic coherent structures, and the behavior of marine ecosystems
- 09:45–10:00 EGU2011-9569
Peter Gaube, Jeffrey Early, Dudley Chelton, Roger Samelson, and Michael Schlax
The Influence of Nonlinear Mesoscale Eddies on Oceanic Chlorophyll

COFFEE BREAK

Chairperson: John Allen / Marina Levy

- 10:30–10:45 EGU2011-4418
Craig Lee, Eric A. D'Asaro, Mary Jane Perry, Katja Fennel and the The NAB08 Team
The 2008 North Atlantic Spring Bloom Experiment: Bloom Evolution at the Patch Scale
- 10:45–11:00 EGU2011-3342
Marie-Hélène Radenac, Patricia E. Plimpton, Anne Lebourges-Dhaussy, and Michael J. McPhaden
Acoustic backscatter observations of zooplankton: responses to environmental forcing in the equatorial Pacific from diurnal to interannual time-scales

- 11:00–11:15 EGU2011-8036
Rose Campbell, Frédéric Diaz, ZiYuan Hu, Andrea Doglioli, Anne Petrenko, and Ivan Dekeyser
 Eddy induced coastal plankton community changes in a coupled numerical model of the Gulf of Lion
- 11:15–11:30 EGU2011-8603
Fanny Chenillat, Pascal Rivière, Peter Franks, and Bruno Blanke
 NPGO index and Cross-Shore Dynamics Variability of the Southern California Current Ecosystem
- 11:30–11:45 EGU2011-10507
Bruno Buongiorno Nardelli, Ananda Pascual, Marie-Helene Rio, Francesco Bignami, Yann Drillet, Stephanie Guinehut, Gilles Larnicol, Sandrine Mulet, Simon Ruiz, and Joaquin Tintoré
 MEsoSCale dynamical Analysis through combined model, satellite and in situ data (MESCLA): project presentation and first results
- 11:45–12:00 EGU2011-1553
Romain Bourdalle-Badie, Clement Bricaud, Corinne Derval, Yann Drillet, Gilles Garric, and Olivier Le Galloudec
 Evaluation of the new Mercator global eddy-resolving (1/12) ocean model: Mean state, day-to-day variability and mesoscale activity.

OS3.2 – From physical to biogeochemical processes: ocean mesoscale and sub-mesoscale impact on marine ecosystem and climate variability – Posters

Convenor: Ananda Pascual | Co-Conveners: John Allen, Bruno Buongiorno Nardelli, Marina Levy, Anthony Kettle, Emma Young

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ananda Pascual / Emma Young

- XY597 EGU2011-3697
Renaud Dussurget, Florence Birol, and Rosemary A. Morrow
 Fine-resolution altimetry data for a regional application in the Bay of Biscay
- XY598 EGU2011-7009
Guillaume Dencausse and Rosemary Morrow
 Confronting mesoscale and sub-mesoscale tracer patterns obtained from altimeter-derived lagrangian sea surface advection south of Tasmania with in-situ data
- XY599 EGU2011-6287
Francesco Nencioli, Andrea M. Doglioli, Anne A. Petrenko, and Francesco d'Ovidio
 Influence of (sub)mesoscale anticyclones on the coastal biogeochemical processes in the western part of the Gulf of Lion (NW Mediterranean)
- XY600 EGU2011-872
Jerome bouffard, Lionel Renault, Simon Ruiz, Ananda Pascual, Claire Dufau, Gilles Larnicol, and Joaquin Tintoré
 Sub-surface small scale eddy dynamics from multi-sensor observations and modelling
- XY601 EGU2011-5113
Rosa Balbín, Maria del Mar Flexas, Jose Luis López-Jurado, Angel Amores, Sebastian Montserrat, Marta Marcos, and Ideados Team
 Hydrographic conditions and vertical velocities at a front detected at the Soller area during an IDEADOS Project survey
- XY602 EGU2011-5627
Ángel M. Amores, Sebastià Monserrat, Marta Marcos, Maria del Mar Flexas, Rosa Babíl, and Jose Luis López-Jurado
 Temporal variability of hydrographic conditions around the Balearic Islands from two mooring lines.
- XY603 EGU2011-8493
Cristina Naranjo, Jesús García-Lafuente, Javier Delgado, Jose C. Sánchez-Garrido, and Antonio Sánchez-Román
 Does the Western Alboran Gyre help ventilate the West Mediterranean Deep Water through Gibraltar?
- XY604 EGU2011-12733
Angel Rodriguez-Santana, Francisco Machin, Pablo Sangra, Antonio Martinez-Marrero, and Angeles Marrero-Diaz
 Vertical Mixing of Nutrients in the Canary Basin
- XY605 EGU2011-9983
Simón Ruiz, Mikhail Emelianov, Josep Lluís Pelegrí, Ananda Pascual, and Evan Mason
 Observations and modelling of a shallow baroclinic anticyclonic eddy off Cape Bojador
- XY606 EGU2011-9001
Torsten Kanzow, Gerd Krahmann, Johannes Karstensen, Thomas Ohde, Andreas Funk, and Mario Müller
 Glider fleet-based, multi-parameter observations in the tropical Northeast Atlantic

- XY607 EGU2011-8722
Mounir Lekouara and Ian Robinson
Exploring Frontogenesis Processes on new Satellite Sea Surface Temperature Data Sets
- XY608 EGU2011-9098
Laure Zanna and David Marshall
A dynamical Constraint on the Vertical Structure of Biogeochemical Tracers
- XY609 EGU2011-11326
Ananda Pascual, Simón Ruiz, Bruno Buongiorno Nardelli, Stéphanie Guinehut, Yann Drillet, Sandrine Mulet, Marie-Hélène Rio, Francesco Bignami, Gilles Larnicol, and Joaquín Tintoré
Vertical motion analysis through combined model, satellite and in situ data. Preliminary results of the MESCLA project
- XY610 EGU2011-8081
Ines Borriane and Reiner Schlitzer
Persistent and highly contrasting biological patterns in the southwestern sector of the Atlantic Ocean: relating local circulation to phytoplankton pigment biomass
- XY611 EGU2011-5310
Francois Ascani, **Kelvin Richards**, Yanli Jia, and Hideharu Sasaki
The impact of mesoscale and submesoscale features on the upper-ocean density and nutrient fields of the North Pacific subtropical gyre
- XY612 EGU2011-12738
Ivy Frenger, Nicolas Gruber, Reto Knutti, and Matthias Münnich
Eddies and chlorophyll in the Southern Ocean
- XY613 EGU2011-2995
Bettina B. Taylor, Elena Torrecilla, Anja Bernhardt, Rüdiger Röttgers, and Astrid Bracher
Characterization of phytoplankton communities by optical properties in the Atlantic Ocean
- XY614 EGU2011-7590
Emma Young, Eugene Murphy, Michael Meredith, Jenny Rock, and Gary Carvalho
Variability in fish larval retention at South Georgia, Southern Ocean: insights from numerical modelling
- XY615 EGU2011-7483
Chuanxi Xing and Inga Hense
Temporal variability of a dominant zooplankton species in the North Sea- A modeling study
- XY616 EGU2011-8048
Daura Vega Moreno, Montserrat Montero, Jesús Morales, Carolina Llerandi, María José Rueda, and Octavio Llinás
Phytoplankton ecoregions controlled by hydrographical conditions in NW African upwelling
- XY617 EGU2011-9762
Nelli Rünk, Aet Meerits, Natalja Buhhalko, Inga Lips, Villu Kikas, Taavi Liblik, and Urmas Lips
Dynamics of nutrients and phytoplankton Chl a influenced by mesoscale and sub-mesoscale physical processes in the Gulf of Finland (Baltic Sea)
- XY618 EGU2011-10536
Rosamma Stephen
Key copepod species of upwelling reflecting environmental changes in the eastern Arabian sea : a multi-decadal study
- XY619 EGU2011-11361
Roberto Inghilesi, Arianna Orasi, Cinzia Pizzi, Francesco Bignami, Rosalia Santoleri, and Luisa Ottolenghi
Evaluation of the dispersion of marine pollutants associated with a river discharge by means of numerical simulations and satellite analysis
- XY620 EGU2011-11684
Thomas Raub, Philip Lorenz, Daniela Jacob, Beate Ratter, Christian Möllmann, and Axel Temming
Prognosis of Future Regime Shifts of the Ecosystem of the Central Baltic Sea (PRORES)
- XY621 EGU2011-13160
Bettina Fach, Julian Ashford, Alexander Arkhipkin, Cynthia Jones, and **Baris Salihoglu**
Large-scale circulation accounts for otolith chemistry in juvenile *Dissostichus eleginoides* on the Patagonian Shelf.
- XY622 EGU2011-439
Olga Shatova, David Koweeck, Maureen H Conte, and John C Weber
Contribution of zooplankton fecal pellets to deep ocean particle flux in the Sargasso Sea using quantitative image analysis
- XY623 EGU2011-655
Mariem Saavedra-Pellitero, Karl-Heinz Baumann, José-Abel Flores, Frank Lamy, Aleix Cortina, and Francisco Javier Sierro
Coccolithophore estimates of paleotemperature changes in the Southeast Pacific over the past ~27 kyr and comparison to other proxies.

Convener: Achim Kopf | Co-Conveners: Timothy Ferdelman, Heiko Pälike, Catherine Mevel, Antje Boetius

Room: 7

Chairperson: Achim Kopf, Antje Boetius

- 15:30–15:45 EGU2011-9065
Achim Kopf and the DS3F Steering Committee Team
 The Deep-Sea and Sub-Seafloor Frontier initiative - a key to link EC research and international scientific ocean drilling
- 15:45–16:00 EGU2011-4820
Timothy Ferdelman and Judith McKenzie
 The Deep Sea and Sub-seafloor Frontier: Past, present and future links in sedimentary seafloor and sub-seafloor ecosystems
- 16:00–16:15 EGU2011-12642
Antje Boetius, Frank Wenzhöfer, Alban Ramette, Felix Janssen, Dirk de Beer, Thomas Soltwedel, Michael Klages, Christoph Waldmann, and Olaf Pfannkuche
 Observing deep-sea ecosystem shifts related to global change and human impact
- 16:15–16:30 EGU2011-3850
Jurgen Mienert, Stefan Bünz, Hafliði Hafliðason, and Shyam Chand
 Scientific Ocean Drilling in Norwegian-Arctic Continental Margins To Determine Gas Hydrate Energy and Active Methane Venting
- 16:30–16:45 EGU2011-3213
R John Parkes and the R John Parkes Team
 Prokaryotes Stimulate Mineral-H₂ Formation for the Deep-Biosphere and Subsequent Thermogenic Activity.
- 16:45–17:00 EGU2011-7150
Catherine Mevel and Maria Ask
 Improving technologies for sub seafloor sampling and instrumentation

OS4.1/CL4.11 – Open session on Operational Oceanography (co-organized) – Orals

Convener: Richard Allard | Co-Conveners: Eric Dombrowsky, Michel Rixen, Emanuel Coelho

Room: D

Chairperson: Richard Alard and Michel Rixen

- 08:30–08:45 EGU2011-3510
Eric Dombrowsky, Pierre Bahurel, and Frédéric Adragna
 The MyOcean GMES Marine Core Service for ocean monitoring and forecasting version 1 is now open
- 08:45–09:00 EGU2011-8724
Stéphane Law Chune, Yann Drillet, Pierre Daniel, and Pierre De Mey
 Improving Mercator operational configurations for drift modelling applications
- 09:00–09:15 EGU2011-3468
Jean-Michel Lellouche, Olivier Le Galloudec, Benoît Tranchant, Charles-Emmanuel Testut, Eric Greiner, Gilles Garric, Romain Bourdallé-Badie, Marie Drévillon, Charly Regnier, and Yann Drillet
 Overview and recent improvements of the global Mercator Ocean operational systems
- 09:15–09:30 EGU2011-3340
Clément Fontana, Pierre Brasseur, Jean-Michel Brankart, and Maéva Doron
 Sequential ocean color data assimilation in a coupled physical-biogeochemical model of the North Atlantic
- 09:30–09:45 EGU2011-12956
Laurent Bertino, Pavel Sakov, and Francois Counillon
 The TOPAZ ocean and sea ice pilot reanalysis (2003 - 2008)
- 09:45–10:00 EGU2011-7488
Marco Bajo, Luciana Bertotti, and Luigi Cavaleri
 Use of ensemble forecast meteorological fields to force a storm surge model

COFFEE BREAK

Chairperson: Eric Dombrowsky and Emanuel Coelho

- 10:30–10:45 EGU2011-3897
Alexander Kurapov, Peng Yu, Gary Egbert, and John Allen
 Data assimilation in a real-time coastal ocean forecast model off Oregon (US west coast)

- 10:45–11:00 EGU2011-8645
James While and Mathew Martin
 SST data assimilation in the 7km Atlantic Margin Model: initial results
- 11:00–11:15 EGU2011-8878
Richard Allard, Tomothy Campbell, Travis Smith, John Cook, Sue Chen, Frank Bub, Mark Swenson, and Daniel Geiszler
 The Coupled Ocean /Atmosphere Mesoscale Prediction System (COAMPS): Plans for Operational Implementation at Navy Production Centers
- 11:15–11:30 EGU2011-5481
Alexander Barth, Jacopo Chiggiato, Aida Alvera-Azcarate, Baptiste Mourre, Jean-Marie Beckers, Jochen Horstmann, and Michel Rixen
 Assimilation of high-frequency radar currents in the Ligurian Sea
- 11:30–11:45 EGU2011-8892
Charlie N. Barron, Tamara L. Townsend, Robert W. Helber, and Jan M. Dastugue
 Improved synthetic ocean profiles for assimilation into operational ocean models
- 11:45–12:00 EGU2011-6670
Andrea Storto, Simona Masina, and Srdjan Dobricic
 Evaluating the impact of different observing networks in the global ocean through ensemble simulations

OS4.2 – Ocean salinity applications based on SMOS data – Posters

Convener: Susanne Mecklenburg | Co-Conveners: Jordi Font, Nicolas Reul, Matthias Drusch

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Susanne Mecklenburg, Matthias Drusch

- XY624 EGU2011-6534
Meike Sena Martins, Nuno Serra, and Detlef Stammer
 Variability of Sea surface salinity as seen by the Argo Profilers in the Atlantic Ocean between 2000 and 2010 and as simulated by a high resolution OGCM.
- XY625 EGU2011-8331
Nadya Vinogradova and Rui Ponte
 Potential for temporal aliasing in satellite-derived SSS measurements
- XY626 EGU2011-8373
Audrey Hasson, Thierry Delcroix, Sophie Cravatte, Jean-Marc Molines, and Nicolas Reul
 An assessment of the mixed-layer salinity budget in the tropical Pacific ocean, 1989-2009
- XY627 EGU2011-8465
Fran Fabra, Estel Cardellach, and Antonio Rius
 Potential contributions of GNSS-R towards salinity retrieval in SMOS-like missions
- XY628 EGU2011-8704
Jacqueline Boutin, Gilles Reverdin, Nicolas Martin, Simon Morrisset, Xiaobin Yin, Antonio Lourenço, Fabienne Gaillard, Jean Rolland, Jordi Font, Christophe Maes and the GLOSCAL SMOS CALVAL Team
 Sea surface salinity as measured by SMOS and by surface autonomous drifters
- XY629 EGU2011-9828
Nina Hoareau, Joaquim Ballabrera, Jérôme Gournion, Sofia Kalaroni, Marta Umbert, Justino Martínez, and Fernando Pérez
 Surface salinity assimilation in the Macaronesian Region
- XY630 EGU2011-10086
Jordi Font, Jérôme Gournion, Carolina Gabarró, Marco Talone, Fernando Pérez, Alessandra Moneris, Joaquín Villanueva, and Oscar Alonso
 Overview of the SMOS Level 3 Salinity Products as Provided by Spanish CP34
- XY631 EGU2011-10229
Carolina Gabarro, Justino Martínez, Veronica Gonzalez, Roberto Sabia, Jerome Gournion, Marco Talone, Sergio Montero, Sebastian Guimbard, Fernando Perez, and Jordi Font
 Assessment of the impact on the SSS of the frequency calibration of the Local Oscillators of SMOS
- XY632 EGU2011-12371
Derek Burrage, David Wang, Joel Wesson, Paul Hwang, Stephan Howden, Jordi Font, and Carolina Gabarro
 SMOS Observations of the Gulf of Mexico and Caribbean Sea: Evaluating Surface Salinity Retrieval and Roughness Correction Performance.

OS4.3 – Ocean Remote Sensing – Posters

Convener: Aida Alvera-Azcárate | Co-Conveners: Guoqi Han, Christine Gommenginger

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Christine Gommenginger and Guoqi Han

- XY633 EGU2011-829
Charles Troupin, Aida Alvera-Azcárate, Alexander Barth, and Jean-Marie Beckers
EOF analysis of Sea Surface Temperature in the Canary Island - Madeira region
- XY634 EGU2011-3267
Fabien Léger, Marie-Hélène Radenac, Pierre Dutrieux, Gérard Eldin, and Christophe Menkes
Seasonal variability of the New Guinea Coastal Current using along-track altimetry
- XY635 EGU2011-3383
Marie-Hélène Radenac, Monique Messié, and Christelle Bosc
Intraseasonal to interannual zonal displacements of the very oligotrophic waters of the Pacific warm pool: a multi-satellite approach
- XY636 EGU2011-3479
Sabine Arnault and Jean Luc Melice
TROPICAL ATLANTIC OCEAN CIRCULATION FROM ALTIMETRY AND ARAMIS data
- XY637 EGU2011-4263
Malgorzata Stramska
Comparison of regional estimates of particulate organic carbon export in the North Atlantic estimated from SeaWiFS ocean color
- XY638 EGU2011-4266
Malgorzata Stramska and Jagoda Bialogrodzka
Temporal and regional variability of vertical attenuation coefficient for downwelling irradiance in the Baltic Sea derived from SeaWiFS ocean color
- XY639 EGU2011-5363
Fedor Khrapchenkov
Upwelling effect, features of the distribution transformed Amur waters and eddies along the northern coast of Sakhalin Island from the satellite imaging data (2006-2007) and hydrological measurements
- XY640 EGU2011-4830
Hugh Mortimer, Tim Nightingale, and Wayne Tubby
Satellite based Sea Surface Temperature (SST) measurement validation using the SISTeR (Scanning Infrared Sea Surface Temperature Radiometer) instrument from the Queen Mary 2
- XY641 EGU2011-6811
Nicolas Picot and **Francois Boy**
CryoSat Processing Prototype, LRM Processing on CNES Side
- XY642 EGU2011-6399
George Zodiatis, Yianna Samuel-Rhoads, Dmitry Solovyov, Dan Hayes, and Gregory Konnaris
Monitoring the Levantine Basin through the use of multiple satellite remote sensing products
- XY643 EGU2011-8899
Uggo Pinho and **Antonio Neves**
Were the sea conditions harsher in 2010 for the Northeast coast of Rio de Janeiro state - Brazil? A 14 year analysis of remote sensing, in-situ wave data and NCEP reanalysis
- XY644 EGU2011-8946
Yves Tanguy and Sabine Arnault
Variability from 1992 to 2009 of the thermal structures in the tropical Atlantic using inversion methodology
- XY645 EGU2011-8973
Nicolas Picot and **Francois Boy**
CryoSat Processing Prototype, how to generate LRM like echoes with SAR data and a Comparison to DUACS SLA over high latitudes
- XY646 EGU2011-9051
Stefano Pierini, Maurizio Migliaccio, Paola De Ruggiero, Antonio Montuori, and Francesco Nunziata
Surface wind speed retrieval from COSMO-SkyMed SAR data, with application to coastal circulation modeling
- XY647 EGU2011-5827
Per Knudsen, Marie-Helene Rio, Jerome Benveniste, and Toolbox Team
GOCE User Toolbox for Operational Oceanography
- XY648 EGU2011-11646
Susana Barbosa, M. Joana Fernandes and the COASTALT Team
Validation of experimental COASTALT coastal altimetry products along the Portuguese coast
- XY649 EGU2011-11873
Jean Kormann, Berta Biescas, Valentí Sallarés, and Naiara Korta
High-resolution mapping of temperature and salinity from full waveform inversion of synthetic seismic data
- XY650 EGU2011-3278
Ulf Klein, Bruno Berruti, Craig Donlon, Johannes Frerick, Constantin Mavrocordatos, Jens Nieke, Bernd Seitz, Juergen Stroede, and Helge Rebhan
Sentinel-3 Mission Status
- XY651 EGU2011-3438
Daouda Diouf, **Julien Brajard**, Awa Niang, Salam Sawadogo, Michel Crépon, and Sylvie Thiria
Atmospheric correction and chlorophyll-a restitution in presence of Saharan dusts.

- XY652 EGU2011-8323
Francois Boy and Nicolas Picot
 CryoSat Processing Prototype, LRM Processing on CNES Side and a Comparison to DUACS SLA

OS4.8/EOS09 – Ocean Science Outreach and Education (co-organized) – Posters

Convener: Vinca Rosmorduc | Co-Conveners: Joachim Dengg, Danielle De Staerke, Margaret Srinivasan, Valborg Byfield

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Vinca Rosmorduc

- XY653 EGU2011-1379
Albert Gerdes
 Marine Science on YouTube - The Role of Video Documentaries in Outreach and Education
- XY654 EGU2011-1111
Chi-Min Liu and I-Chun Chen
 Taiwan's experience in ocean education at the level of junior high school: a textbook-editing project of MEEP
- XY655 EGU2011-4524
Joachim Dengg and Sally Soria-Dengg
 Outreach in Ocean Sciences as a Direct Contribution to Education
- XY656 EGU2011-5137
Vinca Rosmorduc, Jérôme Benveniste, Émile Bronner, and Sander Niemeijer
 Basic Radar Altimetry Toolbox: tools to teach altimetry
- XY657 EGU2011-8822
Jennifer Skene, Catherine Halversen, and Lynn Uyen Tran
 The Communicating Ocean Sciences Network: Universities, Oceanographic Institutions, Science Centers, Aquariums, and Schools Working Together to Improve Education and Public Outreach Efforts
- XY658 EGU2011-9209
Sally Soria-Dengg and Joachim Dengg
 Bringing the Ocean to the Classroom
- XY659 EGU2011-12816
Danielle De Staerke, Vinca Rosmorduc, and Annie Richardson
 ARGONAUTICA, an educational project using satellite data to understand the ocean change and its effects on marine animals.
- XY660 EGU2011-13261
Katrin Knickmeier
 Public Outreach - School program with multimedia presentation about climate change in the Arctic

NP7.1/OS5.3 – Non linear waves, wind-wave-current interactions, internal waves in stratified media and ocean mixing and coastal hydromorphology (co-organized) – Posters

Convener: Vincent Rey | Co-Conveners: Lev Ostrovsky, M. Stive, Philippe Fraunie, Vincent Rey, Margarita Diez, Pascale Bouruet-Aubertot

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00

Chairperson: Pascale Bouruet-Aubertot

- XY514 EGU2011-1035
 Philippe Fraunie, Jose M Redondo, and **Anna Matulka**
 Detection of waves and vortices in North Western Mediterranean
- XY515 EGU2011-2582
Roham Bakhtyar, Alessandro Brovelli, and David Andrew Barry
 Effects of wave characteristics and beach groundwater table on the nearshore morphology and aquifer dynamics
- XY516 EGU2011-4864
Yiing Jang Yang, Ren-Chieh Lien, Ming-Huei Chang, and Tswen Yung Tang
 Pressure perturbations induced by mode-1 depression internal solitary waves
- XY517 EGU2011-4363
Ekaterina Ruvinskaya, Oxana Kurkina, Andrey Kurkin, Alexey Kuzin, and Michail Barenboim
 Nonlinear dynamics of intensive internal waves in bounded stratified basins
- XY518 EGU2011-7296
 Qiang Wang, Tao Xing, and Weidong Zhou
 Topographic-Rossby Wave on the shelf of the northern South China Sea investigated by the numerical model
- XY519 EGU2011-7698
Mostafa Bakhoday Paskyabi, Ilker Fer, and Alastair D. Jenkins
 Wind-wave and current interactions in the upper ocean

- XY520 EGU2011-10111
Sagar Bora, Segey Danilov, and Gerrit Lohmann
wave sensitivity to grid resolution, frequency, and pathways
- XY521 EGU2011-2978
Maria Obregon, Ramon Fernandez-Feria, and Yury Stepanyants
Stationary solutions of the extended reduced Ostrovsky equation
- XY522 EGU2011-1406
B. Edward McDonald
Bidirectional and unidirectional waves in Hertzian chains
- XY523 EGU2011-7043
Julien Touboul and Vincent Rey
Bottom pressure distribution due to wave reflection at a submerged obstacle

Thursday, 07 April

BG3.2 – Oxygen depletion in land-locked, coastal and open ocean systems of the present and past – driving mechanisms, impacts and recovery (co-listed) – Orals

Convener: Caroline P. Slomp | Co-Conveners: Antje Boetius, Daniel Conley, Hiroshi Kitazato, Greg Cowie, Clare Woulds

Room: 24

Chairperson: Caroline Slomp & Antje Boetius

- 13:30–13:45 EGU2011-13933
Tage Dalsgaard, Bo Thamdrup, Donald Canfield, Loreto De Brabandere, Niels Peter Revsbech, and Osvaldo Ulloa
 Biogeochemistry of the eastern tropical south Pacific oxygen minimum zone
- 13:45–14:00 EGU2011-8848
Loreto De Brabandere, Bo Thamdrup, Don E Canfield, Tage Dalsgaard, Niels Peter Revsbech, and Osvaldo Ulloa
 High resolution depth profiles of anammox and denitrification in the OMZ off northern Chile
- 14:00–14:15 EGU2011-5241
Allan Devol, Bonnie Chang, and Wajih Naqvi
 The isotopic composition of nitrogen gas in oxygen deficient zones
- 14:15–14:30 EGU2011-6617
Frank Wenzhoefer, Jan P Fischer, Moritz Holtappels, Daphne Donis, Anna Lichtschlag, Felix Janssen, and Antje Boetius
 Spatio-temporal variations in water column oxygen concentrations at the Crimean Shelf and their effects on biogeochemical processes
- 14:30–14:45 EGU2011-2363
Zeynep Erdem and M.Nam?k Ça?atay
 Effect of Mediterranean Inflow on Redox Conditions of the Istanbul Strait Outlet Area of the Black Sea
- 14:45–15:00 EGU2011-11964
Holger Brix, Curtis Deutsch, Taka Ito, Hartmut Frenzel, and LuAnne Thompson
 Temporal variability of hypoxic zones
- Chairperson: Greg Cowie & Hiroshi Kitazato
- 15:30–15:45 EGU2011-2749
Karin Limburg, Carina Olson, Yvonne Walther, Caroline Slomp, Darren Dale, and Hans Høie
 Detecting hypoxia through otolith chemistry in modern and prehistoric Baltic Sea cod
- 15:45–16:00 EGU2011-1069
Lisa Levin, Anna Lee McGregor, Guillermo Mendoza, Clare Woulds, Peter Cross, Greg Cowie, Andrew Gooday, and Hiroshi Kitazato
 Macrofaunal colonization patterns across the India margin oxygen minimum zone
- 16:00–16:15 EGU2011-2464
Andrew Gooday, Kate Larkin, and Ana Aranda da Silva
 Benthic foraminifera: key members of benthic communities within the Arabian Sea OMZ
- 16:15–16:30 EGU2011-1000
Clare Woulds, Hisami Suga, Matthew Schwartz, Tim Brand, Greg Cowie, and Hiroshi Kitazato
 Benthic nutrient dynamics across the Pakistan and Indian margins
- 16:30–16:45 EGU2011-11907
Karoliina Koho, Leon Moodley, Lara Pozzato, Tanja Moerdijk-Poortvliet, Karline Soetaert, Jack Middelburg, and Gert-Jan Reichart
 Organic matter reactivity across the northern Arabian Sea Oxygen Minimum Zone
- 16:45–17:00 EGU2011-756
William Ross Hunter, Bart Veuger, and Ursula Witte
 Patterns of microbial nitrogen incorporation and retention in oxygen minimum zone sediments: An in situ ¹³C:¹⁵N labelling approach.
- 17:00–17:15 EGU2011-8124
Tom Jilbert, Caroline Slomp, and Bo Gustafsson
 Beyond the Fe-P-redox connection: Preferential regeneration of phosphorus from organic matter as a key control on Baltic Sea nutrient cycles
- 17:15–17:30 EGU2011-10680
Florian Scholz, Christian Hensen, Anna Noffke, Anne Rhode, and Klaus Wallmann
 Early diagenesis of trace metals (V, Mo, U) in sediments of the Peruvian upwelling area: response to oxygen dynamics in the water column

BG3.2 – Oxygen depletion in land-locked, coastal and open ocean systems of the present and past – driving

mechanisms, impacts and recovery (co-listed) – Posters

Convener: Caroline P. Slomp | Co-Conveners: Antje Boetius, Daniel Conley, Hiroshi Kitazato, Greg Cowie, Clare Woulds

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Clare Woulds & Caroline Slomp

- BG1 EGU2011-2023
Hidetaka Nomaki, Kentaro Inoue, **Hisami Suga**, and Hiroshi Kitazato
Algal carbon processing by benthic foraminifera and microbes across the Arabian Sea Oxygen Minimum Zone
- BG2 EGU2011-4667
Marie Zahnert, Annekatrin J. Enge, Markus M. Moeseneder, Ursula Witte, Michal Kucera, and **Petra Heinz**
Recent benthic foraminifera in the oxygen minimum zone at the Western Indian margin, Arabian Sea
- BG3 EGU2011-3550
Carol White and Clare Woulds
Tracer studies on organic matter cycling by benthic fauna across the Arabian Sea (Indian margin) oxygen minimum zone
- BG4 EGU2011-11198
Greg Cowie, Steve Mowbray, Helen Mathesen, Rebecca McKenzie, Michelle Lewis, Amy Anderson, and Carol White
Comparative geochemistries of sediments from stations spanning the OMZ across the Arabian Sea margins of Pakistan, India and Oman
- BG5 EGU2011-5296
Hiroshi Kitazato
Submersible dive cruise at lower transition of the Arabian Sea OMZ of the western Indian continental slope: Logistics, rationale and brief results
- BG6 EGU2011-3089
Ursula Witte, Will R Hunter, Lisa L Levin, and Markus M Moeseneder
Processing of phytodetrital carbon by benthic communities across the Indian margin oxygen minimum zone investigated via in situ isotope labelling experiments
- BG7 EGU2011-3944
Kazumasa Oguri and Hiroshi Kitazato
Oxygen dynamics at sediment-water interface in Arabian Sea continental margin: results from planar oxygen optode experiments in situ
- BG8 EGU2011-1991
Hartmut Schulz, Ulrich von Rad, Venugopalan Ittekkot, and Helmut Erlenkeuser
Particle flux to the continental slope of the NE Arabian Sea - a comparison of water column and seafloor estimates from the Oxygen Minimum Zone off Pakistan
- BG9 EGU2011-8922
Klaas G.J. Nierop, Gert-Jan Reichart, and Jaap S. Sinninghe Damsté
The transformation of macromolecular organic matter within and below the oxygen minimum zone in the Arabian Sea.
- BG10 EGU2011-9402
Peter Kraal, **Caroline P. Slomp**, Daniel C. Reed, Gert-Jan Reichart, and Simon W. Poulton
Sedimentary phosphorus and iron cycling across the Arabian Sea oxygen minimum zone
- BG11 EGU2011-9905
Caroline P. Slomp, Daniel C. Reed, Tom Jilbert, Haydon P. Mort, and Bo. G. Gustafsson
Phosphorus cycling and carbon burial in low-oxygen marine settings: Insights from modern basins
- BG12 EGU2011-11704
Joanna Norkko, Daniel C. Reed, Karen Timmerman, Alf Norkko, Bo G. Gustafsson, Erik Bonsdorff, **Caroline P. Slomp**, Jacob Carstensen, and Daniel J. Conley
A welcome can of worms? Hypoxia mitigation by an invasive species
- BG13 EGU2011-9354
Felix Janssen, Jan Fischer, Jana Friedrich, Moritz Holtappels, Gaute Lavik, Anna Lichtschlag, Nelli Sergeeva, Christoph Waldmann, Frank Wenzhoefer, and Antje Boetius
Oxygen conditions and biogeochemical responses in Black Sea ecosystems: Investigations by the EU-Project HYPOX
- BG14 EGU2011-9315
Felix Janssen, Christoph Waldmann, Antje Boetius and the HYPOX project Team
Hypoxia monitoring in aquatic ecosystems: a short introduction to target sites, scientific approach and first results (7 FP EU-project HYPOX)
- BG15 EGU2011-3704
Mathias K. Kirf, Carsten J. Schubert, and Bernhard Wehrli
Heterogeneity at the oxic-anoxic interface in the water column of Lake Zug, Switzerland.

- BG16 EGU2011-1063
Jana Friedrich, Marian-Trajan Gomoiu, Felix Janssen, and Dan Secieru
 Conceptual Understanding of Hypoxia Effects on Ecosystems - Example: the Black Sea's North-Western Shelf (EU-FP7 "HYPOX")
- BG17 EGU2011-10172
Anna Lichtschlag, Felix Janssen, Jan P. Fischer, Frank Wenzhoefer, Gerdhard Jessen, and Antje Boetius
 Mat-forming sulfide-oxidizing bacteria thriving in the hypoxic zone of the Crimean shelf (Black Sea)
- BG18 EGU2011-10147
Anna Lichtschlag, Frank Wenzhoefer, Felix Janssen, Ulrich Struck, Daphne Donis, Gerdhard Jessen, and Antje Boetius
 Effect of varying oxygen conditions on biogeochemical processes and benthic activities at the Crimean shelf of the Black Sea
- BG19 EGU2011-9125
Moritz Holtappels, Anna Lichtschlag, Yudi Ihsan, Antje Boetius, Namik Ça?atay, Gaute Lavik, and Marcel Kuypers
 Coupled denitrification - sulfide oxidation stimulated by the inflow of oxic Mediterranean waters into the anoxic layers of the Black Sea
- BG20 EGU2011-5306
Feng Xuwen, Yu Xiaoguo, Chen Jianfang, Li Hongliang, Zhang Weiyan Weiyan, and Shi Xuefa
 Sedimentary records of eutrophication and hypoxia in the Changjiang Estuary over the last 100 years
- BG21 EGU2011-12993
 Nelli Sergeyeva, **Sofia Mazlumyan**, and Anna Lichtschlag
 Meiobenthic communities of hypoxic conditions of the Bosphorus Strait (Black Sea)
- BG22 EGU2011-8877
Loreto De Brabandere, Bo Thamdrup, and Niels Peter Revsbech
 Oxygen contamination during anoxic incubations
- BG23 EGU2011-6058
Jasmin Franz, Gerd Krahmann, Gaute Lavik, Patricia Grasse, and Ulf Riebesell
 Distribution of phytoplankton in the tropical Eastern South Pacific in relation to hydrographic and nutrient conditions
- BG24 EGU2011-5806
Birgit Nagel, Tim Schlarbaum, Volker Mohrholz, and Kay Emeis
 N-cycling in the suboxic Benguela upwelling system from dual N and O isotopic composition of nitrate
- BG25 EGU2011-465
Krystallia Kountoura and Ierotheos Zacharias
 Description of the mechanism leading to the development of seasonal anoxia in Amvrakikos Gulf, Greece.
- BG26 EGU2011-6521
Alexandra Pavlidou, Christos Anagnostou, Harilaos Kontoyiannis, and Roza Psyllidou-Giouranovits
 Oxygen depletion in a semi-enclosed area of Aegean Sea (East Mediterranean)
- BG27 EGU2011-11787
Niels van Helmond, Daniel Reed, Caroline Slomp, and Henk Brinkhuis
 Determining the roles of productivity and preservation during formation of sapropel S1 in the eastern Mediterranean
- BG28 EGU2011-2425
Ryan P. North and David M. Livingstone
 Applicability of a 1D hypolimnetic oxygen depletion model to deep Swiss lakes
- BG29 EGU2011-5318
Iana Tsandev, Daniel C. Reed, and Caroline P. Slomp
 Phosphorus diagenesis in deep-sea sediments: sensitivity to water column conditions and global scale implications
- BG30 EGU2011-11367
Svetlana Pakhomova and Evgeniy Yakushev
 Iron and manganese species at the redox-interfaces in the Black Sea, the Baltic Sea and the Oslo Fjord
- BG31 EGU2011-4362
Evgeniy Yakushev
 Influence of mixing on the biogeochemical structure of the water column redox interface: model simulations for the Black Sea, the Gotland Deep and the Oslo fjord
- BG32 EGU2011-370
Yunchang He
 Black Sea biogeochemistry: the numerical model response to decadal atmospheric variability during 1960-2000
- BG33 EGU2011-3071
Itzel Ruvalcaba Baroni and Caroline P. Slomp
 Modeling ocean biogeochemistry in the Cretaceous: what triggered ocean anoxia?

- BG34 EGU2011-5317
Kazumi Ozaki and Eiichi Tajika
 Modeling oceanic redox conditions during the Phanerozoic: Constraints from a one-dimensional ocean biogeochemical cycle model
- BG35 EGU2011-6887
Michael Kaminski, Severyn Kender, and Agnieszka Ciurej
 The first record of Pliocene-Pleistocene dysoxic benthic foraminiferal assemblages in the Bering Sea: Initial results from IODP Expedition 323
- BG36 EGU2011-11913
Micha Ruhl, Robert Frei, and Christian J. Bjerrum
 Marine Anoxia during Large Igneous Province formation at the Triassic-Jurassic transition?

BG7.3 – Biogeochemical function and diversity of chemosynthetic deep sea ecosystems (co-listed) – Posters

Convener: Nadine Le Bris | Co-Conveners: Laurent Toffin, Janine Felden, Douglas Connelly, Jozée Sarrazin, Dirk de Beer

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- BG59 EGU2011-4814
Petra Pop Ristova, Frank Wenzhöfer, Alban Ramette, Matthias Zabel, David Fischer, Sabine Kasten, and Antje Boetius
 Biogeochemical Activities and Associated Biodiversity at the Gigantic Pockmark Regab - A Multidisciplinary Study
- BG60 EGU2011-9515
Antje Boetius, Janine Felden, Frank Wenzhöfer, Dana Yoerger, Rich Camilli, Chris German, Karine Olu, Tomas Feseker, and Dirk DeBeer
 Changes in biogeochemical activity and habitat zonation associated with mud displacement (Haakon Mosby Mud Volcano, Barents Sea)
- BG61 EGU2011-8665
Clara F. Rodrigues, Sébastien Duperron, Ana Hilário, and Marina R. Cunha
 Chemosymbiotic species from cold seeps around NE Atlantic
- BG62 EGU2011-2261
Julie Ponsard, Marie-Anne Cambon-Bonavita, Magali Zbinden, Gilles Lepoint, André Joassin, Laure Corbari, Bruce Shillito, and Philippe Compère
 Inorganic carbon incorporation and nutritional transfers in the chemosynthetic ectosymbiosis harboured by the Atlantic hydrothermal vent shrimp *Rimicaris exoculata*
- BG63 EGU2011-2405
Mélissa Trevisan, Laure Corbari, Sarah Samadi, and Philippe Compère
 Diet and digestive microbial symbioses in amphipod crustaceans from deep-sea wood falls in the Pacific Ocean.
- BG64 EGU2011-9311
Inês Martins, Richard P. Cosson, Virginie Riou, Pierre Marie Sarradin, Jozée Sarrazin, Ricardo S. Santos, and Ana Colaço
 Relationship between metal levels in the vent mussel *Bathymodiolus azoricus* and local microhabitat chemical characteristics of Eiffel Tower (Lucky Strike)
- BG65 EGU2011-11516
Carole Decker, Christian Le Gall, and Karine Olu-Le Roy
 First in situ respiratory measurement of vesicomyid bivalves at a cold-seep site (REGAB pockmark off Congo)
- BG66 EGU2011-11570
Carole Decker, Sébastien Duperron, and Karine Olu-Le Roy
 Multi-gene characterization of endosymbionts associated with two vesicomyid bivalve species co-occurring at a pockmark in the Gulf of Guinea
- BG67 EGU2011-13572
Raul Bettencourt, Miguel Pinheiro, Conceição Egas, Isabel Rodrigues, and Ricardo Santos
 Sequencing the transcriptome of *Bathymodiolus azoricus*: new possibilities for the understanding of biological processes at deep-sea hydrothermal vents
- BG68 EGU2011-1150
Antje Buß, Maren Walter, Christian Mertens, Jürgen Sültenfuß, and Monika Rhein
 Hydrothermal ^3He in the near field of natural CO_2 seeps in the Okinawa Trough
- BG69 EGU2011-7765
Leonardo Contreira, Mustafa Yucel, Jean-Pierre Brulport, Maurice Comtat, and Nadine Le Bris
 Comparative Assessment of Potentiometric and Voltammetric Sensors for Autonomous Monitoring in Deep Sea Sulfidic Environments

- BG70 EGU2011-8919
Cedric F. A. Floquet, Ambra Milani, Vincent J. Sieben, Samer Abi Kaed Bey, Edward M. Waugh, Robin J. Brown, Lee R. Fowler, Peter J. Statham, Douglas P. Connelly, Hywel Morgan, Matthew C. Mowlem and the MOMARSAT (Pourquoi pas?) science party Team
 Development of robust micro-colourimetric analysers for in situ detection and long term monitoring of trace metals in seawater.
- BG71 EGU2011-6216
Xiang Xiao, Jinquan Chen, Wei Xie, Anna-Louise Reysenbach, Stefan M Sievert, AnLong Xu, and Fengping Wang
 Comparative metagenomics of microbial communities inhabiting different hydrothermal chimneys
- BG72 EGU2011-13556
Alejandro Estradas-Romero, Katy Juárez-López, and Rosa Maria Prol-Ledesma
 First description of bacterial populations at shallow hydrothermal vents
- BG73 EGU2011-2820
Sungjae Lee, Kanghee Cho, Bongju Kim, Daewoong Wi, Nagchoul Choi, and Cheonyoung Park
 Effect of Bacterial attachment to surface of pyrite on bioleaching efficiency using indigenous acidophilic bacteria
- BG74 EGU2011-2808
Daewoong Wi, Bongju Kim, Kanghee Cho, Nagchoul Choi, Sungjae Lee, and Cheonyoung Park
 Characteristics of copper matte bioleaching using indigenous acidophilic bacteria for recovering the valuable resources
- BG75 EGU2011-2811
Bongju Kim, Kanghee Cho, Daewoong Wi, Nagchoul Choi, Sungjae Lee, and Cheonyoung Park
 Effect of temperature on efficiency of galena bioleaching using indigenous acidophilic bacteria
- BG76 EGU2011-2816
Kanghee Cho, Bongju Kim, Daewoong Wi, Nagchoul Choi, Sungjae Lee, and Cheonyoung Park
 Characteristics of chalcopyrite bioleaching using indigenous acidophilic bacteria for recovering the valuable resources

ESSI2 – Informatics in Oceanography (co-listed) – Orals

Convener: Giuseppe M.R. Manzella | Co-Conveners: Dick M. A. Schaap, Sissy Iona

Room: 19

Chairperson: Giuseppe Manzella

- 10:30–10:45 EGU2011-1802
Dick Schaap and SeaDataNet Consortium
 SeaDataNet: Development of a Pan-European infrastructure for ocean and marine data management
- 10:45–11:00 EGU2011-2098
Stefano Salon, Giorgio Bolzon, Anna Teruzzi, Paolo Lazzari, Simone Campagna, and Federico Ficarelli
 E-Infrastructures for the operational forecasts of the biogeochemical state of Mediterranean Sea: experiences from DORII and MyOcean projects
- 11:00–11:15 EGU2011-3529
Helen Graves, Dick Schaap and the Geo-Seas Consortium Partners Team
 Geo-Seas - building a unified e-infrastructure for marine geoscientific data infrastructure in Europe
- 11:15–11:30 EGU2011-3939
Stephen Miller, Helen Graves, Suzanne Carbotte, Robert Arko, Cynthia Chandler, Dru Clark, Aaron Sweeney, and Karen Stocks
 Rolling Deck to Repository: Opportunities for US-EU Collaboration
- 11:30–11:45 EGU2011-6797
Cristina Tronconi and Vega Forneris
 Realization of European interoperability in Ocean Science via the CNR-ISAC informatic infrastructure, based upon open-source technology implemented on a Grid environment.
- 11:45–12:00 EGU2011-11957
David Mills, Kathryn Keeble, Rodney Forster, Simon Keeble, Stephen Malcolm, and Jon Rees
 The EMECO Marine Data Tool - an 'on-line' data integration and synthesis information system for marine environmental assessments

ESSI2 – Informatics in Oceanography (co-listed) – Posters

Convener: Giuseppe M.R. Manzella | Co-Conveners: Dick M. A. Schaap, Sissy Iona

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dick Schaap

- XL189 EGU2011-1803
Marco Gambetta and **Giuseppe M.R. Manzella**
Implementation of quality control procedures by means of
- XL190 EGU2011-1827
Roger Proctor
Australian initiatives in marine information infrastructure
- XL191 EGU2011-8578
Cynthia Chandler, Molly Allison, Robert Groman, Patrick West, Stephan Zednick, and Andrew Maffei
Developing an Ontology for Ocean Biogeochemistry Data
- XL192 EGU2011-10279
Matteo Vinci, **Alberto Brosich**, Alessandro Altenburger, Fabio Brunetti, Alessandra Giorgetti, Stefano Kuchler, and Elena Partescano
Real-time system to automatic harvesting of several marine data types, granting interoperability and resilience, using ISO and OGC standards
- XL193 EGU2011-10647
Angelos Lykiardopoulos, Gilbert Maudire, Konstantinos Kalkavouras, Valérie Harscoat, Marc Coriou, and Athanasia Iona
Monitoring large computer networks and distributed services - The SeaDataNet Project Experience
- XL194 EGU2011-9671
Md Sumon Shahriar, Paulo De Souza, and Greg Timms
Smart Information Retrieval for Marine Sensor Data
- XL195 EGU2011-11549
Charles Troupin, Jean-Marie Beckers, Damien Sirjacobs, Michel Rixen, Pierre Brasseur, Jean-Michel Brankart, Alexander Barth, Aida Alvera-Azcárate, Arthur Capet, Mohamed Ouberdous and the DIVA Team
Advanced Data Interpolating Variational Analysis. Application to climatological data.
- XL196 EGU2011-11545
Pekka Alenius, Riikka Hietala, Kimmo Tikka, Seppo Kaitala, Sanna Kujansuu, Riitta Olsonen, Ilkka Priha, and Mikko Virkkunen
Quality comes first in system design
- XL197 EGU2011-13326
Charles Troupin, Jean-Marie Beckers, Mohamed Ouberdous, Alexander Barth, Marie-Eve Toussaint and the SeaDataNet Team
Overview and progresses of the SeaDataNet regional climatologies
- XL198 EGU2011-10889
Maureen Pagnani, Richard Lampitt, Kate Larkin, Sue Hartman, Jon Campbell, Athanasios Gkritzalis, Corinne Pebody, Henry Ruhl, David Billett, Veit Hühnerbach, Doug Masson, Svein Østerhus, Ingunn Skjelvan, Kostas Nittis, Vasilis Lykousis, Leonidas Perivoliotis, Dimitris Kassis, George Petihakis, Vanessa Cardin, Manuel Bensi, Fabio Brunetti, Alessandra Giorgetti, Roberto Bozzano, Sara Pensieri, Doug Wallace, Johannes Karstensen, Christian Berndt, Imants Priede, Anne Holford, Tomasz Niedzielski, Lee Hastie, Alan Jamieson, Laurent Coppola, Christian Tamburini, Dominique Lefèvre, Anne Robert, Sylvie Pouliquen, Thierry Carval, Sylvain Ghiron, Octavio Llinás-González, Andrés Cianca, Oscar Melicio, Carlos Santos, Anibal Medina, Pericles Silva, Ivanice Monteiro, Melchor González-Dávila, and Magdalena Santana-Casiano
The EuroSITES open ocean observatory network: the data managers' perspective

GI-4 – Instrumentation, measurement strategies and methods for ocean-based geoscience investigations (co-listed)

– Orals

Convener: Christoph Waldmann | Co-Conveners: Laura Beranzoli, Ingrid Puillat-Felix

Room: 42

Chairperson: C. Waldmann

- 08:30–09:00 EGU2011-3687
Richard Lampitt, Kate Larkin, Sue Hartman, Athanasios Gkritzalis, Maureen Pagnani, Corinne Pebody, Henry Ruhl, David Billett, Veit Hühnerbach, Doug Masson, Svein Østerhus, Kostas Nittis, Vasilis Lykousis, George Petihakis, Vanessa Cardin, Manuel Bensi, Fabio Brunetti, Roberto Bozzano, Sara Pensieri, Doug Wallace, Johannes Karstensen, Christian Berndt, Imants Priede, Anne Holford, Tomasz Niedzielski, Lee Hastie, Alan Jamieson, Laurent Coppola, Christian Tamburini, Dominique Lefèvre, Anne Robert, Sylvie Pouliquen, Thierry Carval, Sylvain Ghiron, Octavio Llinás-González, Andrés Cianca, Oscar Melicio, Carlos Santos, Anibal Medina, Pericles Silva, Ivanice Monteiro, Melchor González-Dávila, and Magdalena Santana-Casiano
The EuroSITES open ocean observatory network: Results and future vision
- 09:00–09:30 EGU2011-5288
John Orcutt, Frank Vernon, Matthew Arrott, Oscar Schofield, Cheryl Peach, Alan Chave, Mark James, and Michael Meisinger
A proposal for an integrated ocean network for long-term climate and seafloor studies

- 09:30–09:45 EGU2011-9697
John Graybeal, John Orcutt, Frank Vernon, Matthew Arrott, Oscar Schofield, Cheryl Peach, Alan Chave, Mark James, and Michael Meisinger
 The design of the NSF Ocean Observatories Initiative Cyberinfrastructure
- 09:45–10:00 EGU2011-2270
Paolo Favali, Ingv Team, Infn Team, and Tecnomare S.p.A.
 NEMO-SN1 (western Ionian Sea, off Eastern Sicily): Example of architecture of a cabled observatory

COFFEE BREAK

Chairperson: L. Beranzoli

- 10:30–10:45 EGU2011-5517
Pierre Marie Sarradin, Ana Colaço, Mathilde Cannat, Jérôme Blandin, Julien Legrand, Jozée Sarrazin, Javier Escartin, and The Momar d partners
 The MOMAR-D-project: a challenge to monitor the Lucky Strike vent field in real-time.
- 10:45–11:00 EGU2011-9266
 Cansun Guralp, Suleyman Tunc, Samim Ada, Chris Pearcey, and **Horst Rademacher**
 A New Concept for Multidisciplinary Cabled Ocean Bottom Systems: the Marmara Sea Network
- 11:00–11:15 EGU2011-5429
 Lucie Pautet, Chris Barnes, **Mairi Best**, Benoit Pirenne, and Fern Johnson
 NEPTUNE Canada cabled ocean observatory: latest developments and opportunities
- 11:15–11:30 EGU2011-10060
Jérôme Blandin, Julien Legrand and the MoMAR-D engineering & science (1), (2), (3), (4) Team
 Technical Advances in Near Real Time Seafloor Monitoring Implemented for the MoMAR-D Project
- 11:30–11:45 EGU2011-8529
Anne Deschamps, Dominique Lefèvre and the BJS/TEXREX Team
 Multidisciplinary permanent sea floor observation at Antares Site
- 11:45–12:00 EGU2011-8794
Jean-Yves Royer, Julie Perrot, Claude Guennou, Jean-François D'Eu, and Cédric Brachet
 Autonomous-hydrophone arrays: a powerful tool for long-term monitoring of geological processes, biological activity and iceberg tremors over large and remote areas of the ocean

GI-4 – Instrumentation, measurement strategies and methods for ocean-based geoscience investigations (co-listed)

– Posters

Convener: Christoph Waldmann | Co-Conveners: Laura Beranzoli, Ingrid Puillat-Felix

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: I. Puillat

- A78 EGU2011-3892
Jurgen Mienert, Stefan Bünz, Benedicte Ferre, Gaurav Dutta, and Vipul Silwal
 Long-Term Seismological Observations of Eruptions of the Håkon Mosby Mud Volcano at the Barents-Sea Continental Margin (ESONET- LOOME Demonstration Mission)
- A79 EGU2011-4666
Eiichi Asakawa, Fumitoshi Murakami, Yoshihiro Sekino, Taku Okamoto, Koji Ishikawa, Hitoshi Tsukahara, Motonori Higashinaka, and Takuya Shimura
 Development of Vertical Cable Seismic System
- A80 EGU2011-10837
Giuseppe Puglisi, Salvatore Gambino, Paolo Favali, and Riccardo Papaleo
 Guidelines for seafloor geodesy nearby of Sicilian active volcanic area
- A81 EGU2011-9678
Claire D'Este, Paulo de Souza, Chris Sharman, and Simon Allen
 Automated Design of a Low-Cost Marine Sensor Network
- A82 EGU2011-5618
Francesco Chierici, Luca Pignagnoli, Davide Embriaco, and Stephen Monna
 The tsumani detector prototype deployed in the Gulf of Cadiz: data collection and functionality evaluation
- A83 EGU2011-5680
Francesco Chierici, Luca Pignagnoli, Davide Embriaco, and Stephen Monna
 The tsumani detector prototype installed on board of SN1-cabled abyssal station.

- A84 EGU2011-10682
Arnulf Schiller, Klaus Klune, David Ottowitz, and Ingrid Schattauer
 On the Ability of Airborne Electro-Magnetic Systems for Areal Indirect Measurement of Seawater Temperature/Salinity with Depth Resolution
- A85 EGU2011-10323
Viviana Piermattei, Marco Marcelli, Alice Madonia, and Umberto Mainardi
 Technological advances in fluorimetric measure: TFLAP upgrade
- A86 EGU2011-1615
Mikhail Smirnov, Svetoslav Marechek, and Mikhail Danilytchev
 Ground based L-band microwave measurements in the Black sea
- A87 EGU2011-943
Dale Green and Francois Leroy
 Adding a spatial and temporal dimension to Multidisciplinary Seafloor Observatories

OS3.4/EG9 – Deep Sea Frontier - A European Challenge (co-organized) – Posters

Convener: Achim Kopf | Co-Conveners: Timothy Ferdelman, Heiko Pälike, Catherine Mevel, Antje Boetius

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00

Chairperson: Timothy Ferdelman, Catherine Mevel

- XY601 EGU2011-2368
Beth Orcutt, Laura Lapham, and Peter Girguis
 Introducing MIMOSA - A Microbial Methane Observatory for Seafloor Analysis
- XY602 EGU2011-8714
Hans Roy, Jens Kallmeyer, Rishi R Adhikari, Britta Gribsholt, Bo B Jørgensen, and Steven D'Hondt
 Aerobic microbial respiration in ancient oxic sediments below the Subtropical Gyres
- XY603 EGU2011-5092
Timothy Ferdelman, Wiebke Ziebis, and James McManus
 North Pond: A model for the biogeochemical development of an open ocean sub-seafloor sedimentary ecosystem?
- XY604 EGU2011-3558
Alan Jamieson and Imants Priede
 Biological investigation and exploration of the hadal zone (6000 - 11,000 m)
- XY605 EGU2011-5099
Bo Barker Jørgensen and R. John Parkes
 The deep biosphere - a European challenge
- XY606 EGU2011-7500
Nils Risgaard-Petersen, Laura M Wehrmann, Heather N Schrum, Emily A Walsh, Youngsook Huh, Minoru Ikehara, Timothy G Ferdelman, and Steven D'Hondt
 Organic matter mineralization in the deep subseafloor sediment of the northeastern Bering Sea Slope (IODP Exp. 323)
- XY607 EGU2011-9158
Anthony Grehan
 CoralFISH: Ecosystem based management of corals, fish and fisheries in the deep waters of Europe and beyond
- XY608 EGU2011-11086
Heiko Pälike and Work Package 6 of the Deep-sea Frontiers Working Team
 Deep-Sea and Sub-Seafloor Frontiers: WP6 report for Climate Change and Response of Deep-Sea Biota
- XY609 EGU2011-8227
Miquel Canals and Vasilis Likousis
 The Deep Sea & Sub-Seafloor Frontier: Sediment Dynamics and Geohazards
- XY610 EGU2011-6746
Xavier Tubau, Galderic Lastras, Miquel Canals, Oriol Veres, David Amblas, Xavier Rayo, Aaron Micallef, and Hermesione Shipboard Party
 Geomorphology of the Foix submarine canyon system, NW Mediterranean Sea
- XY611 EGU2011-12146
Oriol Veres, Galderic Lastras, Miquel Canals, Sara Lafuerza, Ben De Mol, David Amblas, Ruth Durán, Sergio Costa, Aaron Micallef, Christian Berndt and the HERMESIONE Shipboard Team
 Relief forming processes in the Eivissa channel, Western Mediterranean
- XY612 EGU2011-4965
Aaron Micallef, Douglas G. Masson, Christian Berndt, and Dorrik A.V. Stow
 Failure processes in submarine landslides: A geomorphometric approach.

- XY613 EGU2011-9104
Achim Kopf and the IODP 748-full2 proponents Team
Drilling and monitoring of natural and man-made landslide trigger mechanisms at the Ligurian slope (Mediterranean Sea): the tsunamigenic 1979 Nice Airport landslide, southern France
- XY614 EGU2011-10204
Bernard Avril, Roberto Azzolini, Paola Campus, **Paul Egerton**, Niall McDonough, and Bonnie Wolff-Boenisch
Towards a European, Multidisciplinary Research Strategy in Polar, Deep-Sea, Environmental sciences
- XY615 EGU2011-10480
Angelo De Santis, Phil Weaver, and DS3F Work Package 8 Working Group
Deep sea frontier infrastructure and synergy in Europe
- XY616 EGU2011-3204
Cemil Gürbüz, Dogan Kalafat, Mehmet Y?lmazer, Süleyman Tunç, and Sezim Güvercin
Marmara Sea Bottom Observatory (MSBO) Project and Preliminary Results From First Observations
- XY617 EGU2011-10622
Sarah Davies, Mike Lovell, Peter Fitch, Jenny Inwood, and Joanne Tudge
Optimising subsurface characterisation from core and logs: applications for the deep-sea frontier
- XY618 EGU2011-9076
Achim Kopf and Pierre Henry
Real-Time Amphibic Monitoring and Borehole Observatories (RAMBO)

OS4.1/CL4.11 – Open session on Operational Oceanography (co-organized) – Posters

Convener: Richard Allard | Co-Conveners: Eric Dombrowsky, Michel Rixen, Emanuel Coelho

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michel Rixen and Emanuel Coelho

- XY619 EGU2011-2813
Robin Wedd, Oscar Avles, and Yonghong Yin
Multi-Variate Salinity Assimilation Pre- and Post-Argo
- XY620 EGU2011-2951
Pierre Mathiot, Christof Konig Beatty, **Hugues Goosse**, Thierry Fichet, and Francois Massonnet
Assimilation of sea ice freeboard and concentration data in a coupled ice-ocean model.
- XY621 EGU2011-2969
Melanie Juza, Bernard Barnier, and Thierry Penduff
Contribution of the shallow water areas not sampled by the Argo floats to the variability of the global ocean heat content
- XY622 EGU2011-3062
Nicolas Freychet
Ocean data assimilation with a reduced rank smoother
- XY623 EGU2011-3348
Uwe Stöber and James N. Moum
Automated detection of nonlinear internal waves from seafloor pressure time series
- XY624 EGU2011-3516
Laurent Parent, Nicolas Ferry, Gilles Garric, Olivier Legalloudec, Charles-emmanuel Testut, Bernard Barnier, Eric Greiner, Stephanie Guinehut, Clement De boyer montegut, and Clement Bricaud
GLORYS2: A Global ocean reanalysis simulation of the period 1992-present
- XY625 EGU2011-3640
Lea Wynn and Mark Cobb
Mode Water in the Sea of Japan: A Study on the Reproducibility of Mode Water in the Data-Assimilating Regional Navy Coastal Ocean Model
- XY626 EGU2011-3826
Sheila Natalí Estrada Allis, Rui Caldeira, Xavier Couvelard, Francisco Machín, Ángel Rodríguez Santana, and Pablo Sangrà
Towards the construction of a validated numerical system to study the mesoscale dynamics of the North East Atlantic (2003-2006)
- XY627 EGU2011-4941
Atanas Palazov, Veselka Marinova, Violeta Slabakova, and Asen Stefanov
Bulgarian Activities in the building of Black Sea In Situ Thematic Assembly Centre within MyOcean project
- XY628 EGU2011-6336
George Galanis, George Zodiatis, Dan Hayes, Andreas Nikolaidis, and George Kallos
CYCOFOS new wave forecasting system incorporating sea currents
- XY629 EGU2011-6903
Claire Dufau, Isabelle Pujol, Yannice Faugère, and Marie-Hélène Rio
Regional High-Resolution Altimeter Products for Model Assessment and Data Assimilation

- XY630 EGU2011-8983
Jay Veeramony, Mark Orzech, and Hans Ngodock
Twin Experiment Study Using a Discretized Adjoint Model for SWAN
- XY631 EGU2011-12171
Svetlana Losa, Jens Schröter, Sergey Danilov, Lars Nerger, Tijana Janjić, and Frank Janssen
Assimilating NOAA SST data into BSH operational circulation model for the North and Baltic Seas: What can we learn about the model and data
- XY632 EGU2011-11519
Abdelali El Moussaoui, Coralie Perruche, Eric Greiner, and Marion Gehlen
Integration of biogeochemistry and ecology model to Mercator ocean systems
- XY633 EGU2011-9916
Marta Umberto, Nina Hoareau, Joaquim Ballabrera, and Marcos Portabella
Multivariate statistical model for the air-sea heat fluxes
- XY634 EGU2011-10683
Baptiste Murre, Jacopo Chiggiato, Fabian Lenartz, and Michel Rixen
Ocean temperature uncertainty forecast from 3-D super-ensemble modelling
- XY635 EGU2011-10725
Baptiste Murre and Alberto Alvarez
Operational glider adaptive sampling during REP10 experiment
- XY636 EGU2011-10112
Juan Fernandez, Gabriel Jorda, Vicente Gracia, and Manuel Espino
Operational sediment transport modelling in the Western Mediterranean. System implementation and quality assessment
- XY637 EGU2011-11110
Gianluca Volpe, Simone Colella, Rosalia Santoleri, Vega Forneris, and Cristina Tronconi
Operational oceanography in the Mediterranean Sea: the ocean colour satellite observing system
- XY638 EGU2011-12875
Sebastian Grayek, Joanna Staneva, Johannes Schulz-Stellenfleth, Wilhelm Petersen, and Emil V. Stanev
Use of FerryBox surface temperature and salinity measurements to improve model based state estimates for the German Bight
- XY639 EGU2011-12265
David Lewis, Richard Gould, Adam Lawson, Zhongping Lee, Paul Martinovich, Ronald Vaughan, Samir Ahmed, Alex Gilerson, Tristan Harmel, and Giulietta Fargion
Vicarious Calibration of the Hyperspectral Imager for Coastal Oceans (HICO) to Improve Bio-Optical Property Retrievals for Hydrodynamic Models
- XY640 EGU2011-11193
Johannes Schulz-Stellenfleth, Emil Stanev, and Joanna Staneva
Assimilation of HF radar data into a 3D primitive equation model to improve forecasts of the circulation in the German Bight
- XY641 EGU2011-8793
Didier Jourdan, Mathilde Faillot, and Claire Maraldi
SOAP-3: An example of integrated oceanographic information system for naval applications
- XY642 EGU2011-4404
Xunqiang Yin, Fangli Qiao, Changshui Xia, and Yongzeng Yang
Using Ensemble Adjustment Kalman Filter to assimilate Argo profiles in a coastal OGCM
- XY643 EGU2011-3790
Atanas Palazov, Emil Stanev, Georgi Korchev, Elisaveta Peneva, and Violeta Slabakova
Development of National research infrastructure as a Bulgarian component of the Euro ARGO network - Bul ARGO
- XY644 EGU2011-8833
Ed Blockley and Alistair Sellar
Assessment of ocean currents in the FOAM system : site-specific vs. feature based analysis
- XY645 EGU2011-8896
Byoung Woong An, Antti Westerlund, and Tapani Stipa
Validation of the Baltic Sea Ice ensemble forecasting
- XY646 EGU2011-9898
Marta Umberto and Joaquim Ballabrera
Do EnKF compare to 4D-Var to retrieve model parameters? The case of a deterministic model assimilating deterministic and stochastic observations
- XY647 EGU2011-11250
Nicolas Ferry, Bernard Barnier, Stéphanie Guinehut, Keith Haines, Simona Masina, Laurent Parent, Sandrine Mulet, Maria Valdivieso, and Andrea Storto
The global ocean reanalysis effort of MyOcean: description and early results

Convener: Susanne Mecklenburg | Co-Conveners: Jordi Font, Nicolas Reul, Matthias Drusch

Room: 7

Chairperson: Susanne Mecklenburg, Matthias Drusch

- 08:30–08:45 EGU2011-13876
Jordi Font and the SMOS L2OS Team
 SMOS sea surface salinity determination: status after one year of operations
- 08:45–09:00 EGU2011-13822
Nicolas Reul, Joseph Tenerelli, Frédéric Paul, and Bertrand Chapron
 Major Results from the SMOS data analysis over the oceans for the seasonal cycle of year 2010
- 09:00–09:15 EGU2011-10869
Sebastien Guimbard, Jerome Gourrion, Roberto Sabia, Carolina Gabarró, Veronica Gonzalez, Marco Talone, Sergio Montero, Justino Martinez, Fernando Perez, and Jordi Font
 Improving SMOS Salinity Retrieval: Brightness Temperature Calibration and Forward Model Adjustment
- 09:15–09:30 EGU2011-6023
Xiaobin Yin, Jacqueline Boutin, Nicolas Martin, and Paul Spurgeon
 Validation of SMOS measurements over ocean and improvement of sea surface emissivity model at L Band
- 09:30–09:45 EGU2011-3756
 Chris Banks, **Christine Gommenginger**, Meric Srokosz, and Helen Snaith
 Validating SMOS ocean salinity using in situ and operational ocean model data in the Tropical Atlantic
- 09:45–10:00 EGU2011-13247
Gary S.E. Lagerloef, Yann Kerr, Eric Anterrieu, and David LeVine
 Simulating Aquarius Ocean Measurements by Resampling SMOS

OS4.4 – Physical and biogeochemical ocean modelling: development, assessment, and applications – Orals

Convener: David Ham | Co-Conveners: Thierry Penduff, Sergey Danilov, Stephen M. Griffies, Marina Levy

Room: 6

Chairperson: David Ham

- 10:30–10:45 EGU2011-2699
Sergey Danilov, Qiang Wang, Dmitry Sidorenko, and Jens Schroeter
 Large-scale ocean modeling on unstructured meshes: current status and perspectives
- 10:45–11:00 EGU2011-259
Colin Cotter
 The Holy Grail for unstructured grid ocean modelling: a finite element pair on triangles without spurious modes
- 11:00–11:15 EGU2011-385
Sean Vitousek and Oliver Fringer
 Physical vs. Numerical Dispersion in Nonhydrostatic Ocean Modeling
- 11:15–11:30 EGU2011-7786
Julien Le Sommer, Francesco d'Ovidio, and Gurvan Madec
 Parameterization of subgrid stirring in eddy resolving ocean models.
- 11:30–11:45 EGU2011-9223
Matthieu Leclair and Gurvan Madec
 Éœz-coordinate, an Arbitrary Lagrangian-Eulerian coordinate separating high and low frequency motions
- 11:45–12:00 EGU2011-1517
Jarle Berntsen
 A perfectly balanced method for estimating the internal pressure gradients in sigma-coordinate ocean models

LUNCH BREAK

Chairperson: Thierry Penduff

- 13:30–13:45 EGU2011-849
Flora MacTavish, Colin Cotter, and Matthew Piggott
 An idealised model of the restratification after open ocean deep using an unstructured mesh
- 13:45–14:00 EGU2011-955
Hannah Hiestler, Matthew Piggott, and Peter Allison
 The use of adaptive meshes in ocean modelling: considerations from simulations of the lock-exchange flow

- 14:00–14:15 EGU2011-3396
Marion Meinvielle, Pierre Brasseur, Jean-Michel Brankart, Bernard Barnier, Thierry Penduff, and Jean-Marc Molines
 Optimal adjustment of atmospheric forcing parameters for long term simulations of the global ocean circulation
- 14:15–14:30 EGU2011-3499
Chuanyu Liu, Armin Koehl, and Detlef Stammer
 Estimating Eddy Induced Tracer Mixing Parameters through Global Ocean Data Assimilation Synthesis
- 14:30–14:45 EGU2011-12242
Matthias Hofmann and Miguel Angel Morales Maqueda
 Changing mid-latitude westerlies and their impact to Southern Ocean eddies in a coarse resolution ocean model.
- 14:45–15:00 EGU2011-3957
Hiroaki Tatebe, Masao Kurogi, Tatsuo Suzuki, Yukio Tanaka, Hiroyasu Hasumi, Masayoshi Ishii, and Masahide Kimoto
 Long-term modulations of mesoscale eddy activities in the Kuroshio-Oyashio confluence zone represented in a high-resolution coupled model, and further model development toward better predictions
- Chairperson: Marina Lévy
- 15:30–15:45 EGU2011-8451
Gennady Chepurin, James Carton, Scott C. Doney, and Ivan Lima
 Impact of Improved Ocean Physical State Estimates on Simulated Interannual Air-Sea CO₂ Flux Variations
- 15:45–16:00 EGU2011-4782
Diego Santaren and Nicolas Gruber
 The relative benefit of different observations for constraining parameters of a marine biogeochemistry/ecological model
- 16:00–16:15 EGU2011-12283
Wolfgang Koeve and Heiner Dietze
 Evaluating coupled ecosystem ocean circulation models: can we trust the concept of preformed nutrients?
- 16:15–16:30 EGU2011-9451
Olaf Duteil, Iris Kriest, Samar Khatiwala, and Andreas Oschlies
 Coupling of a complex biogeochemical model with the Transport Matrix Method : quantification of the impact of margin iron input on the ecosystem.
- 16:30–16:45 EGU2011-9317
Michael Lange, Tony Field, Cheng-Chien Liu, Jon Hill, and Gerard Gorman
 Fast and accurate multi-spectral optics in an ocean model
- 16:45–17:00 EGU2011-13525
Mattheus P. Ueckermann and Pierre F.J. Lermusiaux
 High Order Schemes for Biogeochemical Ocean Dynamics

OS4.6 – Ocean Science in Support of Marine Renewable Energy – Posters

Convener: Daniel Conley | Co-Conveners: Phil Hosegood

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Daniel Conley; Merrick Haller

- XY648 EGU2011-2832
Mark Hemer and David Griffin
 The wave energy resource along Australia's southern margin
- XY649 EGU2011-4304
Gianmaria Sannino, Andrea Bargagli, Adriana Carillo, Luca Liberti, Vittorio Ruggiero, and Piero Lanucara
 Assessment of the present and near future wave potential along the Mediterranean coasts: a high resolution numerical modeling study.
- XY650 EGU2011-6802
Jean-François Dorville, Raphael Cécé, Juvenal Dufaur, Sandrine Samot, Sony Broussillon, Maïna André, and Ruddy Blonbou
 Determination of the marine potential energy in the French West Indies for the building of energy converter pilot
- XY651 EGU2011-9445
Merrick Haller, Pukha Lenée-Bluhm, David Newborn, Tuba Ozkan-Haller, Ken Rhinefrank, David Hill, David Honegger, and Aaron Porter
 Experiments on the near-field and far-field wave effects of WEC arrays

- XY652 EGU2011-9622
Fotis Sotiropoulos, Leonardo P. Chamorro, Seokkoo Kang, and Roger Arndt
 On the structure of turbulence around hydrokinetic turbines in an open channel: Experiments and numerical simulations
- XY653 EGU2011-11944
Francisco J. Ocampo-Torres and Pedro Osuna
 Energy resources evaluation from wave records and historical simulation in the coastal region of the Baja California Peninsula
- XY654 EGU2011-11950
George Kallos, George Galanis, Christina Mitsakou, Panos Athanasiadis, Christos Spyrou, Sarantis Sofianos, and Christina Kalogeri
 Energy resource mapping at the framework of MARINA PLATFORM project
- XY655 EGU2011-12472
 Roberto Mínguez, **Antonio Espejo**, Antonio Tomás, Melisa Menéndez, Fernando J. Méndez, and Inigo J. Losada
 Directional Calibrated Wind and Wave Reanalysis Databases using Instrumental Data for Optimal Design of Off-Shore Wind Farms
- XY656 EGU2011-13546
Rosa María Prol-Ledesma, Carlos Lechuga Deveze, Manel Fernández Ortiga, Antonio Correia, Evgueni Shumilin, Carles Canet, Dayán Rodríguez, and Viridiana Vázquez
 High heat flow and gas discharge in a nascent spreading center in the northern Gulf of California
- XY657 EGU2011-13863
Daniel Conley and Martin Austin
 The Use of HF Radar for Resource Assessment

OS4.7 – Ocean Dynamics and Oil spills – Orals

Convener: Richard Camilli | Co-Conveners: Michael Twardowski, Samuel Djavidnia, Michel Rixen

Room: 7

Chairperson: Richard Camilli, Michael Twardowski, Samuel Djavidnia

- 10:30–10:45 EGU2011-3560
Kenneth Grembowicz, Jerry Townsend, Robert Wahl, and Richard Myrick
 Naval Oceanographic Office Activities Related to the Deepwater Horizon Oil Spill
- 10:45–11:00 EGU2011-6187
Michela De Dominicis, Nadia Pinardi, George Zodiatis, and Robin Lardner
 Advanced marine oil spill modelling for short term forecasting and applications to the Mediterranean Sea
- 11:00–11:15 EGU2011-11597
Caterina Sara Livia Grimaldi, Irina Coviello, Teodosio Lacava, Nicola Pergola, and Valerio Tramutoli
 RST analysis of optical satellite data for oil spill detection and monitoring: the deepwater horizon platform accident
- 11:15–11:30 EGU2011-13349
Olaf Trieschmann, Leendert Bal, Marin Chintoan-Uta, Samuel Djavidnia, Anne Marie Hayes, Marc Journel, Pedro Lourenco-Bento, Sonja Pelizzari, and Jorge del Río Vera
 CleanSeaNet: The integrated European satellite based oil spill and vessel detection service of EMSA
- 11:30–11:45 EGU2011-13808
Corey Koch, Joseph Needoba, Leslie Slasor, Andrew Barnard, Michael Twardowski, Casey Moore, Cristina Orrico, Scott Pegau, and Paula Cople
 In-situ tracking of oil spectral fluorescence: field data, lab studies, and development of advanced sensors
- 11:45–12:00 EGU2011-14129
Richard Camilli and Dana Yoerger
 Quick and Dirty: Alternative Methods for Estimating Oil Flow Rate from the Macondo Well

OS4.7 – Ocean Dynamics and Oil spills – Posters

Convener: Richard Camilli | Co-Conveners: Michael Twardowski, Samuel Djavidnia, Michel Rixen

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Samuel Djavidnia, Michael Twardowski, Richard Camilli

- XY658 EGU2011-2209
Suman Singha and Tim Bellerby
 ANN-based image segmentation and feature extraction to distinguish oil spills from 'look-alike' spots in SAR imagery

- XY659 EGU2011-2225
Antonio Olita, Andrea Cucco, Barbara Sorgente, Simone Simeone, Leopoldo Fazioli, Alberto Ribotti, and Roberto Sorgente
Evaluation of oil spill hazard and risk for the shorelines of a mediterranean coastal archipelago
- XY660 EGU2011-3264
Silvia Massmann, Frank Janssen, and Stephan Dick
Operational oil drift modeling in Germany: Status and recent developments
- XY661 EGU2011-4936
Joao Janeiro, Flavio Martins, and Anna Zacharioudaki
Oil Spill forecasting tools integrated in an early detection and monitoring system for the Tuscany Archipelago
- XY662 EGU2011-6434
George Zodiatis, Robin Lardner, Michela De Dominicis, Nadia Pinardi, Giovanni Coppini, Xenia Panayidou, Stavros Stylianou, Dan Hayes, Dmitry Solovyov, and Georgios Georgiou
MEDSLIK oil spill prediction system assisting the response agencies in the Southern European seas
- XY663 EGU2011-6894
Valérie Dulière, José Ozer, Ronny Schallier, and Sébastien Legrand
Belgian intervention support tool in case of oil pollution
- XY664 EGU2011-7936
Francesco Bignami, Simone Colella, Andrea Pisano, and Robert H. Evans
Monitoring oil spills at sea with optical satellite sensors: the PRIMI project Optical Observation Module
- XY665 EGU2011-8249
Rosalía Santoleri and the The PRIMI Group Team
The PRIMI Project: an interdisciplinary approach to oil spill monitoring
- XY666 EGU2011-9084
Paula Coble, Robyn Conmy, A. Michelle Wood, Kenneth Lee, Paul Kepkay, Zhengkai Li, and Mary Abercrombie
Fluorescence detection and characteristics of oil during the Deepwater Horizon oil spill
- XY667 EGU2011-11039
René Ungermann, Jan Bossmeyer, Thorsten Dittmar, Rohan Henkel, Frank Lewitzka, Barbara Scholz-Böttcher, Daniela Voss, Malte Wloch, and Oliver Zielinski
Development of an in situ fibre optical sensor for low concentration measurement of Polycyclic Aromatic Hydrocarbons
- XY668 EGU2011-12905
Oliver Zielinski and Nils Robbe
Airborne and in-situ multi-sensor-systems for hydrocarbons in the sea
- XY669 EGU2011-13005
barbara bulgarelli and samuel djavidnia
Oil spill remote sensing in the marine environment: MODIS potentialities
- XY670 EGU2011-14128
Karin Lemkau, J. Samuel Arey, Robert K. Nelson, Emily E. Peacock, and Christopher M. Reddy
Weathering and Fate of a Heavy Fuel Oil: The M/V Cosco Busan Spill
- XY671 EGU2011-14132
Maria Angelucci, Achille Ciappa, Carlo Morucci, Paolo Nicolosi, and Dino Quattrociochi
Satellite based Oil Spill Detection and Sea Surface Parameters

OS5.1/AS1.6 – Internal Gravity Waves (co-organized) – Orals

Convener: Riwal Plougonven | Co-Conveners: Ulrich Achatz, Erich Becker, Chantal Staquet

Room: 7

Chairperson: Riwal Plougonven

- 13:30–13:45 EGU2011-8258
Lars Hoffmann and M. Joan Alexander
Occurrence Frequency of Convective Gravity Waves during the North American Thunderstorm Season
- 13:45–14:00 EGU2011-11235
Pascale Bouruet-Aubertot, Yannis Cuypers, Bruno Ferron, Denis Dausse, Olivier Ménage, and Agus Atmadipoera
Turbulent mixing and its relationship with internal tides in the Indonesian Throughflow as inferred from the INDOMIX cruise
- 14:00–14:15 EGU2011-5383
Robert Scott, John Goff, Alberto Garabato, and George Nurser
Characteristics of lee wave generation in the World Ocean
- 14:15–14:30 EGU2011-2524
Daniel Ruprecht and Rupert Klein
A Reduced Model for Nonlinear Interactions of Gravity Waves with Deep Convective Clouds

- 14:30–14:45 EGU2011-1938
Roger Grimshaw, Karl Helfrich, and Ted Johnson
 The effect of rotation on internal solitary waves
- 14:45–15:00 EGU2011-11816
Mark Fruman, Ulrich Achatz, and Stefan Hicel
 Simulation of breaking inertia-gravity waves using direct numerical simulation and implicit large-eddy simulation

OS5.1/AS1.6 – Internal Gravity Waves (co-organized) – Posters

Convener: Riwal Plougonven | Co-Conveners: Ulrich Achatz, Erich Becker, Chantal Staquet

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Riwal Plougonven

- XY672 EGU2011-5294
Hye-Yeong Chun and Young-Ha Kim
 Effects of the Convective Gravity-Wave Drag Parameterization in the Global Forecast System of the Met Office Unified Model in Korea
- XY673 EGU2011-12997
Corwin Wright and John Gille
 HIRDLS observations of gravity wave momentum fluxes over monsoon regions
- XY674 EGU2011-10778
Rafael Posada, José Luis Sánchez, Eduardo García-Ortega, José Luis Marcos, and Laura López
 Characterization of favourable conditions for gravity wave generation during snow precipitation events using remote sensing and modelling
- XY675 EGU2011-740
Mohammad Mirzaei, Ali R. Mohebalhojeh, Christoph Zülicke, and Farhang Ahmadi Givi
 Inertia-gravity waves generated in a moist baroclinic wave simulation
- XY676 EGU2011-4228
Kelvin Richards, Andrei Natarov, Yuji Kashino, and Wataru Sasaki
 The impact of near-inertial waves on mixing in the equatorial oceanic thermocline
- XY677 EGU2011-4589
Mathieu Leclair, Nicolas Grisouard, Louis Gostiaux, Francis Auclair, and Chantal Staquet
 Reflexion of a plane wave from a slope and wave-induced mean flow
- XY678 EGU2011-6250
Jose Carlos Sanchez-Garrido, Gianmaria Sannino, Luca Liberti, Jesus Garcia Lafuente, and Larry Pratt
 Three-dimensional generation of nonlinear internal tides in the Strait of Gibraltar
- XY679 EGU2011-1550
Chuncheng Guo, Xueen Chen, Vasiliy Vlasenko, and Nataliya Stashchuk
 Numerical simulation on the transformation of large amplitude second mode internal solitary waves over a slope-shelf topography
- XY680 EGU2011-2967
Antonio Martínez-Marrero and Juan M. Ugía
 Observations of near-inertial current variability associated with the passage of island-generated eddies
- XY681 EGU2011-4774
Nikolaos Bakas and Brian Farrell
 On the role of nonnormality in the overreflection of gravity waves
- XY682 EGU2011-10666
Riwal Plougonven, Albert Hertzog, and Lionel Guez
 Non-orographic and orographic sources of gravity waves above Antarctica and the Southern Ocean
- XY683 EGU2011-12697
Peter Spichtinger and Fabian Fusina
 Orographic gravity waves in a time-dependent flow
- XY684 EGU2011-4884
Marko Zirk and Rein Rõõm
 Orographic Drag Formation in Nonhydrostatic Pressure-Coordinate Dynamics I. Spectral Drag Resonances
- XY685 EGU2011-10299
Alexandre Paci, Christoph Knigge, Dieter Etling, Ted Johnson, Gavin Esler, Sebastien Cazin, Emmanuel Cid, Olivier Eiff, and Laurent Lacaze
 Topographic internal waves in the laboratory: two recent experiments carried in the CNRM-GAME stratified water tank
- XY686 EGU2011-10138
Yvan Dossmann, Francis Auclair, and Alexandre Paci
 Interaction of internal gravity waves generated over a ridge with strong density gradients

- XY687 EGU2011-13401
Marius Opsanger Jonassen, Hálfmán Ágústsson, Haraldur Ólafsson, and Joachim Reuder
 On the persistency of mountain generated gravity waves in Iceland.
- XY688 EGU2011-8620
Shaun Lovejoy, Julien Pinel, and Daniel Schertzer
 Atmospheric waves and fractional order wave equations: waves as emergent high Reynolds number phenomena

OS5.2 – Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean – Orals

Convener: Alexander Babanin | Co-Conveners: Miguel Onorato, Fangli Qiao

Room: 11

Chairperson: n.n.

- 08:30–08:45 EGU2011-4955
 Fabrice Ardhuin and **Aron Roland**
 Validation of numerical waves models in strong currents, a tribute to Owen Phillips.
- 08:45–09:00 EGU2011-13650
Aron Roland, Tai-Wen Hsu, Jian-Ming Liao, Yaron Toledo, and Shan-Hwei Ou
 On the extension of the Wave Action Equation for higher order depth and current effects
- 09:00–09:15 EGU2011-4644
Victor Shrira and Sergei Annenkov
 Evolution of random wind wave fields under rapidly changing wind
- 09:15–09:30 EGU2011-9313
Alexander Soloviev, Silvia Matt, and Atsushi Fujimura
 Air-sea interface in hurricane conditions
- 09:30–09:45 EGU2011-4892
Yuliya Troitskaya, Daniil Sergeev, Oleg Druzhinin, Alexander Kandaurov, and Olga Ermakova
 Laboratory investigation and direct numerical simulation of wind effect on steep surface waves
- 09:45–10:00 EGU2011-9201
Paul Liu
 Contemplating Ocean Wave Measurements

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-2418
Dmitry Chalikov and Alexander Babanin
 Numerical investigation of breaking waves in spectral environment
- 10:45–11:00 EGU2011-2889
Alessandro Iafra
 Energy dissipation mechanisms in spilling and in highly aerated plunging breaking events
- 11:00–11:15 EGU2011-10306
Guillemette Caulliez
 Dissipation regimes for short wind waves
- 11:15–11:30 EGU2011-809
Francisco J. Ocampo-Torres
 Non-linear interactions of wind-sea and opposing swell determined through bispectral analysis
- 11:30–11:45 EGU2011-2042
Sergei I. Badulin and Vladimir E. Zakharov
 Scales of nonlinear relaxation and balance of wind-driven seas
- 11:45–12:00 EGU2011-2266
Leonid Lopatoukhin, Alexander Boukhinovsky, and Ekaterina Chernysheva
 New generation of Wind and Wave climate handbooks

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-3519
Peter Janssen
Ocean Wave effects on the daily cycle in SST
- 13:45–14:00 EGU2011-3930
Johannes Gemmrich and Svein Vagle
Observations of wave-induced mixing
- 14:00–14:15 EGU2011-4324
Yeli Yuan and Ming Lu
A unified theory of waves in a general ocean
- 14:15–14:30 EGU2011-1932
Anna Rutgersson, Björn Carlsson, Rajesh Kumar, Alvaro Semedo, Øyvind Sætra, and Øyvind Breivik
Impact of surface waves on the atmosphere in a coupled wave-atmosphere regional climate model
- 14:30–14:45 EGU2011-1080
Lev Shemer and Andrey Zavadsky
On Reynolds stresses over wind waves
- 14:45–15:00 EGU2011-3906
Paul Hwang
Ocean Surface Roughness and Remote Sensing

NP7.1/OS5.3 – Non linear waves, wind-wave-current interactions, internal waves in stratified media and ocean mixing and coastal hydromorphology (co-organized) – Orals

Convener: Vincent Rey | Co-Conveners: Lev Ostrovsky, M. Stive, Philippe Fraunie, Vincent Rey, Margarita Diez, Pascale Bouruet-Aubertot

Room: 17

Chairperson: Vincent Rey

- 15:30–15:45 EGU2011-8220
Vladimir V. Mitkin and Yuli D. Chashechkin
Visualization of Stratified Flows past 2D Bluff Obstacles
- 15:45–16:00 EGU2011-11275
Pascale Bouruet-Aubertot, Hans van Haren, and Pascale Lelong
Stratified inertial subrange as inferred from in situ measurements in the bottom boundary layer of Rockall Channel
- 16:00–16:15 EGU2011-896
Victor Bakhanov, Nikolai Bogatov, Aleksei Ermoshkin, Vadim Lobanov, Olga Kemarskaya, Irina Repina, and Victor Titov
The full-scale investigations of the action of internal waves and inhomogeneous flows on the wind waves in the White Sea
- 16:15–16:30 EGU2011-12826
Nataly Zaytseva, Konstantin A. Gorshkov, and Irina Anatolievna Soustova
Compound solitons of Gardner equation with variable coefficients of cubic nonliarity
- 16:30–16:45 EGU2011-11681
Aleksei Ermoshkin, Irina Soustova, Konstantin Gorshkov, Vyacheslav Dubina, Yulia Troitskaya, and Natalia Zaitseva
Analysis of intense internal wave evolution in the Seas of Japan and Okhotsk using satellite data from synthetic aperture radar and radiometers
- 16:45–17:00 EGU2011-12106
Vladimir A. Kalinichenko and Yuli D. Chashechkin
Structuring and Restructuring of Suspensions in Standing Waves in Tank with and without Topography

Friday, 08 April

BG7.3 – Biogeochemical function and diversity of chemosynthetic deep sea ecosystems (co-listed) – Orals

Convener: Nadine Le Bris | Co-Conveners: Laurent Toffin, Janine Felden, Douglas Connelly, Jozée Sarrazin, Dirk de Beer

Room: 24

Chairperson: n.n.

- 08:30–08:45 EGU2011-13085
Dirk de Beer, Antje Boetius, Jean-Paul Foucher, Tom Feseker, Chris German, Dana Yoerger, Richard Camilli, and James Kinsey
 Observations on volcanic activity of a cold seep, the Hakon Mosby Mud Volcano, (HMMV)
- 08:45–09:00 EGU2011-7308
Tomas Feseker, Dirk de Beer, Jean-Paul Foucher, François Harmegnies, Julien Legrand, Jerome Blandin, Frank Wenzhöfer, and Antje Boetius
 Long-term observation suggests tidal forcing of mud volcanic activity at Håkon Mosby mud volcano, Barents Sea slope
- 09:00–09:15 EGU2011-6677
Eric Boschker, Tanja Moerdijk-Poortvliet, and Dirk de Beer
 Chemoautotrophy at the Hakon Mosby Mud Volcano: in-situ rates and active Bacteria.
- 09:15–09:30 EGU2011-3871
Jurgen Mienert, Doug Connelly, Jens Greinert, Rachel James, Miguel Veloso, Veit Huhnerbach, Jon Campbell, and Sven Iverson
 Chemosynthesis in the Arctic margins
- 09:30–09:45 EGU2011-9853
Janine Felden, Frank Wenzhöfer, Anna Lichtschlag, Petra Pop Ristova, Dirk deBeer, and Antje Boetius
 Temporal changes in chemosynthetic community distribution and biogeochemical processes at the Amon mud volcano (Nile Deep Sea Fan)
- 09:45–10:00 EGU2011-362
Daniela Zeppilli, Marianna Mea, Cinzia Corinaldesi, and Roberto Danovaro
 Mud volcanoes in the Mediterranean Sea are hot spots of exclusive meiobenthic species

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-5548
Jozée Sarrazin, Jérôme Blandin, Julien Legrand, Christian Le Gall, and Pierre-Marie Sarradin
 Mussel community changes and environmental dynamics at Tour Eiffel, MAR
- 10:45–11:00 EGU2011-7653
Michael Aron, Jozée Sarrazin, Pierre-Marie Sarradin, and Grégoire Mercier
 Analysing the temporal dynamics of chemosynthetic ecosystems by using automated image processing tools
- 11:00–11:15 EGU2011-4878
Franck Lartaud, Marc de Rafelis, Crispin Little, Germain Bayon, Benoît Ildefonse, Jérôme Dymont, and Nadine Le Bris
 Fossil bivalves in the Rainbow area: new insight into the diversity and evolution of chemosynthetic communities.
- 11:15–11:30 EGU2011-3791
Ana Colaço, Nereida Cordeiro, Marina Cunha, Sylvie Gaudron, Silvia Lino, and Ricardo Serrão Santos
 Trophic structure of colonization modules at chemosynthetic habitats: a comparative approach
- 11:30–11:45 EGU2011-5513
Annie Bourbonnais, Moritz F. Lehmann, David A. Butterfield, Steven J. Hallam, Allan H. Devol, Marcel M. M. Kuypers, Gaute Lavik, Réal Roy, Bonnie X. Chang, and S. Kim Juniper
 Denitrification as the dominant N-elimination process in hydrothermal vents of the Juan de Fuca Ridge, North-East Pacific Ocean
- 11:45–12:00 EGU2011-3114
Philippe Compère, Sarah Samadi, Magali Zbinden, Gilles Lepoint, Pierre Becker, Sébastien Duperron, Chantal De Ridder, Françoise Gaill, and Caroline Hoyoux
 Decapod crustaceans from deep-sea wood falls in the South Pacific Ocean: diet, trophic level and symbioses.
-

CR9.10 – Sea Ice and Sea Ice-Climate Interactions (co-listed) – Orals

Convener: Daniel Feltham | Co-Conveners: Clare Postlethwaite

Room: 7

Chairperson: Clare Postlethwaite

- 08:30–08:45 EGU2011-2264
Göran Björk, Christian Stranne, and Karin Borenäs
 On the Response of the Arctic Ocean Ice Thickness to External Forcing Perturbations
- 08:45–09:00 EGU2011-899
Julienne Stroeve, Allan Frei, and Debjani Ghatak
 Arctic Sea Ice Influences on Northern Hemisphere Precipitation
- 09:00–09:15 EGU2011-1674
Daniel Pollak, Marika Holland, and David Bailey
 Understanding Changes in the Arctic Basin Sea Ice Mass Budget as Simulated by CCSM4- Implications from Melt Season Characteristics and the Surface Albedo Feedback
- 09:15–09:30 EGU2011-2622
Daniela Flocco and Daniel Feltham
 Incorporation of a new melt pond scheme into a GCM sea ice model component
- 09:30–09:45 EGU2011-11487
Martin Vancoppenolle, Cecilia Bitz, Thierry Fichefet, Hugues Goosse, Christiane Lancelot, and Jean-Louis Tison
 Sensitivity of a one-dimensional, multi-layer, sea ice-microalgae model
- 09:45–10:00 EGU2011-66
Jiayun Zhou, Jean-Louis Tison, Hajo Eicken, Chris Petrich, Nicolas-Xavier Geilfus, Frédéric Brabant, Gauthier Carnat, Tim Papakyriakou, Bernard Heinesch, and Bruno Delille
 O₂/Ar and CH₄ measurements in sea ice : clues for the key status of sea ice in the climate system

COFFEE BREAK

Chairperson: Daniel Feltham

- 10:30–10:45 EGU2011-2879
Francois Massonnet, Thierry Fichefet, Hugues Goosse, Martin Vancoppenolle, Pierre Mathiot, and Christof König Beatty
 Importance of physics in global hindcast simulations of sea ice with NEMO-LIM
- 10:45–11:00 EGU2011-3471
Jan van Angelen, Michiel van den Broeke, and Ron Kwok
 Analysis of wind driven sea ice export through Fram Strait using a high resolution climate model
- 11:00–11:15 EGU2011-10915
Aleksey Marchenko and Dmitry Brazhnikov
 Characteristics of ice cover drift and structure in axially symmetric solutions of sea ice dynamics models with elastic-plastic rheology
- 11:15–11:30 EGU2011-9658
Peter Sammonds, Ben Lishman, and Daniel Feltham
 Sea ice dynamics: the role of friction
- 11:30–11:45 EGU2011-3456
Michel Tsamados, Daniel Feltham, and Alexander Wilchinsky
 Implementation of a new anisotropic rheology into a GCM sea ice component
- 11:45–12:00 EGU2011-10228
Laurent Bertino, Tim Williams, Dany Dumont, and Alison Kohout
 A model for waves-in-ice and sea ice dynamics in the marginal ice zone

CR9.10 – Sea Ice and Sea Ice-Climate Interactions (co-listed) – Posters

Convener: Daniel Feltham | Co-Conveners: Clare Postlethwaite

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Clare Postlethwaite

- XL117 EGU2011-6970
 Lars H. Smedsrud, **Torge Martin**, and Jens Debernard
 Grease ice parameterisation in sea-ice ocean models

- XL118 EGU2011-2277
Nikhil Radia, Daniel Feltham, and Miguel Angel Morales Maqueda
Formation of frazil ice in leads and polynyas
- XL119 EGU2011-2272
Harry Heorton, Daniel Feltham, and Ann Keen
The role of atmospheric jets in ice edge dynamics
- XL120 EGU2011-10158
Alexander Wilchinsky and **Daniel Feltham**
Modelling Coulombic failure of sea ice with leads
- XL121 EGU2011-4095
Philipp Griewank and Dirk Notz
Modelling Sea-ice Desalination
- XL122 EGU2011-14193
Adrian Turner, Elizabeth Hunke, and Cecilia Bitz
Modeling microphysics and salinity evolution of sea ice
- XL123 EGU2011-11756
Olivier Lecomte, **Thierry Fichefet**, and Martin Vancoppenolle
Inclusion of a multi-layer thermodynamic snow scheme in a large scale sea-ice model
- XL124 EGU2011-10976
Sergey Muzylev, Aleksey Marchenko, and Eugene Morozov
Seiche Motions in Ice-Covered Lakes: Theory and Observations
- XL125 EGU2011-7025
Nuala Carson, Miguel Angel Morales Maqueda, Clare Postlethwaite, and Harry Leach
Fast Ice
- XL126 EGU2011-12747
Kay Huebner, Dirk Notz, and Karl-Hermann Wieners
Impact of Snow on Sea Ice Growth
- XL127 EGU2011-12763
Kay Huebner, Davide Zanchettin, and Johann Jungclaus
Multi-decadal Variability of simulated Sea Ice Cover
- XL128 EGU2011-5246
Pierre Rampal, Jérôme Weiss, Clotilde Dubois, Jean-Michel Campin, and Gaël Forget
IPCC climate models do not capture Arctic sea ice drift acceleration: Consequences in terms of sea ice thinning and decline
- XL129 EGU2011-10948
Jan-Peter Schulz
Introducing a sea ice scheme in the mesoscale NWP model COSMO-EU of the German Weather Service
- XL130 EGU2011-1923
Matthieu Chevallier, David Salas y Melia, Vincent Vionnet, Gilles Garric, Sophie Belamari, and Eric Brun
Sea ice-Ocean modeling at CNRM-GAME for global climate studies: recent improvements of the sea-ice component
- XL131 EGU2011-9894
Andreas Born, Kerim H. Nisancioglu, Christoph C. Raible, and Thomas F. Stocker
Dynamical Impact of Changes in Arctic Sea Ice
- XL132 EGU2011-4897
Svenja Kohnemann, Günther Heinemann, David Schröder, **Sascha Willmes**, and Cornelia Koeberle
Investigation of regional sea ice budgets in the Arctic using the sea ice/ocean model NAOSIM
- XL133 EGU2011-146
Sandra Barreira
Differences between temporal (S-Mode) and spatial (T-Mode) principal component analysis of Antarctic sea ice monthly concentration anomalies: relationship with climate variables.
- XL134 EGU2011-5472
Jan Sedlacek, Olivia Maritus, and Reto Knutti
Influence of the Barents Sea on the summer temperature in Europe and Asia
- XL135 EGU2011-6766
Anna Luomaranta, Jari Haapala, Hilppa Gregow, Kimmo Ruosteenoja, Kirsti Jylhä, and Ari Laaksonen
The changes in the Baltic Sea ice cover by 2050
- XL136 EGU2011-8061
Maddalena Bayer-Giraldi, Ilka Weikusat, and Gerhard Dieckmann
A novel antifreeze protein from sea ice diatoms and its influence on ice microstructure
- XL137 EGU2011-12768
Elizabeth Weatherhead, Jim Maslanik, Peter Boveng, Michael Cameron, Robyn Angliss, Erin Moreland, and Robert Gray
New methods for analyzing sea ice and its influence on biological life

OS1.4 – The Southern Ocean and its Role in the Global Climate System – Orals

Convener: Young Hyang Park | Co-Conveners: Michael Meredith, Ralph Timmermann

Room: 6

Chairperson: Young-Hyang Park

- 08:30–08:45 EGU2011-4489
Helen Phillips and Nathan Bindoff
The observed baroclinic structure of the Antarctic Circumpolar Current
- 08:45–09:00 EGU2011-12636
Nicolas Wienders, Kevin Speer, and Breck Owens
Preliminary results from the subsurface Lagrangian component of the DIMES Experiment
- 09:00–09:15 EGU2011-9053
Stephen Riser and Annie Wong
Multi-year Observations Under Seasonal Ice in the Antarctic Using Arrays of Profiling Floats
- 09:15–09:30 EGU2011-12148
Christine Provost, Alice Renault, Nicolas Barré, Nathalie Sennéchaël, Véronique Garçon, Joël Sudre, and Oliver Huhn
Two repeat crossings of Drake Passage in austral summer 2006: short term variations and evidence for considerable ventilation of intermediate and deep waters.
- 09:30–09:45 EGU2011-7680
Verena Haid, Ralph Timmermann, Lars Ebner, and Günther Heinemann
Coastal polynyas in the southwestern Weddell Sea: sea ice production and bottom water formation
- 09:45–10:00 EGU2011-6849
Tijana Janjic, Jens Schroeter, Roman Savcenko, Wolfgang Bosch, Alberta Albertella, Reiner Rummel, and Olaf Klatt
Impact of assimilation of dynamic ocean topography from radar altimetry and GRACE/GOCE geoid on Weddell Gyre

COFFEE BREAK

Chairperson: Young-Hyang Park

- 10:30–10:45 EGU2011-9480
Ute Hausmann, Arnaud Czaja, and Dudley Chelton
Observed mesoscale eddy sea surface temperature imprints
- 10:45–11:00 EGU2011-4274
Alexa Griesel, Julie McClean, Sarah Gille, Janet Sprintall, and Mathew Maltrud
How well do Lagrangian diffusivities parameterize the effects of eddies in the Southern Ocean of an eddying model ?
- 11:00–11:15 EGU2011-13400
Ivana Cerovecki, Lynne Talley, and Matthew Mazloff
Southern Ocean air-sea buoyancy flux from an ocean state estimate: can ocean observations provide a valuable constraint on the atmospheric state?
- 11:15–11:30 EGU2011-3317
Hela Sekma and Young- Hyang Park
Poleward heat transport at the SACCF over the Kerguelen Plateau
- 11:30–11:45 EGU2011-8010
Julien Le Sommer and the SouthernCross project science Team
Control of Southern Ocean sea surface temperature variability by air-sea fluxes in an eddy resolving model
- 11:45–12:00 EGU2011-2833
John 'Paul' Spence, John Fyfe, and Andrew Weaver
Southern Ocean response to strengthening winds in an eddy-permitting global climate model

OS1.4 – The Southern Ocean and its Role in the Global Climate System – Posters

Convener: Young Hyang Park | Co-Conveners: Michael Meredith, Ralph Timmermann

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Young-Hyang Park

- XY400 EGU2011-136
Oliver Huhn, Monika Rhein, Klaus Bulsiewicz, and Gerd Rohard
Early results from first sulphur hexafluoride measurements in the Weddell Sea

- XY401 EGU2011-77
Carolina O. Dufour, Julien Le Sommer, Marion Gehlen, James C. Orr, Jennifer Simeon, and Bernard Barnier
Response of Southern Ocean natural carbon cycle to a positive phase of the Southern Annular Mode
- XY402 EGU2011-3485
Torge Martin, Wonsun Park, and Mojib Latif
Two types of multi-centennial variability of the Southern Ocean deep convection: How sea ice tips the scale
- XY403 EGU2011-3796
Jessica Makowski, Don Chambers, and Jennifer Bonin
Using Ocean Bottom Pressure from GRACE to Understand Transport Variations of the Antarctic Circumpolar Current
- XY404 EGU2011-4852
Sergey Lebedev and Svetlana Shauro
Climatic variability of the Antarctic Circumpolar Current position and its intensity based on remote sensing data
- XY405 EGU2011-6379
Mariana Soppa and Astrid Bracher
Phytoplankton size-classes in the Southern Ocean: a remote sensing approach
- XY406 EGU2011-6818
Matthew Donnelly, Harry Leach, and Volker Strass
Modelling the Lazarev Sea: An Inverse Approach to Determining Mass Transport
- XY407 EGU2011-7709
Audrey Hasson, Ariane Koch-Larrouy, and Rosemary Morrow
A Study on the Origin and Fate of Mode Water in the Southern Pacific Ocean.
- XY408 EGU2011-8503
Yaokun Li and Jiping Chao
A two-equilibrium theory for the Antarctic Circumpolar Current(ACC) and its associated meridional circulation
- XY409 EGU2011-9625
Maxim Nikurashin and Raffaele Ferrari
Global energy conversion rate from geostrophic flows into internal lee waves in the deep ocean
- XY410 EGU2011-11560
Emanuela Rusciano, Sabrina Speich, and Michel Arhan
Observations of the interocean exchanges and spreading of the Antarctic Intermediate Water south of Africa
- XY411 EGU2011-12213
Ramiro Ferrari, Christine Provost, Alice Renault, Nicolas Barré, Nathalie Sennéchaël, and Jae Hak Lee
Times series of velocity, temperature and salinity in the Ona Basin, Southern Drake Passage
- XY412 EGU2011-12815
Kjersti Opstad Strand, Svein Østerhus, and Elin Darelus
Long term variations of the Ice Shelf Water in the Southern Weddell Sea
- XY413 EGU2011-13078
Arnaud David, Sabrina Speich, and Bruno Blanke
The Southern Ocean frontal system south of Africa calculated from satellite-derived dynamic height
- XY414 EGU2011-13765
Nicolas Barré, Christine Provost, Nathalie Sennéchaël, and Alice Renault
Structure of the Antarctic Circumpolar Current in Drake Passage observed from satellite altimetry
- XY415 EGU2011-2286
Roman Tarakanov
Circulation of Circumpolar and Pacific Deep Waters near the Shackleton Ridge, Drake Passage
- XY416 EGU2011-4354
Clothilde Langlais, Steve Rintoul, and Andreas Schiller
Eddy response to wind forcing in the Southern Ocean
- XY417 EGU2011-4481
Lavinia Patara, Claus Böning, Arne Biastoch, and Erik Behrens
Towards the development of a modeling framework for the study of Southern Ocean variability from interannual to multi-decadal time scales
- XY418 EGU2011-7976
Maxim Nikurashin and Geoffrey Vallis
A theory of deep stratification and overturning circulation in the ocean
- XY419 EGU2011-9329
Steven van Heuven, Harro A.J. Meijer, Mario Hoppema, and Hein J.W. de Baar
Carbon storage in the South Atlantic Ocean. Assessing time trends in Cant with a novel, multiple-cruises variant of the MLR-technique: Time Series Residuals (TSR)
- XY420 EGU2011-9989
Nadine Tisnérat-Laborde, Bruno Delille, Melchor Gonzalez-Davila, Juana Magdalena Santana-Casiano, Louise Bordier, Christine Hatté, Christophe Moreau, Martine Paterne, Marie Boyé, and Sabrina Speich
Evolution of dissolved inorganic radiocarbon in the eastern Atlantic sector of the Southern Ocean

- XY421 EGU2011-10471
Margarita Palmer, Damià Gomis, Maria del Mar Flexas, Gabriel Jordà, Alberto C. Naveira-Garabato, Loic Jullion, and Takamasa Tsubouchi
 Water mass pathways, transports, and biochemical properties over the South Scotia Ridge west of 50°W
- XY422 EGU2011-11968
Alice Renault, Christine Provost, Ramiro Ferrari, Nicolas Barré, Nathalie Sennéchaël, and Jae Hak Lee
 Three years of velocity, temperature and salinity time series in the Yaghan Basin, Northern Drake Passage
- XY423 EGU2011-13604
Tony Lee, Will Hobbs, Josh Willis, Daria Halkides, Ichiro Fukumori, Ed Armstrong, Akiko Hayashi, Tim Liu, Bill Patzert, and Ou Wang
 Record warming in the South Pacific and western Antarctica associated with the 2009-10 El Niño

CL2.5/OS1.5 – Global and regional sea level rise and variability (co-organized) – Orals

Convener: Svetlana Jevrejeva | Co-Conveners: Anny Cazenave, Aslak Grinsted

Room: 15

Chairperson: Aslak Grinsted

- 08:30–08:45 EGU2011-3244
pierre prandi, michael ablain, nicolas picot, and anny cazenave
 Sea level variability in the Arctic Ocean from satellite altimetry
- 08:45–09:00 EGU2011-3793
Christopher Piecuch and Rui Ponte
 Low-Frequency Variability in Regional Sea Level: The Roles of Advection, Diffusion and Surface Buoyancy Fluxes
- 09:00–09:15 EGU2011-4343
john Moore, svetlana Jevrejeva, and aslak Grinsted
 The historical global sea level budget
- 09:15–09:30 EGU2011-5508
Riccardo Riva, Jonathan Bamber, David Lavallée, and Bert Wouters
 Sea-level fingerprint of continental water and ice mass change from GRACE
- 09:30–09:45 EGU2011-6046
Bo Christiansen, Torben Schmith, and Peter Thejll
 How well can we reconstruct global sea level rise and variability?
- 09:45–10:00 EGU2011-6278
Isabel M. Vigo, José M. Sánchez Reales, Mario Trottini, and Benjamin F. Chao
 Mediterranean sea level variations with regional acceleration/deceleration during 1993-2008

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-8229
Stefan Rahmstorf, Martin Vermeer, and Mahé Perrette
 Robustness of semi-empirical sea level projections
- 10:45–11:00 EGU2011-8956
Ichiro Fukumori
 Distinguishing Sea Level Change due to Heating and Freshwater Input from Redistribution by Ocean Circulation
- 11:00–11:15 EGU2011-9264
Christopher W. Hughes, Joanne Williams, Rory Bingham, Chris Wilson, and Vladimir Stepanov
 Contributions of bottom pressure and steric signals to regional sea level variability: Extracting the physics from numerical models.
- 11:15–11:30 EGU2011-13130
Mahé Perrette, Riccardo Riva, Felix Landerer, and Malte Meinshausen
 Probabilistic projection of regional sea-level
- 11:30–11:45 EGU2011-13300
Gabriel Jordà, Damià Gomis, Francisco M. Calafat, and Marta Marcos
 Understanding Mediterranean sea level long term variability through a simple conceptual model. Local versus remote forcing.
- 11:45–12:00 EGU2011-1405
Julian Kuhlmann, Henryk Dobslaw, and Maik Thomas
 Improved Modelling of Sea-Level Patterns by Incorporating Loading and Self-Attraction

CL2.5/OS1.5 – Global and regional sea level rise and variability (co-organized) – Posters

Convener: Svetlana Jevrejeva | Co-Conveners: Anny Cazenave, Aslak Grinsted

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- XL29 EGU2011-1543
Andrzej Jankowski and Wieslaw Maslowski
Dependence of sea level variability in the Nordic Seas on the NAO - results from a Pan-Arctic coupled ice-ocean model
- XL30 EGU2011-5157
Robert Tenzer and Vladislav Gladkikh
Analysis of the tide-gauge records in New Zealand
- XL31 EGU2011-5257
Curtis Collins, Affonso Mascarenhas, and Rodney Martinez
Structure of Ocean Circulation between the Galapagos Islands and Ecuador
- XL32 EGU2011-6693
Svetlana Jevrejeva, John Moore, and Aslak Grinsted
Is the present -day rate of sea level rise unprecedented compared to the last 300 years?
- XL33 EGU2011-8225
Marta Marcos, Bernat Puyol, Carmen Herrero i Navarro, María Jesús García Fernández, Guy Woppelmann, Andy Plater, Tim Shaw, and Frazer Bird
The long sea level record at Cadiz (Southern Spain) from 1880 to 2010
- XL34 EGU2011-8440
Samantha Royston, Kevin Horsburgh, and Jonathan Lawry
Application of a soft rule-based model to storm surge and sea level variability
- XL35 EGU2011-8800
Luca Scarascia and Piero Lionello
Links between Sea Level in the NORTHER ADRIATIC SEA and large scale patterns
- XL36 EGU2011-9054
Erricos C. Pavlis, Paraskevas Milas, Keith Evans, Demetris Paradissis, Basil Massinas, and Xenophon Frantzis
THE EASTERN MEDITERRANEAN ALTIMETER CALIBRATION NETWORK - eMACnet
- XL37 EGU2011-9889
Ole Baltazar Andersen, Yongcun Cheng, and Tina Hvid
Regional Sea level change in the Arctic Ocean from a combination of radar and laser altimetry, tide gauges and ocean models
- XL38 EGU2011-10091
Andrew Matthews, Elizabeth Bradshaw, Kathy Gordon, Simon Holgate, Svetlana Jevrejeva, Lesley Rickards, Mark Tamisiea, and Philip Woodworth
The Permanent Service for Mean Sea Level: A review of recent updates
- XL39 EGU2011-10137
Ivica Vilibic, Jadranka Sepic, Marta Marcos, and Gabriel Jorda
Mediterranean sea level variability changes and projections at high frequencies (1-100 days)
- XL40 EGU2011-2230
Detlef Stammer, Neeraj Agarwal, Peter Herrman, **Armin Köhl**, and Roberto Mechoso
Response of the Coupled Ocean-Atmosphere System to Greenland Ice Melting
- XL41 EGU2011-3090
Gilles Larnicol
The ESA Sea Level CCI project
- XL42 EGU2011-4571
Michael Whitworth
Sea level rise and storminess for the south-west of England
- XL43 EGU2011-8649
Svetlana Jevrejeva, John Moore, and Aslak Grinsted
Sea level projections with new generation of scenarios for climate change
- XL44 EGU2011-1859
Olivier Henry, Pierre Prandi, and Anny Cazenave
Arctic sea level changes and variability.
- XL45 EGU2011-2730
Frauke Albrecht, Ralf Weisse, and Hans von Storch
Regional Mean Sea Level Changes in the German Bight
- XL46 EGU2011-8210
Andrey Proshutinsky and Igor Ashik
Rates of sea level change in the Arctic Ocean and decadal variability

- XL47 EGU2011-8313
Kristin Richter, Jan Even Øie Nilsen, and Helge Drange
Contributions to sea level variability along the coast of Norway during the past 60 years
- XL48 EGU2011-9191
Philip Thompson, Gary Mitchum, and Mark Merrifield
Decadal variability in sea level rise rates
- XL49 EGU2011-9726
David Hill, Stephen Griffiths, Dick Peltier, Benjamin Horton, and Torbjorn Tornqvist
High-resolution numerical modeling of tides in the western Atlantic, Gulf of Mexico, and Caribbean Sea during the Holocene
- XL50 EGU2011-10044
Roelof Rietbroek, Sandra-Esther Brunnabend, Jürgen Kusche, and Jens Schröter
What can GRACE gravimetry and altimetry tell us about sea level contributors?
- XL51 EGU2011-11865
Simona Masina, Andrea Storto, Srdjan Dobricic, Pierluigi Di Pietro, Ida Russo, and Antonio Navarra
Impact of data assimilation and model resolution on sea level rise and variability

HS10.2/OS2.3 – Lakes and inland seas (co-organized) – Orals

Convener: Peter Zavialov | Co-Conveners: Jana Friedrich, Elena Roget

Room: 33

Chairperson: n.n.

- 13:30–13:45 EGU2011-13755
Cvetanka Popovska
Tectonic Lakes-Climatic and Anthropogenic Impacts
- 13:45–14:00 EGU2011-10284
Sebastiano Piccolroaz and **Marco Toffolon**
Modelling climate change impacts on deep water renewal in Lake Baikal
- 14:00–14:15 EGU2011-134
Kürşad Kadir Eriş and M.Namık Çatay
Late Pleistocene to Holocene water exchanges between the Marmara and Black seas and water level changes: new evidence from high-resolution seismic and core studies
- 14:15–14:30 EGU2011-7919
Georg Umgieser, Christian Ferrarin, Andrea Cucco, Angel Perez Ruzafa, Francesca De Pascalis, Michol Ghezzi, Debora Bellafiore, and Marco Bajo
A comparison study of 6 Mediterranean lagoons with numerical modeling
- 14:30–14:45 EGU2011-10459
Fabio Güttler, Simona Niculescu, Francis Gohin, Yannick Lageat, and Ioan Grigora
Comparing turbidity patterns of Danube Delta waters with remote sensing techniques: from deltaic lakes to the western Black Sea coastal zone
- Chairperson: J.Friedrich
- 15:30–15:45 EGU2011-12075
Victor Stepanenko, Andrey Martynov, Klaus D. Joehnk, Marjorie Perroud, Xing Fang, Zack M. Subin, Frank Beyrich, Annika Nordbo, Dmitrii Mironov, and Jussi Huotari
Thermal regime and water-atmosphere interactions of shallow mid-latitude lakes: a case study within the framework of the Lake Model Intercomparison Project
- 15:45–16:00 EGU2011-4168
Peter Zavialov, Slava Kremenetskiy, Valeriy Peresypkin, Oleg Kopelevich, Ruey-Chy Kao, and Chung-Feng Ding
Submarine Groundwater Discharge in Taiwan Strait
- 16:00–16:15 EGU2011-8473
Alfred Wüest
Near-sediment oxygen dynamics in lakes
- 16:15–16:30 EGU2011-460
Areti Gianni and Ierotheos Zacharias
Morphology and anoxia in enclosed seas: Aitoliko lagoon - Greece
- 16:30–16:45 EGU2011-9848
Elena Debolskaya and Evgeny Yakushev
The mathematical modeling of the Shatura lakes ecological state
- 16:45–17:00 EGU2011-10590
Noel Urban, Galen McKinley, Cory McDonald, and Val Bennington
Carbon cycling in inland seas: contrasts among the Laurentian Great Lakes

17:00–17:15 EGU2011-319

Jana Friedrich, Sorin Balan, Marian-Trajan Gomoiu, Sebastian Naeher, Dan Secieru, Sara Wilcken, and Oliver Zielinski
Monitoring the Formation of Hypoxia on the North-Western Black Sea Shelf

HS10.2/OS2.3 – Lakes and inland seas (co-organized) – Posters

Convener: Peter Zavialov | Co-Conveners: Jana Friedrich, Elena Roget

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

A355 EGU2011-13757

Ivar Murdmaa, Ramiz Aliev, Nikolay Esin, Elena Ivanova, Vyacheslav Krylenko, and V i Rudnev
Rapid sapropel accumulation on the upper continental slope of the NE Black Sea during the past century: a response to the global warming?

A356 EGU2011-1552

Philipp Schneider and Simon Hook
Global trends in lake surface temperatures observed from space

A357 EGU2011-4158

Peter Makkaveev and **Peter Zavialov**
Interannual and interdecadal variability of pH in the seas of Russia

A358 EGU2011-13799

Francesc Forcat, Elena Roget, Lidia Dmitrieva, Marina Shatunova, and Valentina Khan
Evaluation of different errors in lake dynamics due to a poor determination of cloud cover

A359 EGU2011-382

Alexander Osadchiov and Peter Zavialov
Mzymta river plume dynamics in the eastern part of the Black Sea: observations and modeling

A360 EGU2011-533

Alexander Izhitsky and Peter Zavialov
Latest Observations of Thermohaline Structure and Circulation of the Dying Aral Sea

A361 EGU2011-547

Natalia Zhurbas
Effect of river plume on Ekman drift velocity in the sea surface layer (dimensional analysis and numerical simulation)

A362 EGU2011-13957

Vera Rostovtseva, Dmitriy Khlebnikov, Vadim Pelevin, Boris Konovalov, Peter Zavialov, Alexandre Grabovskiy, Oleg Abramov, and Georgiy Karlsen
Mapping small-scale river plumes in the Black Sea using shipboard spectrophotometry and fluorimetry

A363 EGU2011-4136

Anthony Kettle and **Richard Back**
Combined Water and Heat Budget to Constrain the Vertical Flow in a Meromictic Lake

A364 EGU2011-6333

Natalya Demchenko
Development of the seasonal thermally-induced front in the Baltic sea after cold winter 2010

A365 EGU2011-8514

Anh Dao Le T., Francesca De Pascalis, Georg Umgiesser, and Walter Wildi
Seasonal thermal structure variations of Lake Geneva using 3D finite element modeling

A366 EGU2011-10796

Maria Magdalena Eder, Dirk Schlöbinger, Marieke Frassl, Karsten Rinke, and András Bárdossy
Climate sensibility of a large lake - a scenario study using a 3D hydrodynamic model and a statistical weather generator

A367 EGU2011-10781

Philip Wallhead
Inference using plankton models forced by spline interpolations: a study of algal loss processes in Lake Geneva

A368 EGU2011-151

Sebastian Naeher, Adrian Gilli, Rienk Smittenberg, and Carsten Schubert
Use of lipid biomarkers to reconstruct past hypoxia and past environmental conditions in two Swiss lakes

A369 EGU2011-13900

Torben Gentz and Michael Schlüter
High resolution mapping of methane concentrations measured by membrane inlet mass spectrometry around pockmarks in Lake Constance, in the North Sea and in the North Atlantic west of Svalbard

A370 EGU2011-13636

Chen Yi-Ron and Hou Wen-Shang
The relationship between variations of the fish fauna and water quality of the Feitsui reservoir in Taiwan

OS4.4 – Physical and biogeochemical ocean modelling: development, assessment, and applications – Posters

Convener: David Ham | Co-Conveners: Thierry Penduff, Sergey Danilov, Stephen M. Griffies, Marina Levy

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Sergey Danilov

- XY424 EGU2011-11577
David Ham
Automated adjoints: towards a robust method for generating adjoint ocean models
- XY425 EGU2011-5139
Ricardo Matano and Elbio Palma
The upstream spreading of bottom-trapped plumes
- XY426 EGU2011-954
Simon Funke, Chris Pain, Stephan Kramer, and Matthew Piggott
A wetting and drying algorithm for non-hydrostatic models with combined pressure/free-surface
- XY427 EGU2011-11728
Dmitry Sidorenko, Qiang Wang, Sergey Danilov, and Jens Schröter
FESOM under Coordinated Ocean-ice Reference Experiment forcing
- XY428 EGU2011-13465
Qiang Wang, Dmitry Sidorenko, Xuezhu Wang, Claudia Wekerle, Sergey Danilov, and Jens Schröter
Global FESOM simulations under the framework of interannual Coordinated Ocean-ice Reference Experiments (CORE-II)
- XY429 EGU2011-3432
Raphael Dussin, Mélanie Juza, Bernard Barnier, Jean-Marc Molines, Thierry Penduff, and Gilles Garric
Impact of vertical resolution in an eddy-permitting Ocean Global Circulation Model forced with ERA-Interim
- XY430 EGU2011-3586
Karen Guihou, Yann Ourmieres, and Bruno Zakardjian
Assessment of a NEMO-based downscaling experiment for the North-Western Mediterranean region: impacts on the Northern Current and comparison with ADCP data and altimetry products.
- XY431 EGU2011-931
Xi Lu
Numerical study of the water exchange in the Western Baltic Sea
- XY432 EGU2011-1383
Moritz Mathis and Thomas Pohlmann
A Projected Forecast of Hydrodynamic Conditions in the North Sea Using Bias Corrected Atmospheric Forcing Data
- XY433 EGU2011-2575
Yangchun Li and Yongfu Xu
Sensitivity of the uptake of bomb ^{14}C to the air-sea exchange scheme in the Pacific Ocean model
- XY434 EGU2011-4059
Yongfu Xu and Qi Ba
Tritium uptake in the ocean general circulation model of the Pacific Ocean
- XY435 EGU2011-4519
Young-Gyu Park
North Pacific Intermediate Water from two NOAA/GFDL coupled models, CM2G and CM2M
- XY436 EGU2011-13554
Robin Matthews
Observational Datasets for Ocean Acidification Modelling
- XY437 EGU2011-6851
Ana Cordeiro Pires, Rita Nolasco, Jesus Dubert, and Alfredo Rocha
Assessing future climate change in the Iberian Upwelling System using a multi-model mean ensemble
- XY438 EGU2011-2234
Igor Shulman, Mark Moline, Bradley Penta, Stephanie Anderson, Matthew Oliver, and Steven Haddock
Modeling and observations of coupled bio-optical, bioluminescent and physical properties.
- XY439 EGU2011-10376
Jon Hill, Ekaterina Popova, David Ham, Matthew Piggott, and Meric Srokosz
Ocean ecosystem modelling in an adaptive mesh model: a performance evaluation
- XY440 EGU2011-8379
Thomas Slawig, Malte Prieß, and Slawomir Koziel
Surrogate-based optimization of parameters in a marine ecosystem model
- XY441 EGU2011-8735
James While, Ian Totterdell, and Mathew Martin
Assimilation of pCO_2 data into a global biogeochemical model

- XY442 EGU2011-6626
Steve Jones, Corinne Le Quéré, and Christian Rödenbeck
Global Interpolation of Surface Ocean pCO₂
- XY443 EGU2011-7792
Marion Fraysse, Christel Pinazo, Vincent Faure, and Ivane Pairaud
3D coupled physical and biogeochemical modelling approach: limitation on biological productions by the different nutrients in Marseilles coastal area.
- XY444 EGU2011-1959
Moacyr Araujo, Nathalie Lefrève, Nadège Bouchonneau, Carlos Noriega, and Marcus Silva
Simulating the tropical Atlantic air-sea CO₂ exchange with a Regional high resolution ocean modeling system
- XY445 EGU2011-7866
Marcus Silva, Nadège Bouchonneau, Carlos Noriega, Nathalie Lefèvre, and Moacyr Araujo
Modeling biogeochemical cycles in the Southwestern tropical Atlantic
- XY446 EGU2011-5698
Victor Gorchakov, Vladimir Ryabchenko, Nikolay Diansky, and Svetlana Pugalova
Modeling the seasonal and inter-annual variability of physical and ecosystem characteristics in the upper layer of the Central-Eastern North Atlantic
- XY447 EGU2011-5122
Rosa Reboreda, Jesus Dubert, Rita Nolasco, Martinho Marta-Almeida, Henrique Queiroga, Carlos Rocha, and Nuno Cordeiro
Three-dimensional modeling of phytoplankton and zooplankton seasonal distribution in the Iberian upwelling system
- XY448 EGU2011-1569
Ruoying He, Dennis McGillicuddy, Donald Anderson, Bruce Keafer, and Yizhen Li
Predicting Coastal Circulation and Harmful Algal Blooms in the Gulf of Maine: From Ensemble Seasonal Forecasting to Data Assimilative Hindcasting
- XY449 EGU2011-1202
Robert McEwan, Maeve Lohan, Nataliya Stashchuk, and Vasiliy Vlasenko
Modelling nutrient distributions in a large-scale river plume

OS5.2 – Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean – Posters

Convener: Alexander Babanin | Co-Conveners: Miguel Onorato, Fangli Qiao

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Alex Babanin, Miguel Onorato, Fangli Qiao

- XY450 EGU2011-5374
Alexander Babanin and Dmitry Chalikov
Numerical investigation of turbulence generation in non-breaking potential waves
- XY451 EGU2011-9087
Jonas Takeo Carvalho and Valdir Innocentini
Wind wave climate along Brazilian coast using a spectral partitioning algorithm
- XY452 EGU2011-4410
Dejun Dai, Fangli Qiao, Wojciech Sulisz, Lei Han, and Alexander Babanin
An Experiment on the Non-Breaking Surface-Wave-Induced Vertical Mixing
- XY453 EGU2011-4389
Vladimir Dulov and Maria Kosnik
A Field Study of 2D-Wavenumber Spectra of Short Wind Waves
- XY454 EGU2011-1520
Alina Galchenko, Alexander Babanin, and Dmitry Chalikov
Influence of wind forcing on evolution and breaking of nonlinear wave groups.
- XY455 EGU2011-7390
Georgia Kalantzi, **Christine Gommenginger**, and Meric Srokosz
Spectral wave dissipation, operational wave models and observations: is there a way of improving wave forecasts?
- XY456 EGU2011-7116
Charles-Antoine Guérin and Guillemette Caulliez
Statistical properties of short wind waves: a high resolution laboratory study
- XY457 EGU2011-2837
Mark Hemer, Kathleen McInnes, and Roshanka Ranasinghe
Projected future wave climate along Australia's eastern margin
- XY458 EGU2011-12478
Rajesh Kumar, Anna Rutgersson, and Prasad Kumar
Impact of rain in modifying wave height in a coupled wave - climate model

- XY459 EGU2011-10268
Alexey Mironov
Theoretical description of breaking crests distributions measured in field conditions
- XY460 EGU2011-10250
Alexey Mironov, Charles-Antoine Guerin, Danièle Hauser, Maria Kosnik, and Vladimir Dulov
Statistical properties of short wind-waves obtained from photo-stereo observations of sea surface.
- XY461 EGU2011-6352
Miguel Onorato and Francesco Zonta
Direct numerical simulation of the boundary layer induced by surface gravity waves
- XY462 EGU2011-5158
Ruslan Puscasu, Alexander Babanin, and Michael Stiassnie
Numerical investigation of a novel wave-action transfer model for near-resonant water waves
- XY463 EGU2011-4145
Fangli Qiao, Zhenya Song, Changshui Xia, and Dejun Dai
The improvement of ocean and climate models through surface wave: From mean state to long-term variations
- XY464 EGU2011-12871
Ivan Savelyev and Robert Handler
Infrared imaging of near-surface eddies generated by steep and by breaking surface waves.
- XY465 EGU2011-6275
Mathieu Dutour Sikiri?, Aron Roland, Ivica Janekovi?, Igor Tomaži?, and Milivoj Kuzmi?
Two-way coupling of ROMS and WWM models
- XY466 EGU2011-4629
Zhenya Song and Fangli Qiao
The establishment of the atmosphere-wave-ocean circulation coupled models-The improvement of CGCMs's simulations by the wave-induced vertical mixing
- XY467 EGU2011-2099
Chia-Huan Ting, Alexander Babanin, and Dmitry Chalikov
Dependence of Drag Coefficient on the Directional Spreading of Ocean Waves
- XY468 EGU2011-5399
Alessandro Toffoli, Alexander Babanin, and Jason McConochie
Field observations of the mixed layer depth in the Indian Ocean: effect of wave-induced turbulence
- XY469 EGU2011-8695
Oleg Druzhinin and **Yuliya Troitskaya**
Investigation of statistical parameters of turbulent air flow over waved water surface by direct numerical simulation
- XY470 EGU2011-4501
Wu-ting Tsai and Li-ping Hung
Characteristics of interfacial transport in a wind-driven gravity-capillary surface wave
- XY471 EGU2011-12295
Kimmo K Kahma, **Laura Tuomi**, and Heidi Pettersson
Wave statistics in seasonally ice-covered seas
- XY472 EGU2011-2794
Anatoli Vakhguel and Alexander Babanin
Influence of water droplet size variations on propagation of the pressure wave above water surface
- XY473 EGU2011-5966
Soeren H. Ahmerkamp, **Jörg-Olaf Wolff**, and Stephen G. Monismith
On wave motions at the steep slope of a coral reef
- XY474 EGU2011-6958
Changshui Xia and Fangli Qiao
The Establishment of the Wave-circulation Coupled Model and Its Application

NH5.2/NP7.4/OS5.5 – Extreme Sea Waves (co-organized) – Orals

Convener: Efim Pelinovsky | Co-Conveners: Christian Kharif, Alexey Slunyaev

Room: 4

Chairperson: n.n.

- 08:30–08:45 EGU2011-3927
Elzbieta Bitner-Gregersen and Alessandro Toffoli
Probability of occurrence of rogue waves
- 08:45–09:00 EGU2011-102
Ira Didenkulova
Freak waves in the coastal zone of the Baltic Sea

- 09:00–09:15 EGU2011-1804
Georg Lindgren and Finn Lindgren
 Stochastic 3D Lagrange waves, asymmetry properties and consequences for marine safety
- 09:15–09:30 EGU2011-1551
Leonid Lopatoukhin, Alexander Boukhanovsky, and Ekaterina Chernysheva
 Climatic wave spectra of extreme wind waves
- 09:30–09:45 EGU2011-6052
Miguel Onorato and Alessandro Torffoli
 The role of the modulational instability in the interaction of waves and currents
- 09:45–10:00 EGU2011-4810
Odin Gramstad, Jean-Michel Lefevre, and Karsten Trulsen
 Model and case study for freak waves in crossing swell and wind sea

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-9094
Gerassimos Athanassoulis and Konstantinos Belibassakis
 Fully nonlinear water waves of high amplitude, propagating in finite depth
- 10:45–11:00 EGU2011-13724
Alexander Dyachenko and Vladimir Zakharov
 On canonical equation for water waves
- 11:00–11:15 EGU2011-3943
Walter Craig
 Nonlinear water wave interactions
- 11:15–11:30 EGU2011-2013
Nail Akhmediev, Adrian Ankiewicz, Jose-Maria Soto-Crespo, and John M. Dudley
 Rogue Waves: Early Warning vs Forecast
- 11:30–11:45 EGU2011-1933
Roger Grimshaw and Sergei Annenkov
 Water wave packets propagating over variable depth
- 11:45–12:00 EGU2011-1977
 Sergei Annenkov and **Victor Shrira**
 Self-similar evolution of wind wave statistical momenta

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-137
Anna Sergeeva, Lev Shemer, and Alexey Slunyaev
 Effects of occasional wave breaking on extreme wave statistics in stochastic modeling
- 13:45–14:00 EGU2011-1253
 Yang-Yih Chen and **Hung-Chu Hsu**
 Theoretical and Experimental study of Nonlinear water waves on uniform current
- 14:00–14:15 EGU2011-4226
 Victor Shrira and **Alexey Slunyaev**
 Rogue waves on jet currents caused by nonlinear evolution of trapped modes
- 14:15–14:30 EGU2011-1036
Sergey Dobrokhoto, Vladimir Nazaikinskiy, and Brunello Tirozzi
 Explicit Asymptotics for Waves and Vortices with Small Amplitudes on the Shallow Water Created by Localized Sources and their Applications
- 14:30–14:45 EGU2011-288
Karima Khusnutdinova
 The effect of an internal wave on breaking surface waves and the oceanic subsurface bubble layer
- 14:45–15:00 EGU2011-1975
Tatiana Talipova and Oxana Kurkina
 Modulation instability and hazardous internal waves in South China and Baltic Seas

Convener: Efim Pelinovsky | Co-Conveners: Christian Kharif, Alexey Slunyaev

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Christian Kharif and Efim Pelinovsky

- XY263 EGU2011-2128
Roman Shamin
Numerical Simulation of FreakWaves: Detection, Predict and Breaking
- XY264 EGU2011-7735
Shiqiang Yan and Qingwei Ma
Fully Non-linear Investigation of Freak Waves and their Interaction with Winds and Currents
- XY265 EGU2011-115
Alexey Slunyaev, Anna Sergeeva, and Efim Pelinovsky
Rogue wave modeling: Approximate vs fully nonlinear wave simulations
- XY266 EGU2011-342
Arnida L. Latifah and E. van Groesen
Investigations of coherence in extreme water waves
- XY267 EGU2011-37
Efim Pelinovsky and Ira Didenkulova
Freak waves in the field of the nonlinear non-dispersive shallow-water waves
- XY268 EGU2011-13924
Efim Pelinovsky and Dong-Jiing Doong
Freak wave observations in Taiwanese and Russian waters
- XY269 EGU2011-807
Andrey Zaytsev, Efim Pelinovsky, Ahmet Yalciner, Ceren Ozer, and Irina Kostenko
Studies of Freak Waves in southern Part of Okhotsk Sea
- XY270 EGU2011-108
Ira Didenkulova and **Irina Nikolkina**
Freak waves in 2006-2010
- XY271 EGU2011-2382
Amin Chabchoub and Norbert Hoffmann
The Peregrine Breather Solution in a water wave tank
- XY272 EGU2011-42
Ekaterina Shurgalina and Efim Pelinovsky
Life-time of freak waves of different shapes: dispersive focusing framework
- XY273 EGU2011-7716
Huiming Zeng and **Karsten Trulsen**
Variation of kurtosis over non-uniform bathymetry
- XY274 EGU2011-1019
Hubert Branger, Laurent Grare, Christian Kharif, Pierre Lubin, Stephane Glockner, Pauline Robin, and Olivier Kimmoun
Wind effects on waves propagating to the shore: experimental and numerical investigations
- XY275 EGU2011-1435
Roland Thomas and Christian Kharif
Stability of a Stokes' wave train in the presence of uniform vorticity
- XY276 EGU2011-1050
Antonio Lechuga
Large amplitude edge waves on a beach
- XY277 EGU2011-4559
Oxana Kurkina, Tatiana Talipova, Efim Pelinovsky, Tarmo Soomere, and Ayrat Giniyatullin
Prognostic characteristics of internal waves for the Baltic Sea
- XY278 EGU2011-5286
Nikolay Makarenko, Janna Maltseva, and Alexei Kazakov
Extreme internal waves in a weakly stratified shear flows
- XY279 EGU2011-13256
Andrey Serebryany and Cho-Teng Liu
Observations of large-amplitude internal wave of the second mode in Luzon Strait
- XY280 EGU2011-4549
Dmitry Arkhipov, **Georgy Khabakhpashev**, Anatoly Litvinenko, and Nurziya Safarova
Combined approach to a simulation of the interaction of nonlinear spatial waves in seas with gently sloping bottom
- XY281 EGU2011-508
Elena Alekseenko, Bernard Roux, Alexander Sukhinov, and Christian Kharif
Influence of currents and wave propagation on the seagrass meadows development in shallow water systems (near shoreline)

- XY282 EGU2011-1573
Ekaterina Batcyna, Nikolay Petrukhin, and Efim Pelinovsky
Strong wave amplification in the atmosphere with large temperature gradients
- XY283 EGU2011-536
Shalva Gagoshidze
To the Calculation of Periodic Longitudinal Waves in Trapezoidal Channels and Their Action on Bank Slopes
- XY284 EGU2011-1685
Vasily Maximov, Gayaz Khakimzyanov, Igor Nudner, Efim Pelinovsky, and Konstantin Semenov
The Solitary Wave Interaction with a Partially Submerged Stationary Structure
- XY285 EGU2011-1686
Vasily Maximov, Igor Nudner, Yuri Mayorov, Dmitry Babchik, and Konstantin Semenov
Extreme Waves Interaction with Lattice Structures
- XY286 EGU2011-3981
Natalia Chaykovskaya and Artem Rodin
Psychological characteristics of human behaviour at a rogue-wave event
- XY287 EGU2011-6781
Jean-François Dorville, Hugues Berthelot, and Narcisse Zahibo
Effect of Extremes Wave on a mitigate type of the French West Indies coast, with a low cost modeling
- XY288 EGU2011-6022
Narcisse Zahibo, Irina Nikolkina, Efim Pelinovsky, and Jean-François Dorville
Extreme Sea Waves on Guadeloupe, French West Indies
- XY289 EGU2011-4456
Mikhail Lavrentiev, Andrey Marchuk, and Konstantin Simonov
Identification of tsunami wave parameters at source

