

EGU General Assembly 2012
Programme Group Programme
OS – Ocean Sciences

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Monday, 23 April

GD2.3/GMPV6.8/SM3.6/TS9.8 – Heat flow and thermal regime of the lithosphere: Deep and surface processes (co-listed) – Orals

Convener: A. Vaughan | Co-Conveners: I.M. Artemieva, I. Rogozhina, I. T. Kukkonen, N. Kuszniir

Room: 22

Chairperson: n.n.

- 08:30–08:45 EGU2012-14378
JH Davies and DR Davies
 Revised Estimate of Earth's Surface Heat Flow: 47 +/- 2 TW
- 08:45–09:00 EGU2012-10762
T. A. Jordan, F. Ferraccioli, and R. C. Hindmarsh
 Rifting, heat flux, and water availability beneath the catchment of Pine Island Glacier
- 09:00–09:15 EGU2012-7411
S. Umino and A. Okugawa
 A New Geothermometer Using Crystal Size Variations of the Sheeted Dikes: Insight Into the Thermal Structure of The Upper Oceanic Crust
- 09:15–09:30 EGU2012-9338
F. Schütz and A. Förster
 Surface heat flow of southern Israel based on new borehole data
- 09:30–09:45 EGU2012-6942
I. T. Kukkonen, V. Rath, L. Kivekäs, J. Šafanda, and V. ?ermak
 Geothermal Studies of the Outokumpu Deep Drill Hole, Finland: Vertical variation in heat flow and palaeoclimatic implications
- 09:45–10:00 EGU2012-13626
M. Purucker
 Heat flow inferred from satellite magnetic data over the Antarctic

GD2.3/GMPV6.8/SM3.6/TS9.8 – Heat flow and thermal regime of the lithosphere: Deep and surface processes (co-listed) – Posters

Convener: A. Vaughan | Co-Conveners: I.M. Artemieva, I. Rogozhina, I. T. Kukkonen, N. Kuszniir

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL182 EGU2012-4499
M.T Tesauro, M.K Kaban, S.C Cloetingh, and W.M Mooney
 A New thermal and compositional model of the North American lithosphere
- XL183 EGU2012-8095
A.P.M. Vaughan, N. Kuszniir, F. Ferraccioli, and T.A.R.M. Jordan
 Regional Heat-flow Prediction for Antarctica using Gravity Inversion Mapping of Crustal Thickness and Lithosphere Thinning
- XL184 EGU2012-7277
V. Spichak, O. Zakharova, and A. Goidina
 3D thermal structure of the Hengill geothermal area (Iceland) revealed from electromagnetic sounding data and temperature well logs
- XL185 EGU2012-9895
I. Rogozhina, J. M. Hagedoorn, Z. Martinec, K. Fleming, and M. Thomas
 Applicability and limitations of large-scale ice-sheet modeling for constraining subglacial geothermal heat flux
- XL186 EGU2012-13345
 R Klenner and **W Gosnold**
 Heat Flow and the Pleistocene Ice Margin
- XL187 EGU2012-9216
Y. Popov, R. Romushkevich, D. Gorobtsov, and D. Korobkov
 Vertical Variations In Heat Flow Inferred From Experiments In Deep Boreholes

GM8.3 – Coastal zone geomorphologic interactions: natural versus human-induced driving factors (co-listed) – Orals

Convener: M. Stancheva | Co-Conveners: A. Baas, G. Anfuso, H. Tönisson

Room: 21

Chairperson: Hannes Tönisson and Margarita Stancheva

- 08:30–08:45 EGU2012-11105
A. Aiello, F. Canora, R. Pellicani, and **G. Spilotro**
Natural and anthropogenic factors in coastal dynamic: two cases in Southern Italy
- 08:45–09:00 EGU2012-10863
A. Rilo, P. Freire, R. Ceia, R.N. Mendes, J. Catalão, and R. Taborda
Human effects on estuarine shoreline decadal evolution
- 09:00–09:15 EGU2012-500
A. Anderson
Aeolian Coastal Landscapes in changes (a study from Tahkuna, Estonia)
- 09:15–09:30 EGU2012-5560
G. Alexandrakis and S. Poulos
The anticipated spatial loss of microtidal beaches in the next 100 years due to sea level rise.
- 09:30–09:45 EGU2012-5856
J. Curoy, C.A. Moses, and D.A. Robinson
Longshore Sediment Transport on a Macrotidal Mixed Sediment Beach, Birling Gap, United Kingdom.
- 09:45–10:00 EGU2012-12815
M. Sedrati and E. J. Anthony
Chronic erosion in Wissant Bay coast, northern France - Causes and trials of management projects

COFFEE BREAK

Chairperson: Margarita Stancheva and Andreas Baas

- 10:30–10:45 EGU2012-1652
D.W.T. Jackson
116 years of misplaced management: Portballintrae, Northern Ireland
- 10:45–11:00 EGU2012-43
M. O'Shea and Dr. J. Murphy
Investigating the Hydrodynamics of a Breached Barrier Beach
- 11:00–11:15 EGU2012-279
M.A. de Schipper, S. de Vries, R. Ranasinghe, A.J.H.M. Reniers, and M.J.F. Stive
Morphological developments after a beach and shoreface nourishment at Vlugtenburg beach, the Netherlands
- 11:15–11:30 EGU2012-11272
L.S. Esteves, J. Foord, and H. Draux
The shift from hold-the-line to management retreat and implications to coastal change: Farlington Marshes, a case of conflicts
- 11:30–11:45 EGU2012-13691
A.M. Carapuço, R. Taborda, M.C. Freitas, T. Silveira, C. Andrade, C. Lira, and C. Pinto
The impact of coastal interventions: between the myth and the reality
- 11:45–12:00 EGU2012-13767
R. Young and K. Peek
Preparing Coastal Parks for Future Sea Level Rise

GM8.3 – Coastal zone geomorphologic interactions: natural versus human-induced driving factors (co-listed) –

Posters

Convener: M. Stancheva | Co-Conveners: A. Baas, G. Anfuso, H. Tönisson

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Andreas Baas, Margarita Stancheva and Hannes Tönisson

- XL254 EGU2012-10626
J.V. Monnot, **J.J. Diez Gonzalez**, and S. del Saz Cordero
The wave criteria for coastal zoning
- XL255 EGU2012-13772
A. Griffith and R. Young
Observations of coastal systems using low-cost, high-resolution, balloon and kite-based aerial imagery
- XL256 EGU2012-538
N. Kopa-Ovdienko, N. Volobueva, and S. Ogorodov
The Ob Estuary (Kara Sea) Coastal Dynamics Interannual Variability Assessment
- XL257 EGU2012-2157
H. Tönisson, K. Orviku, A. Kont, and Ü. Suursaar
Coastal geomorphic processes and their relation to hydrodynamic conditions in Osmussaar Island, Baltic Sea

- XL258 EGU2012-3039
A. Palazov, R. Young, M. Stancheva, and H. Stanchev
Changes of Bulgarian Coastal Dune Landscape under Anthropogenic Impact
- XL259 EGU2012-3899
K. Al Quraishi, N. Al Balushi, A. Roepert, M. Rupprechter, and G. Hoffmann
Late Quaternary delta evolution on an uplifted coastal area (Wadi Haida Sultanate of Oman, Arabian Peninsula)
- XL260 EGU2012-5472
A. Herman, J. Urbański, and A. Wochna
Numerical modeling of storm-induced morphodynamic changes at a micro-tidal sandy coast
- XL261 EGU2012-4898
I. Catianis, C. Ungureanu, and A. Stanica
Preliminary sediments quality assessment of the Midia Port aquatorium - Black Sea - Romania
- XL262 EGU2012-9947
J. Trindade and A. Ramos-Pereira
Modeling extreme beach retreat and erosion volumes. A tool for susceptibility analysis.
- XL263 EGU2012-7429
R. Mani Murali, P. Vethamony, and A.K. Singh
Shoreline and seabed level changes along the central Orissa coast, India
- XL264 EGU2012-10044
D. Bertoni, P. Ciavola, E. Grottoli, and G. Sarti
Transport of marked pebbles in short periods of time on a coarse clastic beach (Marina di Pisa, Italy)
- XL265 EGU2012-10989
R. Bakhtyar, A. Dastgheib, D. Roelvink, and D.A. Barry
3D modelling of nearshore coastal morphodynamics
- XL266 EGU2012-11199
K. Tsanakas, K. Gaki-Papanastassiou, H. Maroukian, A. Cundy, D. Papanastassiou, and E. Koskeridou
Palaeogeographic evolution of Alykes lagoon, Pydna, Northern Greece during the Holocene, based on geomorphological and sedimentological data.
- XL267 EGU2012-619
N. Kosevich
White Sea Islands: contemporary relief dynamics and history of the development.
- XL268 EGU2012-8871
A.-D. Spinu and **R. Mateescu**
Coastal Processes Surveillance - necessary actions towards erosion control
- XL269 EGU2012-10097
C.-H. Jen, S.-J. Chyi, L.-L. Hsiao, M.-S. Wu, and H.-F. Lei
The changing of coastal landform at Chikou barrier island and lagoon coast, Tainan, Southwestern Taiwan
- XL270 EGU2012-10687
C.-H. Lu, S.-J. Chyi, C.-C. Chen, L.-D. Ho, and P.-Y. Chang
The influence of rock resistance on shore platform morphology in Penghu Islands, Taiwan
- XL271 EGU2012-12147
K. Mezouar and R. Ciortan
\\textbf{Seasonal-scale nearshore morphological evolution of Romanian coast }
- XL272 EGU2012-3892
G. Hoffmann, M. Rupprechter, A. Roepert, K. Al Quraishi, N. Al Balushi, C. Grützner, and K. Reicherter
Quaternary coastal evolution of Oman (Arabian Peninsula) - a quantitative approach
- XL273 EGU2012-2391
M. Garcin, **A. Bails**, M. Yates, G. Le Cozannet, T. Bulteau, E. Salai, and J. Sauter
Relative impact of sea level rise, wave climate and anthropogenic actions on the recent shoreline changes of the Pacific Islands

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

Convener: J. van der Molen | Co-Conveners: H. E. de Swart, G.I. Shapiro

Room: 5

Chairperson: Huib de Swart

- 08:30–08:45 EGU2012-7357
A. Rubino, A. Androsov, and N. Voltzinger
3D dynamics in the Strait of Messina
- 08:45–09:00 EGU2012-4634
J. Hopkins, J. Sharples, and J. M. Huthnance
On-shelf transport of slope water lenses within the seasonal pycnocline: A new cross-shelf edge exchange mechanism

- 09:00–09:30 EGU2012-5
D. Yuan
Cross-shelf Water Exchange Between the Kuroshio and the Northern Marginal Seas of China
- 09:30–09:45 EGU2012-3481
A. Bower and **Y. Abualnaja**
New Observations of the Gulf of Aden Intermediate Water Intrusion into the Red Sea.
- 09:45–10:00 EGU2012-1396
G.I. Shapiro
Can tidal energy farms create temperature fronts in the coastal ocean?

COFFEE BREAK

Chairperson: Georgy Shapiro

- 10:30–10:45 EGU2012-7555
E. Bruque Pozas, J. C. Sánchez Garrido, G. Sannino, L. Liberti, J. García Lafuente, J. Delgado Cabello, C. Naranjo, J. Soto Navarro, and A. Sánchez Román
Analysing the tidal dynamics of the interfacial layer in the Strait of Gibraltar and its biological implications
- 10:45–11:00 EGU2012-202
X.-H. Zhu, X. Guo, and Q.-S. Wu
Variation of the Kuroshio nutrient stream in the East China Sea during 1987-2009
- 11:00–11:15 EGU2012-10461
N. Demchenko
Comparative analysis of the vernal and wintry thermally-induced structural front in the Baltic Sea on base of field data
- 11:15–11:30 EGU2012-308
Z.Y. Cai, Z. Liu, X.Y. Guo, H.W. Gao, and Q. Wang
Simulation of density-driven current in a semi-enclosed bay in the Yellow Sea by a robust diagnostic model with synchronous observation data
- 11:30–11:45 EGU2012-13900
A. Guarnieri, N. Pinardi, P. Oddo, G. Bortoluzzi, and M. Ravaioli
Modelling the baroclinic circulation with tidal components in the Adriatic Sea
- 11:45–12:00 EGU2012-3499
H. E. de Swart, A. Nnafie, R. Garnier, and R. Calvete
Effects of wave-topography feedbacks and radiation stresses on the nonlinear dynamics of shoreface-connected sand ridges

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

Convener: J. van der Molen | Co-Conveners: H. E. de Swart, G.I. Shapiro

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Johan van der Molen

- XY385 EGU2012-673
S. L. Ward, S. P. Neill, and J. D. Scourse
Impacts of past and future sea-level rise on shelf sea sediment dynamics
- XY386 EGU2012-1202
A. Polukhin and P. Makkaveev
The contribution and spatial distribution of Ob and Yenisei runoff on surface layer of the Kara Sea.
- XY387 EGU2012-2741
F. Santos, M. Gómez-Gesteira, M. deCastro, I. Álvarez, and M.C. Sousa
Trends of coastal and oceanic ST along the Western Iberian Peninsula over the period 1975- 2006.
- XY388 EGU2012-3263
F. Wobus, G.I. Shapiro, M.A.M Maqueda, and J.M. Huthnance
3D numerical simulations of dense water cascading in an idealised laboratory setting
- XY389 EGU2012-3288
H.G. Cho, D.C. Kim, and H.-I. Yi
Clay mineral evolution in the central Yellow Sea mud deposits
- XY390 EGU2012-4072
I. Alvarez, M. Gomez-Gesteira, M. deCastro, **M.C. Sousa**, J.M. Dias, and F. Santos
Evaluation of wind vectors measured by QuikSCAT using ocean buoy data along the Galician coast (NW Iberian Peninsula)

- XY391 EGU2012-4798
H.E. Pelling and **J.A.M. Green**
Sea-level rise and tides: to flood or not to flood
- XY392 EGU2012-4864
A. Picado, R. Mendes, N. Vaz, and J.M. Dias
Impact of sea level rise in coastal systems - Ria de Aveiro case study
- XY393 EGU2012-4997
W. Jiang and S. Feng
3D Analytical solution for the tidally induced Lagrangian residual current in a narrow bay
- XY394 EGU2012-5104
K. Myrberg and L. Vesikko
Towards the Gulf of Finland Year 2014
- XY395 EGU2012-5153
L. Tuomi and K Myrberg
The performance of the parameterisations of vertical turbulence in the 3D modelling of hydrodynamics in the Baltic Sea
- XY396 EGU2012-6025
L. Bricheno and J Wolf
Wave and tidally generated bed stresses on the UK continental shelf
- XY397 EGU2012-6706
D. Calvete Manrique, G. Coco, F. Ribas Prats, and H.E. de Swart
Formation of crescentic bars in double sandbar systems.
- XY398 EGU2012-6969
S.H. Kim, D.C. Kim, G.S. Lee, S.P. Kim, and S.H. Bae
Geoacoustic model of surface sediments in the southwestern Ulleung basin, the East Sea of Korea
- XY399 EGU2012-8470
N. Stark, G. Coco, K.R. Bryan, and A. Kopf
Geotechnical investigation of sorted bedforms evolution and maintenance processes
- XY400 EGU2012-8805
N. Narayan, B Klein, J Su, B Mayer, H Klein, and T Pohlmann
The variability of thermodynamics and sea level of North Sea under recent climate variation (1950-2000)
- XY401 EGU2012-8890
A. Nowicki, M. Janecki, J. Jakacki, and L. Dzierzbicka-Glowacka
Coupled ice-ocean model of the Baltic Sea - variability of ice cover.
- XY402 EGU2012-9367
Y. L. Ekinci, A. Demirci, A. E. Erginal, H. Kaya, and R. Ekinci
The Nature and Subsurface Geometry of Late Holocene Coquina Rocks, Karaburun-Istanbul, NW Turkey
- XY403 EGU2012-9521
J. Möller, R. Weisse, N. Groll, H. Heinrich, and G. Rosenhagen
Kliwas - Climate Projections of Sea state for Coastal and Open Sea in the North Sea
- XY404 EGU2012-9535
F. Mielck and H. C. Hass
Mapping Seabed Habitats and Dynamic Bedforms using Hydroacoustic Discrimination (Sidescan Sonar and RoxAnn) in the Sylt-Rømø Basin (German Wadden Sea)
- XY405 EGU2012-10207
Y. Ferret, V. Ernstsens, A. Lefebvre, and C. Winter
Evaluation of bedform predictors in tidal environments
- XY406 EGU2012-10701
M. Markovic, S. Huettl-Kabus, B. Klein, U. Mikolajewicz, D. Sein, and H. Klein
Influence of North Atlantic variability on the North Sea
- XY407 EGU2012-11422
J. E. H. Weber
Trapped Gerstner waves over a steeply sloping shelf
- XY408 EGU2012-11525
J. van der Molen, T. Maes, L. Fernand, and P. Kershaw
Modelling marine litter dispersal in the North Sea
- XY409 EGU2012-12039
M.V Luneva
The effect of tides and eddies on the hydrophysical fields in the NEMO-shelf Arctic Ocean model.
- XY410 EGU2012-13612
H.C. Hass, A Bartholomä, D. Bürk, P. Holler, F. Mielck, and H.-C. Reimers
Hydroacoustic seafloor classification in the SE North Sea
- XY411 EGU2012-13890
A. Falqués, N. van den Berg, F. Ribas, M. Caballeria, and D. Calvete
On the wavelength of self-organized shoreline sand waves

OS2.4 – Upwelling events, coastal-offshore exchange processes and their impact on the marine ecosystem under changing climate conditions – Orals

Convener: K. Myrberg | Co-Conveners: A. Lehmann, J. Hopkins

Room: 7

Chairperson: Jo Hopkins

- 13:30–13:45 EGU2012-2668
E. Salusti and F. Bignami
 On the temperature, salinity, velocity and potential vorticity of a cold filament off the southern tip of Sicily
- 13:45–14:00 EGU2012-4185
K. Myrberg, A. Lehmann, and K. Höflisch
 A statistical approach on upwelling in the Baltic Sea based on the analysis of satellite data for 1990–
- 14:00–14:15 EGU2012-9848
Z. Lachkar and N. Gruber
 The future of coastal upwelling ecosystems: the impact of potential wind changes on ocean acidification and coastal hypoxia
- 14:15–14:30 EGU2012-11110
K. Getzlaff and A. Lehmann
 The general circulation of the Baltic Sea in the context of climate variability
- 14:30–14:45 EGU2012-11074
P.M.A. Miranda, J.M.R. Alves, and N. Serra
 Recent trends in Iberian upwelling simulated by ROMS
- 14:45–15:00 EGU2012-312
B. Barreiro and E. D. Barton
 Iberian and California-Oregon Upwelling Systems: trends and status of two upwelling systems at the same latitude over the last four decades.

OS2.4 – Upwelling events, coastal-offshore exchange processes and their impact on the marine ecosystem under changing climate conditions – Posters

Convener: K. Myrberg | Co-Conveners: A. Lehmann, J. Hopkins

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Kai Myrberg

- XY412 EGU2012-5393
J. H. Bettencourt, C. Lopez, and E. Hernandez-Garcia
 Oceanic three-dimensional Lagrangian Coherent Structures in the Benguela ocean region.
- XY413 EGU2012-6789
J.E. Wood and M. Roughan
 The origin and variability of major cold water events observed off Sydney, Australia
- XY414 EGU2012-10110
 S.L. Wakelin, J.T. Holt, **J.M. Huthnance**, J.C. Blackford, J.I. Allen, M. Butenschön, and Y. Artioli
 Carbon exchange between the northwest European continental shelf and the North Atlantic Ocean
- XY415 EGU2012-10339
T. A. S. Rasmussen, S. M. Olsen, B. Hansen, K. M. H. Larsen, and H. Hátún
 Physical control of the Faroe shelf spring bloom
- XY416 EGU2012-13480
A. Lehmann, H.-H. Hinrichsen, and K. Myrberg
 Alongshore and offshore volume transports related to upwelling regions in the Baltic Sea
- XY417 EGU2012-6417
J. Gan, H. Ho, and L. Liang
 Dynamics of intensified downwelling circulation over a widened shelf
- XY418 EGU2012-13590
A. Lehmann and E. Gurova
 Combined SAR/IR satellite data and circulation model analysis of upwelling in the Baltic Sea
- XY419 EGU2012-13469
P. Estrade
 Estimation of the vertical velocities associated with coastal upwelling using models and observations
- XY420 EGU2012-11510
A. Pietri, P. Testor, V. Echevin, A. Chaigneau, L. Mortier, G. Eldin, C. Grados, and A. Albert
 Absolute geostrophic velocities off the coast of Southern Peru as observed from glider data

SSS3.4/BG2.26/OS3.5 – Stabilization of organic matter in soils, sediments and marine dissolved organic matter (co-organized) – Orals

Convener: S. Abiven | Co-Conveners: T. Dittmar, M. W. I. Schmidt

Room: 3

Chairperson: Samuel Abiven

- 13:30–13:45 EGU2012-818
C.A. Masiello, B. Dugan, K. Zygourakis, H. Gonnermann, Z. Liu, K.L. Ziegelgruber, and V.J. Chuang
 Physical controls on organic matter stability
- 13:45–14:00 EGU2012-13952
K. Wolf, R. Bol, J.A.J. Dungait, L. Dixon, D. Dhanoa, D. Beaumont, and G.L.B. Wiesenberger
 Long term drainage alters plant biodiversity and soil C- and N-storage
- 14:00–14:15 EGU2012-9482
A. Miltner, R. Kindler, J. Achtenhagen, K. Nowak, C. Girardi, and M. Kästner
 Stabilization of microbial biomass in soils: Implications for SOM formation and xenobiotics degradation
- 14:15–14:30 EGU2012-5586
L. Tranvik, C. Gudas, B. Koehler, and D. Kothawala
 Inland water transformation and stabilization of terrestrial organic carbon during transport from soil to sea
- 14:30–14:45 EGU2012-5819
B. Jansen, J.M. Van Mourik, A. De Vreng, and K. Kalbitz
 Carbon cycling in polycyclic driftsand sequences
- 14:45–15:00 EGU2012-10263
J Niggemann, G Gerds, and T Dittmar
 Molecular-level dynamics of refractory dissolved organic matter

SSS3.4/BG2.26/OS3.5 – Stabilization of organic matter in soils, sediments and marine dissolved organic matter (co-organized) – Posters

Convener: S. Abiven | Co-Conveners: T. Dittmar, M. W. I. Schmidt

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY565 EGU2012-20
P. Rovira, L. Lopez-Sangil, and V.R. Vallejo
 Organic matter stabilization in mediterranean forest soils: interaction with fine mineral matter
- XY566 EGU2012-180
F. Sakellariadou
 Studies of the DOM aqueous extracts from coastal marine sediments
- XY567 EGU2012-475
Y. H. Xiao, T. Sara-aho, and A. V. Vähätalo
 Contribution of ferric iron to the absorption by chromophoric dissolved matter
- XY568 EGU2012-2202
M. Moriizumi and T. Mutsunaga
 Temporal change in molecular weight distribution of hot-water extractable organic nitrogen from cattle manure compost buried in soil using high-performance size exclusion chromatography with chemiluminescent nitrogen detection
- XY569 EGU2012-4805
Z. Y. Zhu, J. Zhang, Y. Wu, and L. Shao
 Particulate organic matter in the northwest East China Sea: Implications from amino acids enantiomers
- XY570 EGU2012-5961
T. Dittmar, B. Blasius, C. Steinbrink, C. Feenders, M. Stumm, J. Christoffers, J. Niggemann, G. Gerds, H. Osterholz, M. Seibt, M. Seidel, and A. Vähätalo
 Universal molecular features of refractory dissolved organic matter in fresh- and seawater
- XY571 EGU2012-6407
P. Barré, L. Cécillon, A.F. Plante, C. Chenu, B.T. Christensen, J.M. Fernandez, C.M. Gherardi, S. Houot, T. Kätterer, F. van Oort, C. Peltre, and P.R. Poulton
 Evolution of soil organic matter energetic and chemical composition during long-term bare fallow: implications for soil carbon vulnerability to global change
- XY572 EGU2012-6932
O. Vishnyakova, G. Chimitdorzhieva, and D. Andreeva
 Composition of Humic Acids of the Lake Baikal Sediments
- XY573 EGU2012-8718
T. Tesi, M.A. Goñi, L. Langone, R.A. Wheatcroft, S. Miserocchi, and L. Bertotti
 Early diagenesis of recently deposited organic matter: a 9-yr time-series study of a flood deposit

- XY574 EGU2012-10275
M.-A. Courty
 Nature and origin of the resistant carbonaceous polymorphs involved the fossilization of biogenic soil-aggregates
- XY575 EGU2012-10727
H. Abdelrahman, D. Olk, C. Cocozza, and T. Miano
 Fractionation and characterization of soil organic carbon during transition to organic farming
- XY576 EGU2012-12016
H. Throckmorton, J. Bird, L. Dane, M. Firestone, and W. Horwath
 Stabilization of diverse microbial residues in California and Puerto Rico Forest Soils
- XY577 EGU2012-12076
G. de Dato, A. Lagomarsino, R. Abou Jaoudé, and P. De Angelis
 Soil carbon sequestration and mineralization potential in an old-field revegetated with shrubs in semi-arid climate conditions
- XY578 EGU2012-12595
N. Hertkorn, M. Harir, B. P. Koch, B. Michalke, P. Grill, and P. Schmitt-Kopplin
 High field NMR Spectroscopy and FTICR Mass Spectrometry: Powerful Discovery Tools for the Characterization of Marine Dissolved Organic Matter
- XY579 EGU2012-13281
H. Chmiel, J. Kokic, J. Niggemann, T. Dittmar, and S. Sobek
 Organic carbon accumulation and reactivity in central Swedish lakes during the Holocene
- XY580 EGU2012-13951
S. Abiven, J. Fuchser, M.W.I. Schmidt, and T. Dittmar
 Molecular characterisation of soil organic matter by laser-desorption ionization Fourier-transform ion cyclotron resonance mass spectrometry (LDI-FT-ICR-MS)
- XY581 EGU2012-14072
 M. Seidel, T. Riedel, H. Waska, I G. N. A. Suryaputra, M. Beck, and **T. Dittmar**
 Sinks and sources of dissolved organic matter in permeable sediments of the coastal North Sea
- XY582 EGU2012-14159
M.S. Studer, S. Abiven, M.W.I. Schmidt, and R.T.W. Siegwolf
 How to trace organic matter input by living plants into and within the soil?

GM8.4/OS3.6/TS4.10 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Orals

Convener: S. Krastel | Co-Conveners: J. K. Hillier

Room: 21

Chairperson: n.n.

- 13:30–13:45 EGU2012-13865
A. Green, R. Leuci, Z. Thackeray, and J.A.G. Cooper
 An overstepped segmented lagoon complex on the KZN continental shelf, South Africa
- 13:45–14:00 EGU2012-13227
D. Ridente, D. Di Bucci, F. Foglini, E. Campiani, U. Fracassi, and F. Trincardi
 Late Quaternary activity and lateral variability of regional deformation belts in marine foreland settings: the South-Western Adriatic margin case study
- 14:00–14:15 EGU2012-166
Ch.L Gong, Y.M Wang, W.G Li, and X.Ch Peng
 Interactions between down-slope and along-slope processes on the South China Sea Slope off southwestern Taiwan: Processes, products, and depositional models
- 14:15–14:30 EGU2012-6838
 P. B. Flemings, **I. Song**, and D. M. Saffer
 Laboratory investigation of coupled deformation and fluid flow in mudrock: implications for slope stability in the Ursa Basin, Gulf of Mexico
- 14:30–14:45 EGU2012-9425
A. Bronner, M. Munschy, D. Sauter, J. Carlut, R. Searle, and M. Cannat
 Deep-tow geophysical survey above large exhumed mantle domains of the eastern Southwest Indian ridge
- 14:45–15:00 EGU2012-12418
C. A. Stein
 Depth anomalies in old oceanic lithosphere

GM8.4/OS3.6/TS4.10 – Seafloor Expression of Tectonic and Geomorphic Processes (co-organized) – Posters

Convener: S. Krastel | Co-Conveners: J. K. Hillier

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL274 EGU2012-9585
I.S. Patina
Seismostartigraphy of the Maykopian clinoforms in the Middle Caspian
- XL275 EGU2012-13332
S. Okay, G. Cifci, S. Ozel, O. Atgin, O. Ozel, B. Barin, M. Er, D. Dondurur, M. Kucuk, S. Gurcay, D. Choul Kim, and B. Sung-Ho
New discovered Izmir and Busan Mud Volcanoes and Application of Seismic Attributes and AVO Analysis in the Easternmost Black Sea.
- XL276 EGU2012-40
H. Saritas, G. Cifci, L. Géli, Y. Thomas, B. Marsset, A. Rochat, G.K. Westbrook, S. Ker, O. Atgin, S.D. Akhun Ço?kun, C. Grall, P. Henr, S. Gürçay, S. Okay, S. Ço?kun, Ö. Özkan, and B. Bar?n
2D - 3D high resolution seismic survey on the Sea of Marmara - Western High
- XL277 EGU2012-12739
M. Huuse
3D seismic images of tectonic, sedimentary and fluid flow processes affecting the seafloor offshore West Africa
- XL278 EGU2012-8124
M. Vrabec, P. Slavec, S. Poglajen, and M. Buseti
Geomorphology of submerged river channels indicates Late Quaternary tectonic activity in the Gulf of Trieste, Northern Adriatic
- XL279 EGU2012-5240
B. Jolly, L. Lonergan, and A. Whittaker
The interaction between deepwater channel systems and growing thrusts and folds, toe-thrust region of the deepwater Niger Delta
- XL280 EGU2012-6441
J. Schwab, F. Gross, S. Krastel, P. Jintasaeranee, S. Bunsomboonsakul, D. Winkelmann, and W. Weinrebe
Morphodynamics and slope stability at Mergui Ridge, off western Thailand
- XL281 EGU2012-7652
L.A. Muller, A.B. Watts, and the JC066 shipboard scientific party
The Morphology, Structure and Origin of Seamounts on the South-West Indian Ocean Ridge
- XL282 EGU2012-13013
F.K.J. Oberle, T.J.J. Hanebuth, and T. Schwenk
Volumetric facies analysis of a Late Holocene mudbelt environment on the Galician shelf (NW Spain).
- XL283 EGU2012-1628
J.A.G. Cooper, D.W.T. Jackson, R.J. Quinn, R. Plets, J.T. Kelley, D.F. Belknap, A.J. Long, D.A. Long, X. Monteys, R. Edwards, and G.A. Milne
Topographic and stratigraphic expression of submerged shorelines in the Irish Sea

OS4.1 – Open session on Operational Oceanography – Orals

Convener: R. Allard | Co-Conveners: E. Dombrowsky, E. Coelho, J. Chiggiato

Room: 9

Chairperson: jacopo.chiggiato, Eric Dombrowsky

- 08:30–08:45 EGU2012-2161
E. Coelho, G. Peggion, C. Rowley, and P. Hogan
Stochastic Plume Simulations for the Fukushima Accident and the Deep Water Horizon Oil Spill
- 08:45–09:00 EGU2012-4672
N. Hoareau, M. Umbert, A. Turiel, J. Ballabrera, and M. Portabella
Data assimilation and data fusion in a regional simulation
- 09:00–09:15 EGU2012-9475
E. Dombrowsky, Y. Drillet, N. Ferry, J.-M. Lellouche, O. Legalloudec, M. Drevillon, J. Chanut, and A. Elmoussaoui
Recent developments of the Mercator Océan ocean monitoring and forecasting system and corresponding product quality
- 09:15–09:30 EGU2012-2160
R. Allard, P. Posey, R. Preller, D. Hebert, E.J. Metzger, A. Wallcraft, S. Piacsek, O.M. Smedstad, and M. Phelps
The Arctic Cap Nowcast Forecast System
- 09:30–09:45 EGU2012-6606
E.V. Stanev, J. Schulz-Stellenfleth, J. Staneva, and J. Seemann
Coastal Ocean State Estimates and Forecasts based on HF Radar Data

09:45–10:00 EGU2012-10574

A. Barth, P. Mathiot, and H. Goosse

Estimation of the uncertainty of a climate model using an ensemble simulation

OS4.1 – Open session on Operational Oceanography – Posters

Convener: R. Allard | Co-Conveners: E. Dombrowsky, E. Coelho, J. Chiggiato

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Richard Allard, Emanuel Coelho

XY421 EGU2012-5254

L. Mortier, **J. Karstensen**, P. Testor, D. Hayes, E. Mauri, K. Heywood, and L. Mortier

Gliders for Research, Ocean Observation and Management - GROOM

XY422 EGU2012-5412

N. McConnell

Validation of the FOAM-NEMO system in the Indian Ocean

XY423 EGU2012-6094

M.-H. Rio, L. Bessi eres, C. Boone, C. Dufau, and M.-I. Pujol

Three ocean state indicators from altimeter products

XY424 EGU2012-9850

B. Moure, J. Chiggiato, and R. Onken

Skill comparison between 3-D super-ensemble and ensemble Kalman Filter for short-term ocean prediction

XY425 EGU2012-9929

C. Cabanes, A. Gourazel, C. Coatanoan, **K. von Schuckmann**, M. Hamon, V. Turpin, G. Reverdin, F.

Gaillard, S. Pouliquen, and P.-Y. Le Traon

CORA: In situ re-qualified dataset at the Coriolis data center

XY426 EGU2012-10061

S. Pouliquen, T. Carval, T. Loubrieu, **K. von Schuckmann**, H. Wehde, L. SjurRingheim, T. Hammarklint, A.

Harman, K. Soetje, T. Gies, M. de Alfonso, L. Perivoliotis, D. Kassis, and V. Marinova

Real Time In Situ data management system for EuroGOOS: A ROOSes-MyOcean joint effort

XY427 EGU2012-11314

S. Piacsek, P. Posey, L. Smedstad, J. McClean, D. Hebert, and R. Allard

Arctic Ocean Watermasses: Volumes, Locations and Variabilities Derived from Models, Climatologies and Observations

XY428 EGU2012-3083

P. D. Farrar and A. C. Mask

Testing and Implementation of the Navy's Operational Circulation Model for the Mediterranean Sea

XY429 EGU2012-3252

P. Hogan, P. Thoppil, C. Rowley, and E. Coelho

Multi and Single Model Ensemble Forecasting in the Gulf of Mexico

XY430 EGU2012-13144

H. Radhakrishnan, I. Moulitsas, D. Hayes, G. Zodiatis, and G. Georgiou

On Improving the Operational Performance of the Cyprus Coastal Ocean Forecasting System

XY431 EGU2012-5620

L. Holinde, T. H. Badewien, and O. Zielinski

Water level derived from pressure data - a validation tool and analysis of time series data from the East Frisian Wadden Sea

XY432 EGU2012-3259

B.T Nadiga and W.R. Casper

Blending dynamic and static estimates of error covariance to enable successful ocean data assimilation

XY433 EGU2012-856

L. Ponsoni, J.-P. Hermand, and I. C. A. da Silveira

Deep Thermal Front (southeastern Brazilian coast) see through acoustics: a preliminary study from an operational oceanography perspective

XY434 EGU2012-6572

G. McCarthy, D. Smeed, and S. Cunningham

Glider Observations as part of an AMOC monitoring array

XY435 EGU2012-13608

C. Brandini, S. Coudray, S. Taddei, M. Fattorini, L. Costanza, C. Lapucci, P. Poulain, R. Gerin, A. Ortolani, and B. Gozzini

Intercomparison and validation of operational coastal-scale models, the experience of the project MOMAR.

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

Convener: D. Ham | Co-Conveners: S. Danilov, T. Penduff, S. M. Griffies, M. Levy

Room: 2

Chairperson: n.n.

- 13:30–13:45 EGU2012-7798
D. Sidorenko, T. Rackow, T. Semmler, T. Jung, Q. Wang, S. Danilov, and J. Schröter
 300 year simulation with the coupled FESOM/ECHAM5 model
- 13:45–14:00 EGU2012-550
A.V. Gusev, N.A. Diansky, and V.B. Zalesny
 Numerical simulation of the ocean general circulation and its climatic variability for the 1948-2007 using the INMOM
- 14:00–14:15 EGU2012-3710
A. Romanou, WW Gregg, J. Romanski, G. Russell, and R. Bleck
 Climate change simulations using the two NASA-GISS climate models coupled to ocean biogeochemistry
- 14:15–14:30 EGU2012-7965
J.-Y. Park, J.-S. Kug, and Y.-G. Park
 A modeling study on bio-physical process associated with ENSO
- 14:30–14:45 EGU2012-945
E. Chernyavskaya and L. Timokhov
 Statistical model of interannual variability of the Arctic Ocean surface layer salinity in winter
- 14:45–15:00 EGU2012-3517
E. Ludewig and T. Pohlmann
 On the Effect of Offshore Wind Parks on Ocean Circulation
- Chairperson: n.n.
- 15:30–15:45 EGU2012-2736
V.O. Ivchenko, B. Sinha, V.B. Zalesny, R. Marsh, and A. Blaker
 Integral constraints in zonal flows with parameterized potential vorticity fluxes
- 15:45–16:00 EGU2012-13552
J. Demange, L. Debreu, P. Marchesiello, and E. Blayo
 On the use of a depth-dependent barotropic mode for free surface ocean models
- 16:00–16:15 EGU2012-1365
A. Pestiaux, T. Kärnä, S. Melchior, J. Lambrechts, J.F. Remacle, E. Deleersnijder, and T. Fichefet
 Discretizing the Gent-McWilliams velocity and isopycnal diffusion with a discontinuous Galerkin finite element method
- 16:15–16:30 EGU2012-5912
L. Vollmer and C. Eden
 Thickness diffusivities from linear stability analysis derived from observational data
- 16:30–16:45 EGU2012-8899
C. Kratzenstein, T. Slawig, and A. Griewank
 Parameter Identification in Ocean Models via Oneshot Optimization
- 16:45–17:00 EGU2012-5233
D. A. Ham, P. E. Farrell, S. W. Funke, and M. E. Rognes
 Fully automatic adjoints: a robust and efficient mechanism for generating adjoint ocean models

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

Convener: D. Ham | Co-Conveners: S. Danilov, T. Penduff, S. M. Griffies, M. Levy

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY436 EGU2012-13738
R. Reboreda, D. Santaren, C. G. Castro, X.A. Alvarez-Salgado, R. Nolasco, H. Queiroga, and J. Dubert
 Solving the equation for the Iberian upwelling biogeochemical dynamics: an optimization experience
- XY437 EGU2012-12226
M. Marta-Almeida, R. Reboreda, C. Rocha, J. Dubert, R. Nolasco, N. Cordeiro, T. Luna, A. Rocha, J. Lencart e Silva, H. Queiroga, A. Peliz, and M. Ruiz-Villarreal
 operational modelling and forecasting of the Iberian shelves ecosystem
- XY438 EGU2012-12707
R. Khabeev, K. Ushakov, and R. Ibrayev
 Global ocean simulation with INM-IO eddy-resolving model
- XY439 EGU2012-12747
K.V. Ushakov
 Study of long-term characteristics of the INM RAS - IO RAS World Ocean model.

- XY440 EGU2012-427
X. Wang, Q. Wang, D. Sidorenko, S. Danilov, J. Schröter, and T. Jung
 Assessment of an Arctic Ocean model in a global configuration using the Finite Element Sea-ice Ocean Model (FESOM)
- XY441 EGU2012-485
J. Du, J. Zhu, C. Pain, F. Fang, and A. Avdis
 An eddy resolving tidal-driven ocean model of the South China Sea using an unstructured mesh
- XY442 EGU2012-782
J. Kuhlmann, H. Dobslaw, M. Thomas, and C. Petrick
 Modelling the ocean around South Africa: Interactions between the Agulhas Current and the ACC
- XY443 EGU2012-839
I. Russo, A. Storto, and S. Masina
 Impact of ERA-Interim forcing fields corrections on ocean state eddy-permitting OGCM simulation (1989-2010)
- XY444 EGU2012-2930
G.I. Shapiro, J. Pickering, and M.V. Luneva
 Optimising the vertical grid for numerical simulations of the Black Sea dynamics
- XY445 EGU2012-5414
E. Exarchou, J.-S. Von Storch, and J. Jungclaus
 Impact of tidal mixing with different scales of bottom roughness on the general circulation in the ocean model MPIOM
- XY446 EGU2012-2967
G.I. Shapiro, F. Cheng, and R. Thain
 Sensitivity of ocean model simulation in the coastal ocean to the resolution of the meteorological forcing
- XY447 EGU2012-6967
Y.-G. Park
 Dependence of tracer injection on the horizontal resolution in a numerical model
- XY448 EGU2012-4861
P. Itkin, R. Gerdes, C. Köberle, and S. Adams
 Role of Fast Ice in the Laptev Sea Shelf Circulation
- XY449 EGU2012-10253
A. Fuchs, A. Androssov, S. Harig, W. Hiller, and N. Rakowsky
 Numerical Aspects of Nonhydrostatic Implementations Applied to a Parallel Finite Element Tsunami Model
- XY450 EGU2012-13362
I. Rosso, A.M. Hogg, P.G. Strutton, and A.E. Kiss
 The Vertical Transport in the Ocean: a Pump Driven by Meso and Submesoscale Structures

ESSI1.2/OS4.7 – Informatics in Oceanography and Ocean Science (co-organized) – Orals

Convener: G. M. R. Manzella | Co-Conveners: D. M. A. Schaap, A. Alvarez

Room: 25

Chairperson: Dick Schaap

- 13:30–13:45 EGU2012-1163
G. Breitbach and H. Krasemann
 Web Services as Building Blocks for an Open Coastal Observing System
- 13:45–14:00 EGU2012-1258
C.L. Chandler, R.C. Groman, M.D. Allison, P.H. Wiebe, D.M. Glover, and S.R. Gegg
 Effective Management of Ocean Biogeochemistry and Ecological Data: the BCO-DMO Story
- 14:00–14:15 EGU2012-1638
 M. Fichaut, **D. Schaap**, G. Maudire, and G.M.R. Manzella
 SeaDataNet: Pan-European infrastructure for ocean and marine data management
- 14:15–14:30 EGU2012-1643
A. Novellino, D. Schaap, G.M.R. Manzella, S. Pouliquen, and P. Gorringe
 EMODnet Physical Parameters (EMODNet PP) Portal
- 14:30–14:45 EGU2012-4601
 H. Glaves and **D. Schaap**
 Geo-Seas - building a unified e-infrastructure for marine geoscientific data management in Europe
- 14:45–15:00 EGU2012-6399
R. Proctor, P. Blain, and S. Mancini
 Oceans of Data : the Australian Ocean Data Network

AS2.2/OS5.3 – Turbulence in the atmospheric and oceanic boundary layers (co-organized) – Orals

Convener: A.S. Petrosyan | Co-Conveners: S. Belcher

Room: 8

Chairperson: A. Petrosyan

- 13:30–13:45 EGU2012-8368
MW Rotach
Inhomogeneity of atmospheric boundary layers in complex terrain
- 13:45–14:00 EGU2012-9448
C. Meneveau and W. Anderson
Dynamic surface roughness model for LES of atmospheric boundary layer flow over multi-scale terrain with power-law height spectra
- 14:00–14:15 EGU2012-4758
A.-S. Smedman and E. Sahlee
Swell and UVCN regimes - competing mechanisms influencing the exchange of scalars over the ocean
- 14:15–14:30 EGU2012-13102
C.D. Markfort, W. Zhang, F. Porté-Agel, and H.G. Stefan
Effect of canopy and topography induced wakes on land-atmosphere fluxes of momentum and scalars
- 14:30–14:45 EGU2012-3883
C.C.C. Wong and C.H Liu
Turbulent Plume Dispersion over Two-dimensional Idealized Urban Street Canyons
- 14:45–15:00 EGU2012-2561
S. Chambers, A.G. Williams, W. Zahorowski, A. Griffiths, and J. Crawford
Investigating fetch effects and local mixing using near-surface radon gradient measurements
- 15:00–15:15 EGU2012-3659
D. Barantiev, E. Batchvarova, and M. A. Novitzky
Boundary layer structure during sea breeze conditions at Ahtopol, Bulgaria

AS2.2/OS5.3 – Turbulence in the atmospheric and oceanic boundary layers (co-organized) – Posters

Convener: A.S. Petrosyan | Co-Conveners: S. Belcher

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Petrosyan

- XY123 EGU2012-1862
G. Buffett, E.A. Vsemirnova, and D Klaeschen
Stochastic Heterogeneity Mapping to quantify turbulence in horizon layers of thermohaline staircases in the Mediterranean Outflow Water
- XY124 EGU2012-2563
S. Chambers, A.G. Williams, A. Griffiths, J. Crawford, and W. Zahorowski
Radon-222, a proxy for vertical mixing of emissions in the urban nocturnal boundary layer
- XY125 EGU2012-2564
A. Griffiths, **S. Chambers**, S. Parkes, A.G. Williams, and M. McCabe
Improving lidar-based mixing height measurements with radon-222
- XY126 EGU2012-3902
Y.K. Ho and C.H. Liu
Wind Tunnel Measurements of Turbulent Boundary Layer over Hypothetical Urban Roughness Elements
- XY127 EGU2012-7195
T. He, S. Stanic, K. Bergant, and F. Gao
Observations of tropospheric structure over the complex terrain of SW Slovenia with scanning lidars and radiosonde
- XY128 EGU2012-8330
M. Balmez and F. Georgescu
Study of the Low- Level jet characteristics in winter season between 1959 and 1982 for Bucharest's airports
- XY129 EGU2012-9004
V. M. Gryanik, C. Lüpkes, and J. Hartmann
Effective geometry based parametrization of the neutral drag coefficients for different sea ice morphology regimes
- XY130 EGU2012-9061
C. Messenger and V. Faure
Forecast atmospheric surface fields versus in-situ and remote observations from Agulhas region to 57°S in 2008
- XY131 EGU2012-10703
W.C. Cheng and F. Porté-Agel
Evaluation of subgrid-scale models in large eddy simulation of flow past a two-dimensional block
- XY132 EGU2012-11175
M.A. Gusakova and L.N. Karlin
Modeling of global surface air temperature

- XY133 EGU2012-12672
P. Dimitriadis and P. Papanicolou
 Statistical analysis of turbulent positively buoyant jets
- XY134 EGU2012-12716
P. Dimitriadis, M. Liveri-Dalaveri, A. Kaldis, C. Kotsalos, G. Papacharalampous, and P. Papanicolaou
 Zone of flow establishment in turbulent jets
- XY135 EGU2012-11326
M. Abkar and F. Porté-Agel
 The influence of a very large wind farm on turbulent transport in the atmospheric boundary layer
- XY136 EGU2012-13192
L. Garcia-Carreras, D.J. Parker, J.H. Marsham, P. Rosenberg, F. Marengo, and J. Mcquaid
 The vertical structure of the Saharan boundary layer: Observations and modelling
- XY137 EGU2012-14376
 K.V. Karelsky and **A.S. Petrosyan**
 Modeling of particulate plumes transportation in boundary layers with obstacles
- XY138 EGU2012-87
D. Bourras, C. Caudoux, L. Baggio, E. Luisset, P. Gilbert, J.P. Pineau, J.J. Correia, N. Geyskens, A. Cléménçon, H. Branger, L. Mortier, G. Reverdin, L. Marié, A. Weill, M. Berthet, and A. Mironov
 OCARINA : a new platform dedicated to measurements of Air-Sea fluxes
- XY139 EGU2012-1847
B. Maronga, D. van Dinter, A. Moene, and S. Raasch
 Derivation of turbulent structure parameters from large-eddy simulations and comparison with large-aperture scintillometer data and aircraft observations.
- XY140 EGU2012-1949
Mr. Chan and Dr. Liu
 Large-eddy simulation of flows over idealized urban areas in thermal stratification
- XY141 EGU2012-3888
K. K. Leung and C. H. Liu
 On the Aerodynamic Characteristics over Idealized Two-Dimensional Urban Street Canyon Models
- XY142 EGU2012-7859
C. Garbe and J. Schnieders
 Structure of Small-Scale Turbulences at the Free Air-Water Interface
- XY143 EGU2012-12106
A. Segalini, E. Deusebio, J. H. M. Fransson, and P. H. Alfredsson
 Analysis of coherent structures in canopy flows

Tuesday, 24 April

CL5.11 – EuroFORUM 2012: Major achievements and perspectives in scientific ocean and continental drilling (co-listed) – Orals

Convener: C. Escutia | Co-Conveners: U. Röhl, U. Harms, T. Wiersberg, R. Stein

Room: 16

Chairperson: n.n.

- 13:30–13:45 EGU2012-2847
J. Inwood, S. Morgan, A. Mcgrath, S. Davies, H. Foster, and J. Lofi
 Characterization of New Jersey Shelf Sedimentation using geochemical and physical properties: IODP Expedition 313
- 13:45–14:00 EGU2012-7352
T. Wiersberg, M.-L. Doan, A. M. Schleicher, K. Horiguchi, N. Eguchi, and J. Erzinger
 In situ gas concentrations in the Kumano forearc basin from drilling mud gas monitoring and sonic velocity data (IODP NanTroSEIZE Exp. 319 Site C0009)
- 14:00–14:15 EGU2012-9834
T. Litt, F. S. Anselmetti, M. N. Cagatay, R. Kipfer, S. Krastel, H.-U. Schmincke, and M. Sturm
 A 500,000-Year-Long Sediment Archive of Lake Van in Eastern Anatolia
- 14:15–14:30 EGU2012-9841
 S. Goldstein, **M. Stein**, Z. Ben-Avraham, A. Agnon, D. Ariztegui, A. Brauer, G. Haug, E. Ito, H. Kitagawa, A. Torfstein, and Y. Yasuda
 Extreme Dead Sea drying event during the last interglacial from the ICDP Dead Sea Deep Drill Core
- 14:30–14:45 EGU2012-13385
W. Clyde, S. Wing, P. Gingerich and the BBCP Science Team
 Bighorn Basin Coring Project (BBCP): High-Resolution Continental Records of Early Paleogene Hyperthermals
- 14:45–15:00 EGU2012-1824
R. Stein, B. Coakley, N. Mikkelsen, M. O'Regan, and C. Ruppel
 Future scientific drilling in the Arctic Ocean: Key objectives, areas, and strategies
- Chairperson: R. Stein, U. Harms
- 15:30–15:45 EGU2012-7682
T. Andrén, A. Bitinas, S. Björck, E. Emelyanov, J. Harff, M. Houmark-Nielsen, M. Jakobsson, J.B. Jensen, B.B. Jørgensen, A. Kotilainen, K.L. Knudsen, K. Lambeck, M. Moros, V. Spiess, S. U?cinowicz, S. Veski, and V. Zelchs
 The Baltic Sea IODP project "Paleoenvironmental evolution of the Baltic Sea Basin through the last glacial cycle"
- 15:45–16:00 EGU2012-8958
C. Betzler, C. Hübscher, T. Lüdmann, J. Reijmer, G. Eberli, D. Kroon, A. Droxler, M. Tiwari, and E. Gischler
 The Neogene monsoon and oceanic currents in the Indian Ocean: The Maldives archipelago.
- 16:00–16:15 EGU2012-5807
C. Juhlin, D.G. Gee, H. Lorenz, C. Pascal, K. Pedersen, and C.-F. Tsang
 > Exploring the Scandinavian Mountain Belt by Deep Drilling (COSC)
- 16:15–16:30 EGU2012-7104
C Mevel, R. Gatliff, J. Ludden, G. Camoin, B. Horsfield, and A. Kopf
 Towards a distributed infrastructure for research drilling in Europe
- 16:30–16:45 EGU2012-12592
B. Esmael, R. Fruhwirth, A. Arnaout, and G. Thonhauser
 Operations Recognition at Drill-Rigs
- 16:45–17:00 EGU2012-14018
H.-J. Wallrabe-Adams, M. Diepenbroek, H. Grobe, R. Huber, U. Schindler, and J. Collier
 IODP Scientific Earth Drilling Information Service

CL5.11 – EuroFORUM 2012: Major achievements and perspectives in scientific ocean and continental drilling (co-listed) – Posters

Convener: C. Escutia | Co-Conveners: U. Röhl, U. Harms, T. Wiersberg, R. Stein

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: C. Escutia

- Z105 EGU2012-11635
T. Westerhold, M. Lyle, H. Pälike, U. Röhl, and R. Wilkens
Middle to Late Eocene Carbonate Accumulation Events in the Equatorial Pacific - new geochemical records from IODP Exp 320/321 and ODP Leg 199
- Z106 EGU2012-5892
I. Neugebauer, A. Brauer, M.J. Schwab, U. Frank, P. Dulski, N. Waldmann, Y. Enzel, D. Ariztegui, E. Hadzhiivanova, and DSDDP Scientific Party
The ICDP Dead Sea Deep Drilling Project: An overview and the potential for high-resolution records of floods and droughts in the Levant
- Z107 EGU2012-14264
J Hernandez-Molina, D. Stow, C. Alvarez-Zarikian and the Expedition 339 Scientists Team
Onset, evolution and effects of the Mediterranean Outflow: Preliminary Results of IODP Expedition 339 in the Gulf of Cadiz
- Z108 EGU2012-6207
M. Schreck, J. Matthiessen, and **R. Stein**
The Neogene of the Iceland Sea - Paleoenvironmental reconstructions using marine palynomorphs
- Z109 EGU2012-6718
K. Katsuki, B.K. Khim, and B. Song
Latest Miocene and Pliocene paleoceanographic condition in the Southern Ocean based on silicoflagellate assemblage
- Z110 EGU2012-12680
J.J. Gonzalez, **C Escutia**, F.J. Espejo, T Williams, R.M. McKay, S. Passhler, T. van de Flierdt, L. Tauxe, H. Brinkhuis and the Carlota Escutia Team
Records of glacial-interglacial variability during the Pliocene: IODP Expedition 318 - Site U1361
- Z111 EGU2012-12607
M. Kobayashi, **M. Iwai** and the Expedition 318 Scientists Team
Upper Miocene-Pliocene diatoms in the Southern Ocean: IODP Site U1361 on the continental rise off Wilkes Land, Antarctica
- Z112 EGU2012-14473
G.B. Dunbar
Mg/Cas surface temperatures during the Marine Isotope Stage 31 collapse of the Ross Ice Shelf
- Z113 EGU2012-7650
B.D.A. Naafs, J Heffer, P Ferretti, R Stein, and G.H. Haug
Sea surface temperatures did not control the first occurrence of Hudson Strait Heinrich Events during MIS 16
- Z114 EGU2012-9427
C Ohlendorf, C Gebhardt, and the PASADO Science team
A step towards the identification of eolian input in the 51 ka BP sediment record of Laguna Potrok Aike in southeastern Patagonia
- Z115 EGU2012-12857
A. Fehr, R. Pechinig, J. Inwood, J. Lofi, F.P. Bosch, and C. Clauser
Thermophysical properties derived from lab measurements and downhole logging at New Jersey Shallow Shelf (IODP Expedition 313)
- Z116 EGU2012-9581
M. Python, L. France, B. Abily, N. Abe, J.C. Alt, M.M. Godard, B. Ildefonse, J.H. Koepke, M.D. Kurtz, R. Oizumi, B.D. Payot and the Exp. 335 Science Party Team
Petrographical and geochemical characteristics of the sheeted dyke-gabbro transition zone in ODP/IODP Hole 1256D
- Z117 EGU2012-6976
N. T. Arndt and the Barberton Drilling Team
Peering into the Cradle of Life: Scientific Drilling in the Barberton Greenstone Belt, South Africa
- Z118 EGU2012-3228
J. Trela, **E.C. Ferré**, J. Deans, R. Anma, A. Morris, and Expedition 335 Scientific Party
Shape-preferred orientation (SPO) of oceanic gabbros at IODP Hole 1256D: Implications for magmatic processes
- Z119 EGU2012-12550
A. Rüggeberg, A. Foubert, A. Vertino, D. Van Rooij, S. Spezzaferri, J.-P. Henriët, W.-C. Dullo, and COCARDE Science Community
COCARDE: new view on old mounds - an international network of carbonate mound research
- Z120 EGU2012-9416
C. Gebhardt, L. Naudts, L. De Mol, and M. De Batist
Seismic investigation of Lake Issyk-Kul, Kyrgyzstan
- Z121 EGU2012-7644
H. Lorenz and C. Juhlin
The Swedish Deep Drilling Program - projects and status 2012

- Z122 EGU2012-6463
A. Kopf, S. Hammerschmidt, E. Davis, D. Saffer, G. Wheat, A. LaBonte, R. Meldrum, M. Heesemann, H. Villinger, T. Freudenthal, V. Ratmeyer, J. Renken, M. Bergenthal, and G. Wefer
 Simple, Affordable and Sustainable Borehole Observatories for Complex Monitoring Objectives
- Z123 EGU2012-7379
 J.-E. Rosberg and **H. Lorenz**
 A new scientific drilling infrastructure in Sweden
- Z124 EGU2012-12985
M. Rothfuss, E. Anders, W. H. Müller, T. Rothenwänder, and D. Wunsch
 New tools and applications for the retrieval of cores under in situ pressure
- Z125 EGU2012-12209
A. Arnaout, R. Fruhwirth, M. Winter, B. Esmael, and G. Thonhauser
 Model-Based Hookload Monitoring and Prediction at Drilling Rigs using Neural Networks and Forward-Selection Algorithm
- Z126 EGU2012-1789
S. Tavakoli, S. Poslad, R. Fruhwirth, and M. Winter
 Using Real-time Event Tracking Sensitivity Analysis to Overcome Sensor Measurement Uncertainties of Geo-Information Management in Drilling Disasters
- Z127 EGU2012-9363
 B. Jandl, M. Winter, R. Fruhwirth, F. Riedel, and **H. Zeiner**
 Rig Side Online Drilling Support System for Prediction and Prevention of Upcoming Crises
- Z128 EGU2012-8501
K. Behrends and R. Conze
 Science Data Management for a CO₂-Sequestration project

NP3.1 – Nonlinear, scaling and complex Physical and Biogeophysical Processes in the Atmosphere and Ocean (co-listed) – Posters

Convener: V. Lucarini | Co-Conveners: F. Schmitt, S. Lovejoy, JM Lopez

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Francois Schmitt

- XY287 EGU2012-7427
F.G. Schmitt
 Scaling comparison of high frequency simultaneous oceanic and atmospheric temperature time series
- XY288 EGU2012-8351
 S.B. Zongo and **F.G. Schmitt**
 High frequency study of nutrient fluxes variability in a small river
- XY289 EGU2012-7082
S. K. Seo and K. Kim
 Dynamical behaviors of meteorological variations using the multifractal detrended fluctuation analysis
- XY290 EGU2012-7211
J.-S. Hwang, S. Souissi, L.-C. Li-Chun Tseng, J. C. Molinero, Q.-C. Chen, and C.-K. Wong
 Long term study of monsoon effect on the distribution of *Calanus sinicus* in the waters of Taiwan, western North Pacific Ocean
- XY291 EGU2012-1743
T.V. Belonenko and V.R. Foux
 Barotropic standing-progressive Rossby waves
- XY292 EGU2012-13235
V. Lucarini and G. Zappa
 Baroclinic stationary waves in aquaplanet models
- XY293 EGU2012-13219
S. Lovejoy, D. Schertzer, and D. Varon
 Do GCM's predict the climate? Or the low frequency weather?
- XY294 EGU2012-6771
W. Jung, D. Lee, and K. Kim
 Characteristics of networks in sea surface temperatures
- XY295 EGU2012-11124
G. Bel and Y. Ashkenazy
 The relation between the statistics of open ocean currents and the temporal correlations of the wind
- XY296 EGU2012-13292
A. Gires, I. Tchiguirinskaia, D. Schertzer, and S. Lovejoy
 A toy model to deal with zero rainfall in a Universal Multifractal framework

- XY297 EGU2012-4832
G. Rowlands, **S. C. Chapman**, N. W. Watkins, A. Clarke, and E. J. Murphy
Ecosystem control parameters, scaling relations and complexity thresholds from dimensional constraints.
- XY298 EGU2012-11540
A Brereton and D. Lewis
Finding Plankton Blooms in Turbulence
- XY299 EGU2012-4567
P. Lherminier, P. Klein, and L. Dumas
Mesoscale turbulence properties in the North-East Atlantic from altimetry and ADCP observations
- XY300 EGU2012-4379
A. Venaille, G.K Vallis, and S. M. Griffies
The vertical structure of geostrophic turbulence: statistical mechanics approach.

OS1.1 – Open Session on Ocean Circulation (including Fridtjof Nansen Medal Lecture) – Orals

Convener: T. Kanzow | Co-Conveners: J. Hirschi, E. Frajka-Williams

Room: 12

Chairperson: Torsten Kanzow

- 13:30–13:45 EGU2012-1633
CJ Wright and RB Scott
Current Meter Measurements of Ocean-Bottom Eddy Dissipation
- 13:45–14:00 EGU2012-6384
K.I.C. Oliver
The apparent efficiency of gravitational potential energy generation by diapycnal mixing in the ocean
- 14:00–14:15 EGU2012-4777
b. sinha, a. t. blaker, j. j.-m. hirschi, s. bonham, m. brand, s. a. josey, r. s. smith, and j. marotzke
mountains, no mountains and the Atlantic Meridional Overturning Circulation
- 14:15–14:30 EGU2012-7471
T. Graham, L. Jackson, M. Menary, and M. Palmer
Freshwater pulse experiments in a coupled climate model with bistable AMOC: testing the theory
- 14:30–14:45 EGU2012-13280
I. Koszalka, **T. W. N. Haine**, and M. G. Magaldi
Fates and transformation of Denmark Strait Overflow Water revealed by Lagrangian particles in a high resolution ocean model
- 14:45–15:00 EGU2012-1715
P. Haertel and **A.V. Fedorov**
What controls stratification, overturning, and water masses in an ocean with a fully adiabatic interior?
- Chairperson: Eleanor Frajka-Williams
- 15:30–15:45 EGU2012-13503
N. Maximenko, J. Hafner, and R. Lumpkin
Pathways of marine debris in statistical and diagnostic ocean circulation models
- 15:45–16:00 EGU2012-4784
R. Marsh, N. Skliris, S.A. Josey, and B.A. de Cuevas
The forcing, shaping and possible consequences of ocean salinity changes in the global ocean
- 16:00–16:15 EGU2012-9774
O. Marchal
A Rauch-Tung-Striebel smoother for the interpretation of long time series of ocean observations
- 16:15–16:30 EGU2012-858
M. Kersalé, A. A. Petrenko, A. M. Doglioli, F. Nencioli, J. Bouffard, and I. Dekeyser
Role of mesoscale eddies on exchanges between coastal regions
- 16:30–16:45 EGU2012-5702
A. Teles-Machado and A. Peliz
Atlantic Iberian Margin currents and eddies on a 20 yr high resolution simulation
- 16:45–17:00 EGU2012-13349
R. F. Sanchez Leal, C. González-Pola Muñoz, M. Ruiz Villarreal, A. Peliz, L. M. Fernández Salas, J. García Lafuente, and A. Lavín Montero
Recent observations of the Mediterranean water in the Eastern Gulf of Cadiz: flow-topography interactions.

OS1.1 – Open Session on Ocean Circulation (including Fridtjof Nansen Medal Lecture) – Posters

Convener: T. Kanzow | Co-Conveners: J. Hirschi, E. Frajka-Williams

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Joel Hirschi

- XY333 EGU2012-109
H. Uchida, T. Kawano, M. Aoyama, M. Wakita, S. Nishino, and S. Ozawa
A modified algorithm for estimating Absolute Salinity in the global ocean
- XY334 EGU2012-226
R. Durazo
Poleward flows along the transitional region of the Northeastern Pacific
- XY335 EGU2012-296
N. Kalashnikova and A. Demidov
Decadal changes of the Intermediate, Deep and Bottom Water Mass Characteristics in the Atlantic Ocean
- XY336 EGU2012-298
E. Krayushkin and A. Demidov
The distinctive features of the North Atlantic Deep Water components origin, structure and propagation in the Atlantic Ocean
- XY337 EGU2012-1038
Z. Wang and D. Yuan
Nonlinear Dynamics of Two Western Boundary Currents Colliding at a Gap
- XY338 EGU2012-2721
M. Vogt, W. Roether, S. Vogel, and **J. Sueltenfuss**
Improving the accuracy of helium and neon measurements in ocean waters
- XY339 EGU2012-3494
E. Heslop, S. Ruiz, J. Allen, and J. Tintoré
High sub-seasonal variability in water volume transports, revealed through a new ocean monitoring initiative using autonomous gliders
- XY340 EGU2012-4547
S. Tippenhauer and T. Kanzow
Horizontal mapping of near-seafloor vertical mixing in the central valley of the Mid-Atlantic Ridge
- XY341 EGU2012-4581
A. Peliz and S. Kida
On the connection between the Mediterranean Outflow-driven Beta-plume and the Azores Current.
- XY342 EGU2012-5703
A. Rabitti, H. van Haren, T. Gerkema, and L. R. M. Maas
On the West Atlantic Ocean Equatorial boundary layer
- XY343 EGU2012-6929
C. Collins, T. Margolina, and T. Rago
Comparison of Shipboard Hydrographic Time Series off California and Hawaii
- XY344 EGU2012-7651
H. S. Min and J.-H. Park
Hydrographic structure in the Northwest Pacific Ocean in stream function space
- XY345 EGU2012-7669
S. Guinehut, **M.-H. Rio**, S. Mulet, A.-L. Dhomp, and G. Larnicol
Monitoring the ocean from observations
- XY346 EGU2012-7973
Y. Aksenov, A.J.G. Nurser, S. Bacon, and A.C. Coward
Simulations of the Arctic Boundary Current in an eddy-resolving global ocean model
- XY347 EGU2012-8516
A. Barbosa Aguiar, A. Peliz, A. Teles-Machado, and X. Carton
A statistical study of MO eddies in a 20 yrs high resolution simulation
- XY348 EGU2012-10681
W. Wang, A. Koehl, and D. Stammer
The Deep Meridional Overturning Circulation in the Indian Ocean Inferred from the GECCO Synthesis
- XY349 EGU2012-11768
A. Marrero-Díaz, A. Rodriguez-Santana, M. Hernández-Arencibia, F. Machín, and L. García-Weil
Advective and diapycnal diffusive oceanic flux in Tenerife - La Gomera Channel
- XY350 EGU2012-12196
M. D. Pérez-Hernández, A. Hernández-Guerra, E. Fraile-Nuez, I. Comas-Rodríguez, V. Benítez-Barrios, J. F. Domínguez-Yanez, and P. Vélez-Belchí
An inverse model to estimate the origin of the Canary Current in Autumn 2009
- XY351 EGU2012-12293
R. Waldman, J. Mignot, and C. Frankignoul
Seasonal AMOC variability at 26,5°N in two coupled models and a forced ocean model : comparison to observations

- XY352 EGU2012-13525
B. Aguiar-González, S. Hormazábal, **A. Rodríguez-Santana**, J. Cisneros-Aguirre, and A. Martínez-Marrero
Observations of inertial oscillations affected by mesoscale activity in the Northeast Atlantic Ocean
- XY353 EGU2012-13752
B. Martinez-Lopez, J. Zavala-Hidalgo, and A. Quintanar
Loop Current Rings and Seasonal Cycle

OS4.3 – Ocean Remote Sensing – Posters

Convener: A. Alvera-Azcárate | Co-Conveners: G. Han, C. Gommenginger, S. Mecklenburg, J. Font, N. Reul, M. Drusch, E. Devred, V. Vantrepotte, D. McKee

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Alvera-Azcárate, E. Devred and S. Mecklenburg

- XY354 EGU2012-1248
G. Vanyushin, V. Borisov, M. Bogdanov, and T. Bulatova
Using satellite data for monitoring temperature conditions in fishing areas of the Northeast Atlantic for improving prognosis of fishery.
- XY355 EGU2012-1304
L.G. Evers, A Van Geyt, and M Snellen
Passive probing of the Atlantic Ocean's SOFAR channel with hydro-acoustic observations from earthquakes
- XY356 EGU2012-1314
C. Guo, V. Vlasenko, W. Alpers, N. Stashchuk, and X. Chen
Short internal waves trailing strong internal solitary waves in the South China Sea
- XY357 EGU2012-2604
C. C. Lin, C. R. Ho, and Y. H. Cheng
Sea Level Rise in Tuvalu
- XY358 EGU2012-2641
C.-R. Ho, Y.-H. Cheng, C.-Y. Lin, N.-J. Kuo, and S.-J. Huang
A Study of Typhoon Intensity Change by Data Mining Technique
- XY359 EGU2012-2770
S.-J. Huang, Y.-T. Chan, N.-J. Kuo, and C.-R. Ho
Effects of sea surface characteristics on typhoon evolution using multi-satellite data
- XY360 EGU2012-3266
F. Beron-Vera, Y. Wang, M. Olascoaga, G. Haller, and G. Goni
Objective identification and tracking of eddies in altimetry data
- XY361 EGU2012-5176
C. Troupin, A. Alvera-Azcarate, and J.-M. Beckers
Reconstruction and analysis of QuikSCAT wind measurements with an EOF-based technique
- XY362 EGU2012-6152
I. Bashmachnikov, D. Boutov, J. Dias, **A. Aguiar**, and J.H. Monteiro
Surface signature of a meddy while interacting with the Azores current
- XY363 EGU2012-7315
D.H. Lee, J.S. Hwang, H.S. Yun, B.I. Min, and Y.C. Suh
Computation of Complete Bouguer Anomalies using Satellite Marine Gravity Models in East Sea, Korea
- XY364 EGU2012-7584
K.-W. Gurgel, T. Schlick, D. Figueroa, and A. Dzvonkovskaya
Observing the 2011 Honshu Tsunami at the Coast of Chile by HF radar
- XY365 EGU2012-7778
A. Turiel, M. Umbert, N. Hoareau, J. Ballabrera-Poy, and M. Portabella
Singularity Analysis: a powerful image processing tool in remote sensing of the oceans
- XY366 EGU2012-8246
M.-I. Pujol, M.-H. Rio, C. Renaudie, Y. Faugere, G. Dibarboure, R. Morrow, J. Lambin, E. Bronner, and F. d'Ovidio
A Kerguelen regional Sea Level product to support the KEOPS2 experiment
- XY367 EGU2012-9090
Z.-W. Zheng and C.-R. Ho
The impact of ENSO on upper ocean response to a typhoon
- XY368 EGU2012-10529
V. Drozdowska, M. Darecki, D. Gutowska, P. Makuch, J. Kowalczyk, A. Strzałkowska, T. Petelski, and **J. Piskozub**
Studying luminescent characteristics of the specific surfactants in various regions of the Baltic Sea
- XY369 EGU2012-13162
M.P. Clarizia, M. di Bisceglie, C. Galdi, C. Gommenginger, and M. Srokosz
On the influence of ocean waves on simulated GNSS-R delay-doppler maps

- XY370 EGU2012-11148
P. Cipollini, J. Benveniste and the COASTALT Team
COASTALT Project's contribution to the development and dissemination of coastal altimetry
- XY371 EGU2012-11313
S. M. Barbosa and M. J. Fernandes
Space-time variability of geophysical corrections from the COASTALT coastal altimetry product in the west Iberia region
- XY372 EGU2012-12047
J.S. Löfgren, R. Haas, K.M. Larson, and H-G. Scherneck
Remote sensing of the coastal ocean with standard geodetic GNSS-equipment
- XY373 EGU2012-11443
R. Kiamehr, H.R. Daddowlat, S.M.T. Sadatipour, and M. Abrehdary
Evaluation of the Global Tidal Models versus Satellite Altimetry and Local Tide gauge data, a Case Study in Persian Gulf and Oman Sea
- XY374 EGU2012-10480
E.G.R. Gonzalez Rodriguez and A.T.C. Trasviña Castro
Mesoscale in the coastal zone of the Southern Baja California Peninsula, through color images
- XY375 EGU2012-10230
T. Zielinski, T. Petelski, P. Makuch, A. Strzalkowska, A. Ponczkowska, V. Drozdowska, D. Gutowska, J. Kowalczyk, M. Darecki, and **J. Piskozub**
Studies of aerosols advected to coastal areas
- XY376 EGU2012-11147
B Wozniak, K Bradtke, **M. Darecki**, J. Dera, J. Dudzinska-Nowak, L. Dzierzbicka-Glowacka, D. Ficek, K. Furmanczyk, M. Kowalewski, A. Krezel, R. Majchrowski, M. Ostrowska, M. Paszkuta, J. Ston-Egiert, M. Stramska, and T. Zapadka
SatBa?tyk - a project for satellite remote sensing of the Baltic ecosystem
- XY377 EGU2012-12793
T. Geisler, O. Oppelt, T. Heege, and I. Bartsch
The influence of suspended matter on a water column correction approach for case 2 coastal waters on remote sensing data
- XY378 EGU2012-12987
B. Wozniak, **M. Ostrowska**, K. Bradtke, M. Darecki, J. Dera, J. Dudzinska-Nowak, L. Dzierzbicka, D. Ficek, K. Furmanczyk, M. Kowalewski, A. Krezel, R. Majchrowski, M. Paszkuta, J. Ston-Egiert, M. Stramska, and T. Zapadka
Practical applicability and preliminary results of the Baltic Environmental Satellite Remote Sensing System (SatBaltic)
- XY379 EGU2012-13903
V. Vantrepotte, H. Loisel, D. Dessailly, and X. Mériaux
Optical classification of contrasted coastal waters
- XY380 EGU2012-13896
D. McKee, M. Twardowski, V. Sanjuan Calzado, D. D'Alimonte, and C. Trees
Sensitivity analysis for a spectral deconvolution approach for interpretation of ocean colour remote sensing in Case 2 waters
- XY381 EGU2012-13082
J.C. Wesson, D.M. Burrage, D.W. Wang, and S.D. Howden
Sea Surface Salinity and Ocean Color Observations in the Northern Gulf
- XY382 EGU2012-2504
J. Font and the SMOS L2OS Team
SMOS ocean salinity: improvements and issues after two years of operations
- XY383 EGU2012-4328
J. Köhler, M. Sena Martins, and D. Stammer
Analysis of Sea Surface Salinities as seen by SMOS
- XY384 EGU2012-4673
M. Umbert, N. Hoareau, A. Turiel, J. Ballabrera, and M. Portabella
Turbulence-inspired fusion methods for ocean remote sensing data
- XY385 EGU2012-6209
E. Slominska, W. Marczewski, and J. Slominski
SMOS over Antarctica - a short story of massive iceberg
- XY386 EGU2012-7464
X. Yin, **J. Boutin**, N. Martin, J. Vergely, and P. Spurgeon
Wind induced errors on retrieving SSS with SMOS brightness temperature
- XY387 EGU2012-7674
M. Umbert, J. Ballabrera, P. Fernandez, J. Salat, and J. Salvador
SMOS validation using SSS data from Barcelona World Race and Argo profilers

XY388 EGU2012-12963

D. M. Burrage, **J.C. Wesson**, D.W. Wang, P.A. Hwang, and S.D. Howden

Coincident Retrieval of Sea Surface Salinity from the Northern Gulf of Mexico Using SMOS and STARRS During the 2011 COSSAR Airborne Campaign.

OS4.5 – SENSEnet: Marine sensor development for the 21st Century – Orals

Convener: D. Connelly | Co-Conveners: V. Garçon, F. Wenzhoefer

Room: 9

Chairperson: Douglas Connelly

08:30–08:45 EGU2012-3774

K. Johnson

Chemical Sensors for a Global Observing System

08:45–09:00 EGU2012-2102

C. Barus, W. Giraud, D. Thouron, M. Comtat, V. Garçon, M. Armengaud, and N. Striebig

Electrochemical microsensor for in situ measurements of dissolved silicate in marine systems

09:00–09:15 EGU2012-4408

A. Meier, N.M. Tsaloglou, D. Connelly, B. Keevil, and M. Mowlem

Analysis of hyper-baric biofilms on engineering surfaces formed in the Deep Sea

09:15–09:30 EGU2012-12890

M.-N. Tsaloglou, C.M. Loukas, J.M. Ruano-López, H. Morgan, and M.C. Mowlem

An integrated microfluidic sensor for real-time detection of RNA in seawater using preserved reagents

09:30–09:45 EGU2012-14050

S Borisov and I Klimant

New Optical Sensing Materials for Application in Marine Research

09:45–10:00 EGU2012-11984

M. Marcelli, **V. Piermattei**, and U. Mainardi

T-Flap advances: instrumental and operative implementation

COFFEE BREAK

Chairperson: Veronique Garçon

10:30–10:45 EGU2012-11471

D. Donis, F. Janssen, M. Böttcher, D. McGinnis, M. Holtappels, and F. Wenzhöfer

Application of an eddy correlation system for the estimation of oxygen benthic fluxes in coastal permeable sediments impacted by submarine groundwater discharge

10:45–11:00 EGU2012-11143

J. Chapman, A. Lawlor, and F. Regan

Bio-inspired Design Approached Antifouling Strategies

11:00–11:15 EGU2012-11894

U. Marzocchi, N.P. Revsbech, L.P. Nielsen, and N. Risgaard-Petersen

Distant electric coupling between nitrate reduction and sulphide oxidation investigated by an improved nitrate microscale biosensor

11:15–11:30 EGU2012-11060

K. Koop-Jakobsen, J. Fischer, and F. Wenzhöfer

A novel Multi-Fiber Optode sensor system (MuFO) for monitoring oxygen

11:30–11:45 EGU2012-4435

A. Chennu, N. Volkenborn, F. Janssen, and L. Polerecky

Mapping the in situ microscale distribution of microphytobenthic biomass in coastal sediments: a hyperspectral methodology

11:45–12:00 EGU2012-2324

E. R. Reggiani and R. G. J. Bellerby

An autonomous spectrophotometric system for high resolution measurement of seawater pH

OS4.5 – SENSEnet: Marine sensor development for the 21st Century – Posters

Convener: D. Connelly | Co-Conveners: V. Garçon, F. Wenzhoefer

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Douglas Connelly

- XY389 EGU2012-4564
A. Milani, C. F. A. Floquet, D. Connelly, M. C. Mowlem, and P. J. Statham
Microfluidic technology for in-situ detection of iron at low concentration in seawater
- XY390 EGU2012-11235
R. Zmijan, S. Abi Kaed Bey, M. C. Mowlem, and H. Morgan
Micro Flow Cytometry Miniaturisation - Towards in-situ Optical Phytoplankton Analysis
- XY391 EGU2012-3504
Y. Marcon, H. Sahling, and G. Bohrmann
The use of photo-mosaics, bathymetry and sensor data into geographic information system for site description and faunal distribution analysis at the Menez Gwen Hydrothermal vent field
- XY392 EGU2012-5217
M. Tomczyk, G. Bohrmann, I. C. Wright, H. Sahling, and C. Waldmann
Hydroacoustic investigation of the emissions of gas from the seabed in fieldwork and experimental studies
- XY393 EGU2012-6258
M. Kononets, A. Tengberg, D. Atamanchuk, C. Waldmann, A. Behnken, and P.O.J. Hall
Quality control of long-term oxygen and related observations at the Koljoe Fjord Observatory, Sweden
- XY394 EGU2012-11790
R. Martellucci, M. Marcelli, and **U. Mainardi**
Low-cost instrumentation for high-resolution coastal monitoring
- XY395 EGU2012-12442
M. Marcelli, A. Madonia, V. Piermattei, and U. Mainardi
Results of instrumental and operative implementation of T-Flap
- XY396 EGU2012-10414
A. Kolomijeca, Y.-H. Kwon, **H. Ahmad**, and H.-D. Kronfeldt
Next generation in-situ optical Raman sensor for seawater investigations
- XY397 EGU2012-10125
Y.-D. Kwon, A. Kolomijeca, H. Ahmad, and H.-D. Kronfeldt
Introducing a new high sensitive surface-enhanced Raman substrate for monitoring PAHs in sea-water
- XY398 EGU2012-1586
J. Jonca, D. Thouron, C. Comtat, N. P. Revsbech, and V. Garçon
Electrochemical methods for autonomous chemical (phosphate and oxygen) monitoring in the ocean in the Oxygen Minimum Zone
- XY399 EGU2012-2053
J. P. Fischer, A. Wittstock, F. Wenzhöfer, and M. Bäumer
Switchable trace oxygen optode - combining the principle of the STOX electrode with optical oxygen sensors
- XY400 EGU2012-2685
C. Gabriel, A. Khalighi, S. Bourennane, P. Léon, and V. Rigaud
Optical Communication System for an Underwater Wireless Sensor Network
- XY401 EGU2012-6189
F.-E. Legiret, S.K. Abi Kaed Bey, V.J. Sieben, E.M.S. Woodward, M.C. Mowlem, D.P. Connelly, and E.P. Achterberg
Towards nanomolar nutrients sensors for the marine environment.
- XY402 EGU2012-12268
T Feseker, G Wetzell, and B Heesemann
A new device for high precision in situ sediment temperature profile measurements at the seafloor
- XY403 EGU2012-8384
D. Atamanchuk, P.O.J. Hall, A. Tengberg, J. Hovdenes, P.J. Thomas, and A. Apostolidis
Improvement and use of an optical pCO₂ sensor in the marine environment
- XY404 EGU2012-9690
A. Tengberg
Multivariate statistical methods used in sensor development and on-line analyzing of data from marine observatories
- XY405 EGU2012-10775
C. Briciu-Burghina and F. Regan
The role of continuous monitoring as a decision support tool: A Dublin Port deployment.
- XY406 EGU2012-3012
V. M.C. Rerolle, C. F. A Floquet, M. C. Mowlem, A. J. K. Harris, R. G. J. Bellerby, and E. P. Achterberg
Development of a colorimetric micro-sensor for seawater pH analysis: microfluidic design and oceanic deployment

ESSI1.2/OS4.7 – Informatics in Oceanography and Ocean Science (co-organized) – Orals

Convener: G. M. R. Manzella | Co-Conveners: D. M. A. Schaap, A. Alvarez

Room: 25

Chairperson: Giuseppe Manzella

- 15:30–15:45 EGU2012-8644
G. Griffiths, J. Blower, X. Yang, T. Loubrieu, and **K. Haines**
Web-based visualisation of ocean data in MyOcean
- 15:45–16:00 EGU2012-9816
Y. Sagarmínaga, I. Galparsoro, R. Reig, and J.A. Sánchez
Development of ITSASGIS-5D: seeking interoperability between Marine GIS layers and scientific multidimensional data using open source tools and OGC services for multidisciplinary research.
- 16:00–16:15 EGU2012-8517
S. Bainbridge
Cloud-based serviced-orientated data systems for ocean observational data - an example from the coral reef community
- 16:15–16:30 EGU2012-7935
A. Sokolov, P. Axe, S. Bock, S. Kaitala, O. H. Manscher, M. Rodriguez-Medina, R. Olsonen, I. Priha, and K. Tikka
Access to distributed marine databases on the Baltic Sea
- 16:30–16:45 EGU2012-10503
T. Hamre, S. Sandven, A. Leadbetter, V. Gouriou, D. Dunne, M. Grant, M. Treguer, and Ø. Torget
EUMIS - an open portal framework for interoperable marine environmental services
- 16:45–17:00 EGU2012-11036
E. Boldrini, B. Broeren, D. M. A. Schaap, S. Nativi, and G. M. R. Manzella
Revision and documentation of the CDI metadata model as a ISO 19115 profile
- 17:00–17:15 EGU2012-10663
C. Wosniok, G. Breitbach, and R. Lehfeldt
A Common Metadata System for Marine Data Portals
- 17:15–17:30 EGU2012-11439
T. Loubrieu, J. Dorandeu, V. Claverie, K. Cordier, Y. Barzic, O. Lauret, T. Jolibois, and J. Blower
MyOcean Information System : achievements and perspectives

ESSI1.2/OS4.7 – Informatics in Oceanography and Ocean Science (co-organized) – Posters

Convenor: G. M. R. Manzella | Co-Conveners: D. M. A. Schaap, A. Alvarez

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Giuseppe Manzella

- XL116 EGU2012-12023
M. Ouberdous, C. Troupin, A. Barth, A. Alvera-Azcárate, and J.-M. Beckers
Diva software, a tool for European regional seas and Ocean climatologies production
- XL117 EGU2012-14020
A. Grigoriev and A.G. Zatsepin
Validation of numerical model of waters dynamics of the Black Sea (Russian zone)
- XL118 EGU2012-7018
H. Glaves, S. Miller, and D. Schaap
Mind the Gap: furthering the development of EU-US collaboration in marine geoscience.
- XL119 EGU2012-5662
C. Troupin, M. Ouberdous, A. Barth, A. Alvera-Azcarate, D. Sirjacobs, and J.-M. Beckers
Comparison between Optimal Interpolation (OI) and Data-Interpolating Variational Analysis (Diva) for the generation of analysis and error gridded fields
- XL120 EGU2012-13062
R. Arko, C. Chandler, P. Clark, A. Milan, and J. Mize
Rolling Deck to Repository (R2R): A "Linked Data" Approach for the U.S. Academic Research Fleet
- XL121 EGU2012-2521
A. Jovicic, A. Castelli, and Z. Kljajic
SEA ODC - An Implementation of Web Portal and B2B Services for Managing of Oceanographic Data Sets Collected in South-East Adriatic
- XL122 EGU2012-6247
A. Palazov, V. Slabakova, and V. Marinova
Post-deployment evaluation of T-S data measured by Argo floats in the Black Sea: Regional approach
- XL123 EGU2012-8622
S.-H. Choi, S.-D. Kim, H.-W. Choi, S.-Y. Park, J.H. Oh, and S.-H. Baek
Development of KORDI Ocean Data Portal Web Service for Integrated Data Service
- XL125 EGU2012-7083
A. Palazov, A. Stefanov, V. Marinova, and V. Slabakova
Marine Web Portal as an Interface between Users and Marine Data and Information Sources

XL126 EGU2012-10550

R. Fernandes, P.C. Leitão, F. Braunschweig, F. Lourenço, P. Galvão, and R. Neves

Using Numerical Models in the Development of Software Tools for Risk Management of Accidents with Oil and Inert Spills

Wednesday, 25 April

AS1.7/NP1.4 – Recent Developments in Geophysical Fluid Dynamics (co-listed) – Orals

Convener: U. Harlander | Co-Conveners: A. Will, N. Wedi

Room: 10

Chairperson: n.n.

- 15:30–15:45 EGU2012-3614
P. Smolarkiewicz and J. Szmelter
Soundproof simulations of stratospheric gravity waves on unstructured meshes
- 15:45–16:00 EGU2012-6790
F.J. Poulin and N. K.-R. Kevlahan
Analyzing Spectral Fluxes in Wind-Driven Gyres using Wavelets
- 16:00–16:15 EGU2012-7074
S.A. Triana, **H.-C. Nataf**, D. Zimmerman, M. Adams, D.P. Lathrop, D. Schmitt, P. Cardin, A. Richard, P. La Rizza, J.-P. Masson, S. Cabanes, and P. Roux
Rotational acoustics in spherical Couette experiments
- 16:15–16:30 EGU2012-5907
N. Bakas and P. Ioannou
Emergence and maintenance of coherent vortices by stochastically forced Vortex Rossby Waves
- 16:30–16:45 EGU2012-6192
E. Becker and S. Brune
Indications of upper tropospheric stratified turbulence in a high-resolution mechanistic GCM
- 16:45–17:00 EGU2012-13117
E. Deusebio, A. Vallgren, and E. Lindborg
Energy transfer in geostrophic turbulence at finite Rossby and Froude number

AS1.7/NP1.4 – Recent Developments in Geophysical Fluid Dynamics (co-listed) – Posters

Convener: U. Harlander | Co-Conveners: A. Will, N. Wedi

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY30 EGU2012-3451
M.S. Kotelnikova, **Z.V. Verbitskaya**, and V.V. Nikulin
Experimental and numerical study of tornado-like vortex formation
- XY31 EGU2012-12996
Th von Larcher and R Klein
Multiple Scales in Fluid Dynamics and Meteorology: The DFG Priority Programme 1276 MetStröm
- XY32 EGU2012-9709
A. Rabitti and L. R. M. Maas
Wave ray dynamics of rotating spherical fluid domains
- XY33 EGU2012-13649
J. Ogaja and A. Will
Theoretical and numerical analysis of convergence properties of the higher order spatial schemes in the COSMO model
- XY34 EGU2012-406
J. Cao and Q. Xu
Computing Streamfunction and Velocity Potential in a Limited Domain of Arbitrary Shape
- XY35 EGU2012-1830
F. Zaussinger, F. Kupka, H. J. Muthsam, N. Happenhofer, and H. Grimm-Strele
Layered convection in double diffusive fluids
- XY36 EGU2012-2928
J. LaCasce
The SQG model with quasi-realistic stratification
- XY37 EGU2012-3035
M. Voigt and V. Wirth
Dynamics of orographic banner clouds
- XY38 EGU2012-3111
J.-I. Yano
Mass-Flux Subgrid-Scale Parameterization in Analogy with Multi-Component Flows: A Formulation Towards Scale Independence

- XY39 EGU2012-3415
C. Erath
A new multi-tracer transport scheme for the dynamical core of NCAR's Community Atmosphere Model
- XY40 EGU2012-4448
S. Tobias and B. Marston
Direct Statistical Simulation of Geophysical Flows
- XY41 EGU2012-4981
T. Seelig, U. Harlander, I. D. Borcia, and C. Egbers
Zonal mean flow excitation due to inertial waves propagating in the meridional plane
- XY42 EGU2012-5059
P. Paleo Cageao, B. Turnbull, and P. Bartelt
Experimental Modelling of Debris Flows
- XY43 EGU2012-5368
U. Harlander, G. B. Wright, and C. Egbers
Reconstruction of the 3D flow field in a differentially heated rotating annulus laboratory experiment
- XY44 EGU2012-7342
S. Koch, **U. Harlander**, R. Hollerbach, and C. Egbers
Inertial waves in a rotating spherical shell: Comparison between numerical simulations and laboratory experiments
- XY45 EGU2012-7385
Yu. D. Chashechkin
Adequate mathematical modelling of environmental processes
- XY46 EGU2012-7403
N. Lahaye and V. Zeitlin
Modons and multipolar coherent structures in a two-layer Rotating Shallow Water model
- XY47 EGU2012-7782
B. Futterer, **F. Zaussinger**, and C. Egbers
Experimental and numerical simulation of the spherical mantle convection microgravity experiment GeoFlow II of low viscosity ratio
- XY48 EGU2012-8045
Th von Larcher, A Fournier, and R Hollerbach
The influence of a sloping bottom endwall on the linear stability in the thermally driven baroclinic annulus with a free surface
- XY49 EGU2012-9822
A Lazar, A Stegner, and E Heifetz
Inertial instability of oceanic submesoscale vortices: linear analysis, marginal stability criterion and laboratory experiments
- XY50 EGU2012-10411
I. D. Borcia, **U. Harlander**, T. Seelig, and C. Egbers
Comparing attractor frequency bands with eigen frequencies for a confined rotating fluid
- XY51 EGU2012-11268
D. Halleaux and N. Renno
Measurements confirm a thermodynamical theory for convective vortices
- XY52 EGU2012-12645
W. Bauer, A. Gassmann, M. Baumann, V. Heuveline, L. Scheck, and S. Jones
Simulation of tropical-cyclone-like vortices in shallow-water ICON-hex using goal-oriented r-adaptivity
- XY53 EGU2012-13906
O. Fuhrer, T. Gysi, X. Lapillonne, and T. Schulthess
Considerations for implementing NWP dynamical cores on next generation computers.
- XY54 EGU2012-12186
P. Augier and E. Lindborg
Spectral budget of energy and potential enstrophy in high resolution General Circulation Models

BG3.1 – Oxygen depletion in land-locked, coastal and open ocean systems of the present and past – driving mechanisms, impacts and recovery (co-listed) – Orals

Convener: C. P. Slomp | Co-Conveners: J. Middelburg, A. Boetius

Room: 23

Chairperson: Caroline Slomp

- 08:30–08:45 EGU2012-10421
S. Lefort, Y. Gratton, A. Mucci, I. Dadou, and D. Gilbert
Hypoxia in the bottom water of the St. Lawrence Estuary: Is this ecosystem on borrowed time?
- 08:45–09:00 EGU2012-6045
C. Berg, V. Vandieken, B. Thamdrup, and K. Jürgens
Significance of archaeal nitrification in hypoxic waters of the Baltic Sea

- 09:00–09:15 EGU2012-5690
G.L. Jessen, A. Lichtschlag, D. Donis, F. Wenzhöfer, C.J. Schubert, A. Ramette, and A. Boetius
 Changes in microbial community structure under variable oxygen conditions at the Crimean shelf (Black Sea)
- 09:15–09:30 EGU2012-7041
S. Schimanke and H.E.M. Meier
 Past and future changes of hypoxia in the Baltic Sea simulated with a Regional Climate Model
- 09:30–09:45 EGU2012-12547
T. Jilbert, C. P. Slomp, and D. J. Conley
 Phosphorus dynamics and productivity during modern and past intervals of coastal hypoxia
- 09:45–10:00 EGU2012-9350
S. Sommer, L. Bohlen, A.W. Dale, K. Wallmann, A. Noffke, C. Hensen, T. Mosch, and O. Pfannkuche
 Nitrogen cycling across the Peruvian oxygen minimum zone surface sediments

BG3.1 – Oxygen depletion in land-locked, coastal and open ocean systems of the present and past – driving mechanisms, impacts and recovery (co-listed) – Posters

Convener: C. P. Slomp | Co-Conveners: J. Middelburg, A. Boetius

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

Author in Attendance: 17:30–19:00

Chairperson: Caroline Slomp

- BG51 EGU2012-5071
J. Karstensen, B. Fiedler, P. Brandt, A. Körtzinger, R. Zantopp, D. Wallace, G. Krahmann, M. Visbeck, and J. Hahn
 Severe dead-zone eddies in the open North Atlantic Ocean
- BG52 EGU2012-11447
M. Holtappels, F. Janssen, A. Lichtschlag, J. Fischer, F. Wenzhöfer, A. Boetius, and M. Kuypers
 Highly dynamic oxygen conditions and increased denitrification in Crimean Shelf sediments (Black Sea)
- BG53 EGU2012-1881
Y. He, E. Stanev, and J. Staneva
 Black Sea Biochemistry: Variability of Suboxic Zone as seen in continuous observations and 3D Numerical Simulations
- BG54 EGU2012-9869
A. Noffke, S. Sommer, A.W. Dale, V. Bertics, and O. Pfannkuche
 Internal nutrient loading of ammonium and phosphorus across the benthic boundary layer of the oxic to anoxic Gotland Basin (Baltic Sea)
- BG55 EGU2012-12678
C. P. Slomp, T. Jilbert, K.P.G.L. van Riel, H.P. Mort, D.J. Conley, and B.G. Gustafsson
 Sediment trace metals as a recorder of bottom water redox conditions in the Baltic Sea over the Holocene
- BG56 EGU2012-7330
A. Stigebrandt, D. Hansson, and B. Liljebladh
 Minimum oxygen concentrations in the deepwater of enclosed stratified marine basins of arbitrary hypsography as determined by organic loading and vertical mixing and their dependences on atmospheric and marine boundary conditions
- BG57 EGU2012-390
V.N.L. Wong, S.G. Johnston, E.D. Burton, R.T. Bush, L.A. Sullivan, and P.G. Slavich
 Episodic estuarine hypoxic events: integrating the biogeochemistry, hydrology and climate on a sub-tropical floodplain, eastern Australia
- BG58 EGU2012-455
B. Y. Queste, L. Fernand, T. D. Jickells, and K. J. Heywood
 Spatial extent and historical context of North Sea oxygen depletion in August 2010
- BG59 EGU2012-7629
 D. Langlet, E. Geslin, E. Metzger, B. Riedel, M. Stachowitsch, M. Zuschin, C. Baal, and **F. Jorissen**
 Foraminiferal response to long-term anoxia: In situ experiment in the Gulf of Trieste (Northern Adriatic Sea)
- BG60 EGU2012-4490
P. Kraal, R. T. Bush, E. D. Burton, and M. D. Cheetham
 Physical and chemical drivers of iron, phosphorus and sulfur cycling in a eutrophied shallow estuary
- BG61 EGU2012-4796
K. Oguri, T. Toyofuku, C. Fontanier, R. Schiebel, L.J. de Nooier, K. Koho, G.J. Reichart, and H. Kitazato
 Oxygen concentration profiles and the consumption rates at the sediment-water interface off Hachinohe, Northeastern Japan.
- BG62 EGU2012-4652
A. Pavlidou, I. Hatzianestis, and R. Psillidou-Giouranovits
 Dissolved Oxygen decrease near the bottom of the Inner Saronikos Gulf affected by the Athens Sewage Outfall

BG63 EGU2012-12509

A. Dreier, L. Stannek, M. Blumenberg, M. Taviani, M. Sigovini, C. Wrede, V. Thiel, and M. Hoppert
Isotopic fingerprints of bacterial chemosymbiosis in the bivalve *Loripes lacteus*

CL4.3 – Mediterranean Climate: from past to future (co-listed) – Orals

Convener: P. Lionello | Co-Conveners: C.M. Goodess, F. Abrantes, M. Tsimplis

Room: 16

Chairperson: C. Goodess

08:30–08:45 EGU2012-6637

P. Lionello, M. Gacic, G. Gomis, R. Garcia-Herrera, F. Giorgi, S. Planton, R. Trigo, A. Theocharis, M.N. Tsimplis, U. Ulbrich, and E. Xoplaki
The MedCLIVAR program and the climate of the Mediterranean region

08:45–09:00 **Young scientist poster presentations**

09:00–09:15 EGU2012-9847

M Rogerson, EJ Rohling, GR Bigg, and J Ramirez
Why does the Mediterranean Outflow vary through time?

09:15–09:30 EGU2012-8770

S. Alessio, C. Taricco, G. Vivaldo, and M. Ghil
Modern decrease of $\delta^{18}\text{O}$ in Mediterranean sediments over the last 150 y: anthropogenic forcing and natural variability

09:30–09:45 EGU2012-13625

J.-P. Savy, K.M. Yao, F. Touratier, and C Goyet
Temporal evolution of the anthropogenic CO_2 and acidification of the northwestern Mediterranean Sea, from the mid-1990s to the mid-2000s

09:45–10:00 EGU2012-2657

J. Llasses, G. Jordà, and D. Gomis
Optimal spatio-temporal design of an hydrographic sampling aimed to monitor climate change in the Mediterranean Sea

COFFEE BREAK

Chairperson: I. Bladé

10:30–10:45 EGU2012-1673

J. Romanski, A. Romanou, M. Bauer, and G. Tselioudis
Atmospheric Forcing of the Eastern Mediterranean Transient by Midlatitude Cyclones

10:45–11:00 EGU2012-10946

M. Gaetani and **M. Pasqui**
A synoptic characterization of the Saharan dust transport in the Mediterranean basin

11:00–11:15 EGU2012-4573

K. Schepanski and P. Knippertz
Soudano-Saharan Depressions and their Importance for Precipitation and Dust - a new Perspective on a classical synoptic Concept

11:15–11:30 EGU2012-3956

P. Nabat, F. Solmon, S. Somot, and M. Mallet
Implementation of a new emitted dust size distribution in a RCM over the Mediterranean region: application to the impact of aerosols on the Mediterranean climate

11:30–11:45 EGU2012-8974

A. Polonsky and M. Bardin
Variability of Mediterranean cyclonic activity associated with the NAO and AMO

11:45–12:00 EGU2012-5932

S. Josey
To What Extent Do Atmospheric Modes Of Variability Determine Mediterranean Sea Surface Heat Exchange?

LUNCH BREAK

Chairperson: P. Lionello

- 13:30–13:45 EGU2012-11846
I. Bladé, B. Liebmann, D. Fortuny, and G.-J. van Oldenborgh
 The summer North Atlantic Oscillation (SNAO) in CMIP3 models and related uncertainties in precipitation projections in the Euro-Mediterranean region
- 13:45–14:00 EGU2012-4034
E. Hertig, J. Jacobeit, A. Paxian, G. Vogt, S. Seubert, and H. Paeth
 Statistical assessments of extreme precipitation and dry periods in the Mediterranean area until the end of the 21st century
- 14:00–14:15 EGU2012-13623
J. A. Añel and the The Weatherathome.net Team
 Weatherathome.net: useful simulations for the Mediterranean region
- 14:15–14:30 EGU2012-194
A.-L. Lereboullet, G. Beltrando, and D.K. Bardsley
 Climate change and viticulture in Mediterranean climates: the complex response of socio-ecosystems. A comparative case study from France and Australia (1955-2040)
- 14:30–14:45 EGU2012-1836
 A.G. Koutroulis, **I.K. Tsanis**, and D. Jacob
 Projections of water resources availability in Crete for the 21st century under the global change perspective
- 14:45–15:00 EGU2012-10819
S. Somot, F. Sevault, M. Déqué, M. Herrmann, C. Dubois, R. Aznar, E. Padorno, E. Alvarez-Fanjul, G. Jorda, M. Marcos, and D. Gomis
 Regional ocean climate change scenarios for the Mediterranean Sea: assessing the uncertainties along the 21st century.
- 15:00–15:15 EGU2012-12375
C. Dubois, S. Somot, S. Calmanti, A. Carillo, M. Déqué, A. Dell'Aquila, A. Elizalde, S. Gualdi, D. Jacob, B. L'Hévéder, L. Li, P. Oddo, G. Sannino, E. Scoccimarro, and F. Sevault
 Future projections of the surface heat and water budgets of the Mediterranean Sea in an ensemble of coupled atmosphere-ocean regional climate models.

CL4.3 – Mediterranean Climate: from past to future (co-listed) – Posters

Convener: P. Lionello | Co-Conveners: C.M. Goodess, F. Abrantes, M. Tsimplis

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P.Lionello

- Z106 EGU2012-9097
B. Wilhelm, F. Arnaud, P. Sabatier, C. Crouzet, E. Brisset, F. Guiter, J.L. Reyss, E. Chaumillon, K. Tachikawa, E. Bard, and J.J. Delannoy
 1.4 kyrs of flash flood events in the Southern European Alps: implications for extreme precipitation patterns and forcing over the north-western Mediterranean area
- Z107 EGU2012-13012
L. Vidal, A. Pothin, M. Revel, K. Tachikawa, M. Garcia, C. Sonzogni, and E. Bard
 Climate Variability in the Levant basin during the last deglaciation
- Z108 EGU2012-12500
R. Zech, M. Zech, S. Markovic, and Y. Huang
 Humid glacials, arid interglacials? Results from a multiproxy study of the loess-paleosol sequence Crvenka, Serbia
- Z109 EGU2012-234
B. Soumaya, K. Nejib, B. Franck, L. Laurent, D. Jean-Claude, C. Nicolas, and R. Hélène
 Constraints on Mg/Ca-paleothermometry in the western Mediterranean Sea
- Z110 EGU2012-4161
A. Stadnitskaia, V. Liebetrau, A. Eisenhauer, and J.S. Sinninghe Damsté
 Past methane seepage and linked deep-water anoxia are logged in methane-derived carbonates
- Z111 EGU2012-7377
O. Peyron, M. Magny, N. Combourieu-nebout, S. Goring, S. Joannin, J.-L. de Beaulieu, E. Brugapaglia, I. Dormoy, R. Drescher-schneider, D. Galop, E. Ortu, and L. Sadori
 Pollen-inferred quantitative reconstruction of the Holocene climate in the central Mediterranean area (Italy)
- Z112 EGU2012-3717
G. Jordà, J. Llasses, and D. Gomis
 Can we trust Mediterranean hydrographic data products (MEDAR, EN3, Ishii) for climate studies?
- Z113 EGU2012-751
M. Gómez, L. Gimeno, R. Nieto, A. Drumond, and L. Prieto
 Variability of the moisture sources around the Mediterranean Basin during 1980-2000

- Z114 EGU2012-1121
C.M. Goodess, M.D. Agnew, D. Hemming, C. Giannakopoulos and the CIRCE RL11 Team
Integrated assessment in the Mediterranean: the CIRCE case studies
- Z115 EGU2012-1557
JD Ruiz Sinoga, JF Martinez Murillo, MA Gabarron Galeote, and JM Senciales Gonzalez
Analysis of dry periods using the DDSLR index in the Mediterranean southern Spain
- Z116 EGU2012-3720
G. Jordà, M. Marcos, M. Gómez, and D. Gomis
Wind wave climate in the Western Mediterranean under climate change scenarios
- Z117 EGU2012-2465
A. Martínez-Asensio, M. Marcos, G. Jordà, D. Gomis, and M. Gómez
Calibration of a wind wave hindcast (1958-2008) in the Western Mediterranean using buoy data.
- Z118 EGU2012-2712
M. Tanarhte, P. Hadjinicolaou, and J. Lelieveld
Intercomparison of temperature and precipitation datasets based on observations in the Mediterranean and the Middle-East
- Z119 EGU2012-6008
M. Stéfanon
Dynamical effects of vegetation on the 2003 summer heat waves
- Z120 EGU2012-6166
M. Revel, **N. Combourieu Nebout**, E. Ducassou, S. Migeon, M. Ismail, S. Bernasconi, and O. Peyron
Temporal evolution of the Ethiopian monsoon intensity since the last 25,000 years from the Nile suspended discharges record.
- Z121 EGU2012-9538
E. Romano, E. Volpi, and F. Stefanucci
Analysis of temperature trends, heat and cold waves in Central Italy (1952-2008)
- Z122 EGU2012-6263
P. Pereira, A. Sanchez-Lorenzo, J.-A. Lopez-Bustins, and C.-J. Lolis
Trends in summer tropical nights on the Iberian Peninsula and their connection with large-scale atmospheric circulation patterns
- Z123 EGU2012-8804
C. Pizzigalli, P. Lionello, Ahmed Hassan Fahmi, Ghada Al-Naber, Muhammad Shatanawi, Khaldoun Shatanawi, Zohra Lili Chabaane, Mohamed Wael Hamed Al Askhar, Mohamed Magdy Abdel Wahab, and Haifa Goma Ben Mailod
Precipitation climatology for the North African and Middle East areas of the Mediterranean Region using a collection of in situ observation
- Z124 EGU2012-6605
P. Lionello
The climate of the Venetian and North Adriatic region: variability, trends and future change
- Z125 EGU2012-6582
M. Reale and **P. Lionello**
Climate change over Venetia (north-east Italy)
- Z126 EGU2012-7085
K.M. Nissen, **U. Ulbrich**, G.C. Leckebusch, and J.G. Pinto
Mediterranean cyclones and wind storms in a changing climate
- Z127 EGU2012-6361
A. Bleta, **P.T. Nastos**, and A. Matzarakis
Assessment of bioclimatic conditions in Crete Island, Greece
- Z128 EGU2012-8188
R. Marcos, M. Turco, M.C. Llasat, and P. Quintana-Seguí
Application of a statistical downscaling method to detect inhomogeneities in a temperature time series
- Z129 EGU2012-2599
J. Kysely, L. Gaal, S. Begueria, R. Beranova, and J. I. Lopez-Moreno
Uncertainties of climate change scenarios of precipitation extremes in the Mediterranean based on ENSEMBLES RCMs
- Z130 EGU2012-9351
M. Dubrovsky, P. Duce, B. Arca, and G. Pellizzaro
Multi-GCM Climate Projection for the Mediterranean and Related Impact on the Forest Fire Risk (with a stress on Sardinia)
- Z131 EGU2012-11833
C.M Gouveia, R.M. Trigo, S.M. Begueria, and S Vicente-Serrano
Drought influence on vegetation behavior in Mediterranean basin
- Z132 EGU2012-12272
C. Oikonomou, M. El-Maayar, and M.A. Lange
Investigating wheat yield response to climatic extremes in the Mediterranean region under current and projected future climatic conditions

- Z133 EGU2012-4442
H. Feidas, **P. Zanis**, D. Melas, M. Vaitis, E. Anadranistakis, P. Symeonidis, and S. Pantelopoulou
The Geographic Climate Information System Project (GEOCLIMA): Overview and preliminary results
- Z134 EGU2012-12999
F. Appiotti, **M. Krzelj**, F. Marincioni, and A. Russo
Climate change effects on environment (marine, atmospheric and terrestrial) and human perception in an Italian Region (Marche) and the nearby northern Adriatic Sea.
- Z135 EGU2012-13844
Z. Bargaoui, **Y. Trambly**, E. Lawin, and E. Servat
Precipitation variability and future projections for water resources management in Tunisia Northern Coastal basins

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

Convener: E. Guilyardi | Co-Conveners: M. J. McPhaden, A. Wittenberg, A. Fedorov, P. Braconnot

Room: 17

Chairperson: n.n.

- 08:30–08:45 EGU2012-7022
S.-W. Yeh, B. Dewitte, J.-Y. Yu, S.-I. An, and Y.-K. Lee
Warming of warm pool sea surface temperature and changes in El Nino activity
- 08:45–09:00 EGU2012-8094
H. Bellenger, E. Guilyardi, M. Collins, S. Ferrett, W. Cai, and A. Wittenberg
First assesement of ENSO in CMIP5
- 09:00–09:15 EGU2012-5039
M. Watanabe, J.-S. Kug, F.-F. Jin, M. Collins, M. Ohba, and A. Wittenberg
Attributing varying ENSO amplitudes in climate model ensembles
- 09:15–09:30 EGU2012-3439
M. J. McPhaden
A 21st Century Shift in the Relationship between ENSO SST Anomalies and Upper Ocean Heat Content
- 09:30–09:45 EGU2012-7414
W.H.G Roberts
Investigating the different "flavours" of ENSO using the Linearised Ocean Atmosphere Model, LOAM
- 09:45–10:00 EGU2012-1457
D. Dommenges, T. Bayr, and C. Frauen
Analysis of the Non-linearity in the Pattern and Time Evolution of El Niño Southern Oscillation
- 10:00–10:15 EGU2012-6697
T. Izumo, M. Lengaigne, J. Vialard, J.-J. Luo, T. Yamagata, and G. Madec
Influence of Indian Ocean Dipole and Pacific recharge on following year's El Niño: interdecadal robustness.

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

Convener: E. Guilyardi | Co-Conveners: M. J. McPhaden, A. Wittenberg, A. Fedorov, P. Braconnot

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY369 EGU2012-12211
S. Thual, B. Dewitte, S.-I. An, S. Illig, and N. Ayoub
Low frequency modulation of the stability in a conceptual model of the equatorial Pacific: an estimate of the most influential changes in ENSO parameters over the recent decades
- XY370 EGU2012-1201
M. Ohba and M. Watanabe
Role of the Indo-Pacific Interbasin Coupling in Predicting Asymmetric ENSO Transition and Duration
- XY371 EGU2012-11636
B. Vannière, E. Guilyardi, T. Toniazzo, and S. Woolnough
Understanding coupled model errors in the tropical Pacific using hindcasts
- XY372 EGU2012-1718
m. zhao, h. hendon, y.h. yin, and o. Alves
Impact of Assimilating Salinity on ENSO Variability and Seasonal Forecast Skill in a Coupled Model
- XY373 EGU2012-2586
A. S. von der Heydt and H. A. Dijkstra
El Niño dynamics in the warm Pliocene climate

- XY374 EGU2012-2883
J. Stoll, K. Trachte, and J. Bendix
Analysis of ENSO related multi source SST for the east pacific Nino 1.2 region
- XY375 EGU2012-3824
D. Chen and T. Lian
Effects of westerly wind bursts on El Niño: a new perspective
- XY376 EGU2012-6728
W. Duan, Y. Yu, and H. Xu
Behaviors of nonlinearities modulating the El Nino events induced by optimal precursory disturbances
- XY377 EGU2012-6874
H.-Y. Son, J.-Y. Park, and J.-S. Kug
Winter Precipitation variability over East Asia associated with ENSO
- XY378 EGU2012-7035
M. Ohba, H. Shiogama, T. Yokohata, and M. Watanabe
Phase-dependent Impact of Strong Tropical Volcanic Eruption on predicting ENSO
- XY379 EGU2012-8944
S. Ineson and T. Graham
ENSO in the HadGEM2-ES CMIP5 centennial simulations
- XY380 EGU2012-10485
A. Babonneix, L. Gourdeau, F. Durand, C. E. Menkes, and N. Djath
Impact of ENSO variability on the Pacific Equatorial Undercurrent (EUC) sources: A modeling approach depending on the horizontal resolution
- XY381 EGU2012-13576
B. Rodríguez de Fonseca, E. Mohino, T. Losada, M. Martin-Rey, and I. Polo
Multidecadal Modulation of Tropical Atlantic impact on ENSO
- XY382 EGU2012-3088
H. Ding, N. Keenlyside, and M. Latif
Potential of Equatorial Atlantic Variability to Enhance El Niño Prediction

NP3.1 – Nonlinear, scaling and complex Physical and Biogeophysical Processes in the Atmosphere and Ocean (co-listed) – Orals

Convener: V. Lucarini | Co-Conveners: F. Schmitt, S. Lovejoy, JM Lopez

Room: 17

Chairperson: Shaun Lovejoy

- 13:30–13:45 EGU2012-1408
H. Yahia, J. Sudre, V. Garçon, and C. Pottier
High-resolution ocean dynamics from microcanonical formulations in non linear complex signal analysis
- 13:45–14:00 EGU2012-11645
Y. Ashkenazy and H. Gildor
On the Probability and Spatial Distribution of Ocean Surface Currents
- 14:00–14:15 EGU2012-5646
X. Sanchez, E. Roget, and J. Planella
Scaling properties of the velocity turbulent field from micro-structure profiles in the ocean
- 14:15–14:30 EGU2012-5329
S. De Monte, C. Cotté, F. d'Ovidio, M. Lévy, M. Le Corre, and H. Weimerskirch
Coupling submesoscale physics to seabirds behaviour at the ocean-atmosphere interface
- 14:30–14:45 EGU2012-13371
Y. Mezemate, V. Rambach, I. Tchiguirinskaia, B. Lemaire, B. Vincon Leite, C. Bonhomme, D. Schertzer, and S. Lovejoy
Turbulence and intermittency in lakes, a multifractal correlation analysis
- 14:45–15:00 EGU2012-4074
L. Gostiaux and H. van Haren
A complete sketch for fine-structure contamination by internal waves
- 15:00–15:15 EGU2012-5458
D. Faranda, V. Lucarini, and P. Manneville
Breakdown of turbulence in a plane Couette flow. Can extreme fluctuations be used to understand critical transitions?

OS1.1 – Open Session on Ocean Circulation (including Fridtjof Nansen Medal Lecture) – Orals

Convener: T. Kanzow | Co-Conveners: J. Hirschi, E. Frajka-Williams

Room: D

Chairperson: Peter Koltermann

15:30–16:30 EGU2012-14458

P.Y. Le Traon

From satellite altimetry to operational oceanography and Argo: three revolutions in oceanography
(Fridtjof Nansen Medal Lecture)

NH5.3/NP 7.3/OS2.6 – Nonlinear Dynamics of the Coastal Zone (co-organized) – Orals

Convener: I. Didenkulova | Co-Conveners: E. Pelinovsky

Room: 1

Chairperson: n.n.

10:30–10:45 EGU2012-1302

R. Grimshaw

The reduced Ostrovsky equation: integrability and breaking

10:45–11:00 EGU2012-6167

H. Kalisch

Mechanical balance laws for a class of Boussinesq systems

11:00–11:15 EGU2012-8764

O. Bokhove and E. Gagarina

Hamiltonian Boussinesq Model with Sheared Currents

11:15–11:30 EGU2012-3372

G.M. Reznik and V. Zeitlin

Nonlinear excitation of trapped waves by Poincaré waves in the coastal waveguides

11:30–11:45 EGU2012-4149

V. Liapidevskii and A. Chesnokov

Stability and horizontal mixing in shear shallow flows

11:45–12:00 EGU2012-2676

S. P. Pudasaini

Tsunami Generated by a Two-Phase Submarine Debris Flow

LUNCH BREAK

Chairperson: n.n.

13:30–13:45 EGU2012-1577

E.G. Morozov and A.V. Marchenko

Asymmetric tide in Spitsbergen fjords

13:45–14:00 EGU2012-3641

A. Ezersky and N. Abcha

Laboratory modelling of run-up amplification due to resonant waves

14:00–14:15 EGU2012-4007

F. Løvholt and G. Pedersen

Modelling highly non-linear waves with depth integrated models

14:15–14:30 EGU2012-2669

E. K. Lindstrøm, G. Pedersen, A. Jensen, and A. Bertelsen

Evolution of boundary layers on beaches

14:30–14:45 EGU2012-6732

M. Tian, A. Sheremet, and J. Smith

A Hyperbolic Nonlinear Wave Model Based On The Stream Function Formulation

14:45–15:00 EGU2012-7500

J. B. Frandsen, M. Mier-Torrecilla, M. Zurita-Gotor, and D. M. Holman

Predictions of nearshore hydrodynamics based on free-surface lattice Boltzmann approximations

NH5.3/NP 7.3/OS2.6 – Nonlinear Dynamics of the Coastal Zone (co-organized) – Posters

Convener: I. Didenkulova | Co-Conveners: E. Pelinovsky

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: I. Didenkulova and E. Pelinovsky

XY274 EGU2012-11784

O. Khvostova and E. Averbukh

On the dynamics of nonlinear, unsteady landslide flow within the smoothed particle hydrodynamics

- XY275 EGU2012-764
I. Nikolkina and I. Didenkulova
Waves generated by landslides in rivers: data of Nizhniy Novgorod region
- XY276 EGU2012-1085
Sh. Chatraee and I. Didenkulova
Effective fully-reflective boundary conditions at the shore for modeling of wave processes in long bays
- XY277 EGU2012-110
I. Didenkulova and **A. Rodin**
Statistics of waves within a ship wake
- XY278 EGU2012-112
A. Rodin, I. Didenkulova, and E. Pelinovsky
Nonlinear interaction of large-amplitude unidirectional waves in shallow water
- XY279 EGU2012-1390
P. Denissenko, I. Didenkulova, E. Pelinovsky, and J. Pearson
Laboratory study of statistical characteristics of nonlinear long wave runup on a beach
- XY280 EGU2012-120
M Cannalire and **E. Pelinovsky**
Soliton propagation over a submarine hill: The variable-coefficient Korteweg - de Vries framework
- XY281 EGU2012-13244
A. Osborne
Coastal Zone Dynamics in 2+1 Dimensions: Theory and Hyperfast Modeling
- XY282 EGU2012-4126
E. Gagarina, O. Bokhove, and J.J.W. van der Vegt
Hamiltonian Boussinesq Model with Horizontally Sheared Currents.
- XY283 EGU2012-9441
T. Lyubimova, A. Lepikhin, V. Konovalov, Ya. Parshakova, and A. Tiunov
Mixing in three-dimensional turbulent flow near the river confluence
- XY284 EGU2012-12096
M. Drivdal and J.E.H. Weber
Mean Lagrangian drift in continental shelf waves
- XY285 EGU2012-12182
V. Vasilieva and **O. Shishkina**
An effect of the near-bottom pycnocline on the loads of the bottom hill
- XY286 EGU2012-6816
I. Tereshchenko, A. Filonov, and A. Anis
Internal Nonlinear Tides on the Mexican Pacific Shelf
- XY287 EGU2012-6162
A. Filonov, M.F. Lavin, L.B. Lada, and I. Tereshchenko
The dynamics of internal tidal waves in Todos Santos Bay, Baja California, during experiment FLOO-2007
- XY288 EGU2012-518
J.M. Magalhaes and J.C.B. da Silva
Internal solitary wave generation and refraction observed at the Estremadura Promontory off the west Iberian Coast (Portugal)
- XY289 EGU2012-9237
T. Reisner, H. Steeb, and J. Renner
A numerical investigation on the fluid flow at the interface of a porous and a free flow domain
- XY290 EGU2012-9761
T. Szekely, L. Marie, and Y. Morel
Numerical model and observations of interactions between coastal shelf tidal front and a barotropic jet.
- XY291 EGU2012-9267
D. Lyubimov, T. Lyubimova, and D. Baidina
Travelling waves above the canopy of aquatic vegetation

OS3.1 – 'Sensitivity of marine ecosystems, biogeochemical cycles and carbon uptake to global change'. – Posters
Convener: B. Salihoglu | Co-Conveners: A. V. Borges, R. Sabia, Dr. Fernández Prieto, B. Barnier, C. Garbe, B. Ward, C. Donlon, D. Woolf, Dr. de Leeuw, V. Garçon, S. Pincock, R. Steinfeldt, A. F. Rios, K. Lygre, C. Robinson
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

- XY447 EGU2012-6834
Y. Bao, F. L. Qiao, and Z. Y. Song
The historical global carbon cycle simulation of FIO-ESM

- XY448 EGU2012-7604
F. Kersten and R. Tiedemann
Changes in carbonate ion concentrations of deep and intermediate Southern Ocean waters over the past 25 kyrs
- XY449 EGU2012-8653
P.C. Pardo, F.F. Pérez, A. Velo, S. Khatiwala, and A.F. Ríos
Anthropogenic CO₂ estimates in the Southern Ocean: storage partitioning in the different water masses.
- XY450 EGU2012-10199
D. Ruiz Pino, **A.A. Bianchi**, H. Isbert, A. Paulmier, J.L. Esteves, and M. Ferrario
Is phytoplankton responsible for pumping CO₂ in the Weddell Sea?
- XY451 EGU2012-10465
E. Fernández Gualart, F.F. Pérez, X.A. Padín, M. Vázquez-Rodríguez, N.M. Fajar, E. Calvo, C. Pelejero, and A.F. Ríos
Spatial and temporal changes in the subtropical North Atlantic along 24.5°N in terms of pH and other variables of the CO₂ system
- XY452 EGU2012-5691
V. M.C. Rerolle, M. Esposito, S. E Hartman, D. J. Hydes, and E. P. Achterberg
An estimate of anthropogenic carbon into the north east Atlantic between Scotland and Iceland
- XY453 EGU2012-5008
N. Gypens, A.V. Borges, and C. Lancelot
Historical changes in carbon dioxide (CO₂) and dimethyl sulphide (DMS) emissions in the eutrophied Southern North Sea
- XY454 EGU2012-6866
A. Oka, A. Abe-Ouchi, M. Chikamoto, and T. Ide
Investigation on mechanisms controlling export production at the LGM with an biogeochemical ocean model
- XY455 EGU2012-7728
K. Agiadi, E. Koskeridou, Ch. Giamali, and V. Karakitsios
Reef fish dynamic response to climatic variability in a warm eastern Mediterranean semi-enclosed basin
- XY456 EGU2012-8280
K. Agiadi, E. Koskeridou, P. Moissette, G.E. Lopez-Otalvaro, F. Quillévére, and J.J. Cornée
A middle Pleistocene eastern Mediterranean fish refuge: the Tsampika Bay (Rhodes, Greece)
- XY457 EGU2012-9949
Z. Lachkar and N. Gruber
The future coastal ocean: the impact of increased stratification on biological production and carbon cycling
- XY458 EGU2012-10619
L. Arteaga, M. Pahlow, and A. Oschlies
Evaluation of regional patterns of light and nutrient colimitation in the global ocean
- XY459 EGU2012-10284
G. Benassai, M. Migliaccio, A. Montuori, and A. Ricchi
SWAN wave simulations in the Southern Tyrrhenian Sea with COSMO SKY-MED SAR data
- XY460 EGU2012-12080
V. Jacq and C. Ridame
The influence of iron limitation on the growth and activity of *Crocospaera watsonii*, an unicellular diazotrophic cyanobacterium
- XY461 EGU2012-12760
M. Arcos-Pulido, **A. Rodríguez-Santana**, M. Emelianov, V. Paka, J. Arístegui, P. Sangrà, F. Machín, and L. García-Weil
Diapycnal Nutrient Fluxes in the Cape Ghir upwelling region
- XY462 EGU2012-2083
Dr. P. Kishcha, B. Starobinets, A. di Sarra, R. Udisti, S. Becagli, and P. Alpert
Sea-Salt Aerosol Mass Concentration Oscillations After Rainfall, Derived From Long-Term Measurements
- XY463 EGU2012-8861
S. M. King, A. C. Butcher, T. Rosenoern, E. Coz, K. I. Lieke, G. de Leeuw, E. D. Nilsson, and M. Bilde
Investigating primary marine aerosol properties: CCN activity of sea salt and mixed particles
- XY464 EGU2012-9539
M. Portabella, W. Lin, A. Stoffelen, A. Turiel, A. Verhoef, J. Verspeek, J. Ballabrera, and J. Vogelzang
Coastal and rain-induced wind variability depicted by scatterometers

OS4.3 – Ocean Remote Sensing – Orals

Convener: A. Alvera-Azcárate | Co-Conveners: G. Han, C. Gommenginger, S. Mecklenburg, J. Font, N. Reul, M. Drusch, E. Devred, V. Vantrepotte, D. McKee

Room: 5

Chairperson: n.n.

- 08:30–09:00 EGU2012-1694
L.-L. Fu
Observing the oceanic mesoscale processes with satellite altimetry: the state of the art and outlook
- 09:00–09:15 EGU2012-2605
Y.H. Cheng and C.R. Ho
Observations of mesoscale eddies in the North Pacific
- 09:15–09:30 EGU2012-1050
I.E. Kozlov, V.N. Kudryavtsev, J.A. Johannessen, B. Chapron, I. Dailidien?, and A.G. Myasoedov
ASAR imaging of the coastal upwelling in the Baltic Sea
- 09:30–09:45 EGU2012-9908
G. Han, Z. Ma, and N. Chen
Impacts of Hurricane Igor on the mixed-layer depth and phytoplankton bloom over the Grand Banks
- 09:45–10:00 EGU2012-13068
A. Kaplan
Small-Scale and Short-Term Variability of Sea Surface Temperature and Their Role in the Error of Gridded Data Sets

COFFEE BREAK

Chairperson: n.n.

- 10:30–11:00 EGU2012-13411
K. Giles, S Laxon, A Ridout, R Willatt, S Hendricks, C Hass, and J Beckers
CryoSat2: Observing the Arctic
- 11:00–11:15 EGU2012-8283
O. B. Andersen and L Stenseng
Global altimetric marine gravity field mapping. The impact of Cryosat-2 data.
- 11:15–11:30 EGU2012-6580
C. Gommenginger, C. Martin-Puig, S. Dinardo, D. Cotton, and J. Benveniste
Improved altimetric performance of Cryosat-2 SAR mode over the open ocean and the coastal zone
- 11:30–11:45 EGU2012-6918
A.M. Fischer and M.J. Moreno-Madrinan
The validity chlorophyll-a estimation by sun induced fluorescence in estuarine waters: An analysis of long-term (2003-2011) water quality data from Tampa Bay, Florida (USA)
- 11:45–12:00 EGU2012-3452
K. Stamnes, W. Li, Y. Fan, B. Hamre, Ø. Frette, A. Folkestad, K. Sørensen, and J. J. Stamnes
New algorithm for simultaneous retrieval of aerosols and marine parameters in coastal waters

LUNCH BREAK

Chairperson: E. Devred, S. Mecklenburg and J. Font

- 13:30–13:45 EGU2012-11249
G. Sclep and F. Mélin
Error introduced by wavelength correction schemes relating reflectance data from different satellite ocean colour missions
- 13:45–14:00 EGU2012-11524
G. Tilstone, A. Lotliker, and S. Groom
Accuracy assessment of satellite Ocean colour products in coastal waters.
- 14:00–14:15 EGU2012-6058
J. Boutin, N. Martin, J.L. Vergely, G. Reverdin, and S. Morrisset
Sea surface salinity as measured by SMOS and by autonomous platforms: impact of rain
- 14:15–14:30 EGU2012-6669
G Lagerloef, Y Kerr, E Anterrieu, T. Jackson, R. Bindlish, and H. Kao
Aquarius Status And SMOS Cross-Calibration Over Oceans
- 14:30–14:45 EGU2012-8720
N. Reul, B. Chapron, J. Tenerelli, S. Fournier, and Y. Quilfen
Sea Surface Salinity Observations from Space: a new tool to monitor the oceanic freshwater cycle as well as ocean/land & ocean/ atmosphere interactions

14:45–15:00 EGU2012-13601

J. Gurrion, S. Guimbard, R. Sabia, M. Portabella, V. Gonzalez, A. Turiel, J. Ballabrera, C. Gabarro, F. Perez, and J. Martinez

Improving SMOS retrieved salinity: characterization of systematic errors in reconstructed and modelled brightness temperature images

Thursday, 26 April

BG1.7 – Terrestrial organic matter dynamics during land-ocean transport in the Arctic. (co-listed) – Orals

Convener: J. E. Vonk | Co-Conveners: V. Alling, P. J. Mann

Room: 24

Chairperson: P. J. Mann & J. E. Vonk

- 15:30–15:45 EGU2012-3206
D.A. Hansell and R.T. Letscher
 The surface Arctic Ocean: A dynamic reservoir of terrigenous dissolved organic carbon
- 15:45–16:00 EGU2012-4237
V.V. Gordeev
 Seasonal and multi-annual variations of the North Dvina river input into the White Sea (Russia)
- 16:00–16:15 EGU2012-10122
L. Sánchez-García, J.E. Vonk, V. Alling, B. Van Dongen, A. Charkin, D. Kosmach, O. Dudarev, I. Semiletov, and Ö. Gustafsson
 Molecular, isotopic and gas-flux investigations of thaw-eroding reliefs of the Arctic Coastal-Ice complex in three different systems of the East Siberian Arctic Shelf
- 16:15–16:30 EGU2012-3212
R. Striegl, G. Aiken, D. Butman, M. Dornblaser, P. Raymond, P. Schuster, R. Spencer, A. Stubbins, and K. Wickland
 Seasonal Variability and Chemical Composition of Carbon Export by the Yukon River, Alaska
- 16:30–16:45 EGU2012-13072
C. W. Mueller, S. Loepmann, C. Hoeschen, J. Kao-Kniffin, and J. Bockheim
 Organic matter stabilization in Cryosols of Northern Alaska - a combined NMR and NanoSIMS study
- 16:45–17:00 EGU2012-6924
A. V. Vähätalo, H. Aarnos, E. M. Paolucci, D. E. Musibono, S. R. Khan, Y. Gelinas, A. Shantz, Q. Huang, W. Schneider, C. E. Rezende, E. Petrescu, and H. E. Reader
 Photochemical and microbial transformation of terrestrial dissolved organic matter - Lena River vs. rivers in mid and low latitudes

BG1.7 – Terrestrial organic matter dynamics during land-ocean transport in the Arctic. (co-listed) – Posters

Convener: J. E. Vonk | Co-Conveners: V. Alling, P. J. Mann

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

Author in Attendance: 17:30–19:00

Chairperson: P. J. Mann & J. E. Vonk

- BG1 EGU2012-5972
E. Karlsson, A. Charkin, O. Dudarev, I. Semiletov, J.E. Vonk, L. Sánchez-García, A. Andersson, and Ö. Gustafsson
 Carbon isotopes and lipid biomarker investigation of sources, transport and degradation of terrestrial organic matter in the Buor-Khaya Bay, SE Laptev Sea
- BG2 EGU2012-11054
E. Karlsson, V. Brüchert, A. Charkin, O. Dudarev, I. Semiletov, and Ö. Gustafsson
 Combined molecular biomarker - microbial incubation approach to investigate organic matter mineralization in the East Siberian Shelf Sea sediments
- BG3 EGU2012-6587
K.M. Schreiner, T.S. Bianchi, M.A. Allison, A.J. Miller, and F. Marcantonio
 Changes in Terrestrial Organic Carbon Delivery to the Colville River Delta and Adjacent Simpson's Lagoon Over the Late Holocene
- BG4 EGU2012-10536
 M.R. Oosterwoud, **S.E.A.T.M. van der Zee**, J.C.L. Meeussen, and E.J.M. Temminghoff
 Master function for the solid:solution equilibrium of DOC in taiga and tundra soils of N. Russia: experimental and modeling results
- BG5 EGU2012-9551
P J Mann, R M Spencer, P J Hernes, S E Tank, R Striegl, R Y Dyda, B J Peterson, J W McClelland, and R M Holmes
 Dissolved Organic Matter Land-Ocean Linkages in the Arctic
- BG6 EGU2012-9444
P J Mann, W Sobczak, J E Vonk, A Davydova, J Schade, E Bulygina, S Davydov, N Zimov, and R M Holmes
 Enzymatic regulation of organic matter metabolism in Siberia's Kolyma River Watershed

- BG7 EGU2012-8971
V. Alling, **L. Sanchez-García**, S. Pugach, D. Porcelli, C. Humborg, C.-M. Mörrh, B. van Dongen, O. Dudarev, I. Semiletov, and Ö. Gustafsson
Extensive degradation of terrestrial POC and DOC over the Eastern Arctic Siberian Shelf
- BG8 EGU2012-7268
Ö. Gustafsson and G. Destouni
On the use of Arctic rivers as integrators of water and carbon release from permafrost thawing
- BG9 EGU2012-1370
M.A. Granskog, C.A. Stedmon, P.A. Dodd, R.M.W. Amon, A. K. Pavlov, L. de Steur, and E. Hansen
Fate of terrestrial colored dissolved organic matter (CDOM) in the Arctic Ocean: exported or removed?
- BG10 EGU2012-8533
J. E. Vonk, P. J. Mann, S. Davydov, A. Davydova, W. V. Sobczak, J. Schade, E. Bulygina, S. Zimov, R. G. M. Spencer, T. I. Eglinton, and R. M. Holmes
High reactivity of ancient permafrost carbon upon hydrological release
- BG11 EGU2012-11878
C. G. Griffin, J. W. McClelland, **J. E. Vonk**, R. M. Holmes, and K. E. Frey
Chromophoric dissolved organic matter during the Mackenzie River spring freshet: Observations and freeze-thaw experiments
- BG12 EGU2012-8375
J. E. Vonk, L. Sánchez-García, B. E. van Dongen, V. Alling, D. Kosmach, A. Charkin, I. P. Semiletov, O. V. Dudarev, N. Shakhova, P. Roos, T. I. Eglinton, A. Andersson, and Ö. Gustafsson
Remobilization of old carbon from coastal and subsea permafrost in the Siberian Arctic
- BG13 EGU2012-8610
V. Alling, D. Porcelli, C.-M. Mörrh, L. G. Anderson, L. Sanchez-Garcia, Ö. Gustafsson, P. S. Andersson, and C. Humborg
Degradation of terrestrial organic carbon, primary production and out-gassing of CO₂ along the Laptev and East Siberian Seas as inferred from $\delta^{13}\text{C}$ values of DIC
- BG14 EGU2012-6376
G. Mollenhauer, S. Kusch, and J. Rethemeyer
Characterizing the export of fossil carbon from permafrost soils of Spitsbergen using compound-specific radiocarbon dating
- BG15 EGU2012-2114
M. Manecki, D. Herlemann, F. Pollehne, M. Labrenz, R. Zimmermann, T. Dittmar, D. Schulz-Bull, and K. Jürgens
Microbial decomposition of terrigenous organic matter discharged into the Baltic Sea
- BG16 EGU2012-12287
M. Winterfeld, R. Flerus, B. Koch, and G. Mollenhauer
Age distribution of permafrost soil & surface water particulate organic carbon in the Lena Delta, Siberia
- BG17 EGU2012-12248
M. Winterfeld, M. Goni, and G. Mollenhauer
Terrestrial organic matter sources and distribution along a land-ocean transect in Siberia derived from lignin phenol composition

OS1.2 – The North Atlantic: natural variability and global change – Orals

Convener: M. Rhein | Co-Conveners: R.J. Greatbatch

Room: 12

Chairperson: Richard Greatbatch

- 08:30–08:45 EGU2012-1770
M. Rhein, D. Kieke, and R. Steinfeldt
The Circulation of Newly Formed Deep Water in the Atlantic
- 08:45–09:00 EGU2012-4891
C. Mertens, M. Rhein, and F. R. Karbe
Transport variability in the western subpolar North Atlantic at 47°N
- 09:00–09:15 EGU2012-3096
C. S. Meinen and S. L. Garzoli
Physical mechanisms involved in Deep Western Boundary Current variability at 26.5°N
- 09:15–09:30 EGU2012-4160
D. Kieke, M. Rhein, I. Yashayaev, and B. Klein
Spreading of Labrador Sea Water in the vicinity of the Mid-Atlantic Ridge in the central subpolar North Atlantic
- 09:30–09:45 EGU2012-4879
F. Richter, D. Sidorenko, and **J. Schroeter**
On estimating the circulation in the North Atlantic from altimetry and ARGO data

- 09:45–10:00 EGU2012-13143
M. G. Magaldi, **T. W. N. Haine**, and R. S. Pickart
On the nature and variability of the East Greenland Spill Jet

COFFEE BREAK

Chairperson: Monika Rhein

- 10:30–10:45 EGU2012-1544
M. Latif, J. Ba, R. Greatbatch, S. Gulev, N. Keenlyside, T. Martin, and W. Park
Interannual, Decadal and Centennial Variability in the North Atlantic Sector
- 10:45–11:00 EGU2012-2398
A. A. Cimadoribus, M. den Toom, S. S. Drijfhout, and H. A. Dijkstra
Sensitivity of the Atlantic Meridional Overturning Circulation to South Atlantic freshwater anomalies.
- 11:00–11:15 EGU2012-871
L. C. Allison, E. Hawkins, T. Woollings, and L. Jackson
Mechanisms and impacts of decadal-scale fluctuation events in the Atlantic Meridional Overturning Circulation in unforced climate model simulations
- 11:15–11:30 EGU2012-5921
I. Medhaug, H.R. Langehaug, T. Eldevik, O.H. Otterå, T. Furevik, and M. Bentsen
Mechanisms for decadal scale variability in the North Atlantic Ocean circulation in the Bergen Climate Model
- 11:30–11:45 EGU2012-7661
E. Frajka-Williams, S. A. Cunningham, T. Kanzow, W. E. Johns, C. Meinen, H. L. Bryden, M. O. Baringer, and G. D. McCarthy
Dramatic Interannual Variability in the Atlantic Meridional Overturning Circulation (AMOC) at 26°N
- 11:45–12:00 EGU2012-4625
T. Kanzow, M. Lankhorst, E. Frajka-Williams, U. Send, S. A. Cunningham, R. Bingham, J. Karstensen, and C. W. Hughes
Meridional coherence and divergence of the Atlantic Meridional Overturning Circulation (AMOC)

LUNCH BREAK

Chairperson: Dagmar Kieke

- 13:30–13:45 EGU2012-8268
S. Josey and J. Grist
Exploring the surface forced variability of the North Atlantic circulation
- 13:45–14:00 EGU2012-1501
T. Woollings, J. M. Gregory, M. Reyers, J. G. Pinto, and D. J. Brayshaw
Ocean-atmosphere interaction in the Atlantic storm track response to climate change
- 14:00–14:15 EGU2012-2212
N. Barrier, A.M Tréguier, and C. Cassou
Impact of winter weather regimes on the North Atlantic oceanic circulation
- 14:15–14:30 EGU2012-1140
I. Manola and F. Selten
Differences in the wave guide characteristics of the jet stream in positive and negative phases of the NAO
- 14:30–14:45 EGU2012-2194
W. P. Sijp, J. M. Gregory, R. Tailleux, and P. Spence
The key role of the western boundary in linking the AMOC strength to the north-south pressure gradient.
- 14:45–15:00 EGU2012-5993
S. Elipot, E. Frajka-Williams, C. Hughes, S. Olhede, and M. Lankhorst
Basin-wide response of the North Atlantic Meridional Overturning Circulation to wind stress forcing

Chairperson: Richard Greatbatch

- 15:30–15:45 EGU2012-2117
X. Zhai, H.L. Johnson, D.P. Marshall, and O.A. Saenko
Significant sink of ocean eddy energy near western boundaries and its potential influence on the large scale ocean circulation

- 15:45–16:00 EGU2012-7086
M. Walter, C. Mertens, M. Dengler, and M. Rhein
 North Atlantic Current variability and associated mixing at the Mid-Atlantic Ridge
- 16:00–16:15 EGU2012-8752
S. Gregorio, T. Penduff, B. Barnier, J.-M. Molines, and J. Le Sommer
 Low-frequency variability of the Atlantic MOC in the eddying regime : the intrinsic component.
- 16:15–16:30 EGU2012-9248
M. Li, C. Mertens, M. Walter, and M. Rhein
 Spatial variation of diapycnal mixing from hydrographic surveys in the subpolar North Atlantic
- 16:30–16:45 EGU2012-2818
A. Marzocchi, J. J.-M. Hirschi, N. P. Holliday, S. A. Cunningham, S. Masina, and A. C. Coward
 Establishment of the North Atlantic subpolar circulation in an eddy-resolving ocean model
- 16:45–17:00 EGU2012-1714
A.V. Fedorov and F. Sevellec
 The leading, interdecadal mode of the Atlantic meridional overturning circulation in a hierarchy of ocean and coupled models

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

Convener: Y. H. Park | Co-Conveners: R. Timmermann, K. J. Heywood

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Y.-H. Park, R. Timmermann, K. Heywood

- A273 EGU2012-456
B. Y. Queste, W. O. Smith Jr., V. L. Asper, C. M. Lee, M. S. Dinniman, J. I. Gobat, and K. J. Heywood
 Physical and biogeochemical observations of the Ross Sea polynya using Seagliders during the 2010-2011 austral spring
- A274 EGU2012-4856
K J Heywood, S Fielding, S Schmidtke, D Guihen, A F Thompson, and G Griffiths
 Seaglider observations of ocean physics and biology in the Northwest Weddell Sea
- A275 EGU2012-355
N Mackay, A Watson, M-J Messias, and J Ledwell
 Diapycnal diffusivity in Drake Passage
- A276 EGU2012-7808
 K. Sheen, A.C. Naveira-Garabato, and **J. A. Brearley**
 Investigating turbulent mixing rates and the internal wave field in the Southern Ocean: microstructure and finestructure data from DIMES
- A277 EGU2012-7851
 J.A. Brearley, **K.L. Sheen**, and A.C. Naveira-Garabato
 First Year Observations of Antarctic Circumpolar Current Variability and Internal Wave Activity from the DIMES Mooring Array
- A278 EGU2012-1904
 A. H. Orsi, M. Palmer, **D. Gomis**, M. M. Flexas, Y-S. Kim, G. Jordà, C. Wiederwohl, and M. Álvarez
 On the Antarctic Slope Front and Current crossing of the South Scotia Ridge
- A279 EGU2012-9797
V. Haid, R. Timmermann, L. Ebner, and G. Heinemann
 Impact of coastal polynyas on sea ice production and water mass modification in the southwestern Weddell Sea
- A280 EGU2012-11070
 D. Walker, **A. Jenkins**, M. Brandon, K. Assmann, and D. Shoosmith
 Oceanographic observations at the shelf break of the Amundsen Sea, Antarctica
- A281 EGU2012-693
Dr Rusciano, Dr Speich, Dr Arhan, Dr Blanke, and Dr Ollitrault
 Interocean exchanges and spreading of the Antarctic Intermediate Water south of Africa
- A282 EGU2012-7606
A. Gritsenko and R. Tarakanov
 Front Structure in the Area South of Africa on Satellite Altimetry Data and Hydrophysical Section in December 2009
- A283 EGU2012-8733
D. Sidorenko, V. Ivchenko, S. Danilov, and J. Schröter
 Variability of transport through the Drake Passage and its link to the meridional pressure gradient
- A284 EGU2012-4467
G. Sgubin, S. Pierini, and H. A. Dijkstra
 Intrinsic low-frequency variability of the Argentine Basin flow, and its interaction with the Antarctic Circumpolar Current

- A285 EGU2012-5610
Q. Wang, S. Danilov, E. Fahrbach, J. Schroeter, and T. Jung
On the impact of wind forcing on the seasonal variability of Weddell Sea Bottom Water transport
- A286 EGU2012-3353
S. Close, **H. Goosse**, and F. Massonnet
The role of Southern Ocean salinity in determining Antarctic sea ice variability
- A287 EGU2012-3197
W. Rath and R.J. Greatbatch
Impact of Surface Velocity Dependence of the Wind Stress on the Dynamics of the Southern Ocean
- A288 EGU2012-5769
N. Bakas, P. Ioannou, and N. Constantinou
Stochastic structural stability theory of the Antarctic Circumpolar Current
- A289 EGU2012-7526
T. Kuhlbrodt, L. C. Shaffrey, and J. M. Gregory
Ocean heat uptake processes in the Southern Ocean in HiGEM1.2, a climate model with an eddy-permitting ocean
- A290 EGU2012-7527
C. Wilson, J. R. Blundell, C. W. Hughes, M. Mazloff, E. Shuckburgh, and A. F. Thompson
The structure and stability of transport and mixing barriers in the Antarctic Circumpolar Current
- A291 EGU2012-8587
L. C. Allison, H. L. Johnson, and D. P. Marshall
Spin-up and adjustment of the Antarctic Circumpolar Current and global pycnocline
- A292 EGU2012-10566
T. Janjic, R. Timmerman, and **J. Schroeter**
Improved representation of Southern Ocean fronts in a finite element ocean model
- A293 EGU2012-2799
A. Buß, O. Huhn, J. Sültenfuß, and M. Rhein
Upwelling in the Atlantic sector of the Southern Ocean inferred from helium isotope disequilibrium
- A294 EGU2012-6128
S. Torres-Valdes, L. Jullion, A. Naveira-Garabato, and P. J. Brown
The contribution of the Weddell Sea to the global biogeochemical cycles
- A295 EGU2012-8790
T. Tesi, L. Langone, M. Ravaioli, L. Capotondi, and F. Giglio
Particulate export vs lateral advection in the Antarctic Polar Front (Southern Pacific Ocean)
- A296 EGU2012-12252
A. Laurantou, C. Lo Monaco, C. Brunet, C. Ridame, and N. Metzl
Seasonal to decadal pH and fCO₂ changes in the subtropical, sub-antarctic and polar waters of the SW Indian ocean
- A297 EGU2012-10939
D. Sprenk, M. E. Weber, G. Kuhn, P. Rosén, and H.-G. Röhling
Bioproductivity in the Southern Ocean since the last Interglacial - new high-resolution biogenic opal flux records from the Scotia Sea

CL4.5/OS1.8 – Global and regional sea level rise and variability: from past to future (co-organized) – Orals

Convener: S. Jevrejeva | Co-Conveners: A. Cazenave, A. Grinsted

Room: 16

Chairperson: Grinsted

- 13:30–13:45 EGU2012-102
H. Palanisamy, B. Meyssignac, D. Peng, A. Cazenave, and M. Becker
Regional sea level variability in the Caribbean and South China Sea over 60 years from 1950-2009
- 13:45–14:00 EGU2012-2347
J. Williams and C. W. Hughes
Coherence of off-shore steric height and island sea level.
- 14:00–14:15 EGU2012-2672
A.B.A. Slangen, R.S.W. van de Wal, and L.L.A. Vermeersen
Can we explain regional relative sea-level variations for the period 1961-2003?
- 14:15–14:30 EGU2012-3348
G. Woppelmann and **M. Marcos**
Coastal sea level rise in southern Europe and the nonclimate contribution of vertical land motion
- 14:30–14:45 EGU2012-3554
E. Giarolla and R. Matano
Low-Frequency Variability of the Southern Ocean Circulation

- 14:45–15:00 EGU2012-5612
F. M. Calafat and D. Chambers
 Mechanisms of decadal sea level variability in the Eastern North Atlantic and the Mediterranean Sea
 Chairperson: Cazenave
- 15:30–15:45 EGU2012-6029
M. Geyer and D. Salas y Melia
 An assessment of the contribution of the Greenland ice sheet to future sea level rise
- 15:45–16:00 EGU2012-7273
D. Volkov and F. Landerer
 The Genesis of Sea Level Variability in the Barents Sea
- 16:00–16:15 EGU2012-7510
T. Kuhlbrodt and J. M. Gregory
 The spatial structure of simulated ocean heat uptake in the CMIP3 and CMIP5 climate models
- 16:15–16:30 EGU2012-8632
K. S. Madsen and T. Schmith
 Decadal sea level variations in the North Atlantic and Arctic Oceans
- 16:30–16:45 EGU2012-9155
M. Carson, A. Köhl, and D. Stammer
 Low-frequency sea surface height variability from long control runs of coupled models
- 16:45–17:00 EGU2012-9802
K. von Schuckmann, J.-B. Sallée, C. Cabanes, P.-Y. Le Traon, F. Gaillard, S. Speich, and M. Hamon
 The role of Argo steric sea level within the global sea level budget

CL4.5/OS1.8 – Global and regional sea level rise and variability: from past to future (co-organized) – Posters

Convener: S. Jevrejeva | Co-Conveners: A. Cazenave, A. Grinsted

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jevrejeva

- XY197 EGU2012-2146
E.P.H. Bregman, I.Kant Baltic Federal State University, Kaliningrad, Russia; **Utrecht University, the Netherlands** and O.A. Druzhinina, I.Kant Baltic Federal State University, Kaliningrad, Russia
 Post-glacial coast development and human settling of the North European Ice Marginal Landscape (IML)
- XY198 EGU2012-3077
 B. Meyssignac, **O. Henry**, P. Prandi, A. Cazenave, and D. Stammer
 Past sea level reconstruction over the Arctic Ocean since the mid-1950s
- XY199 EGU2012-3304
 R. Torres and **M. Tsimplis**
 Seasonal sea level cycle in the Caribbean Sea
- XY200 EGU2012-3305
 R. Torres and **M. Tsimplis**
 Sea level trends and interannual variability in the Caribbean Sea
- XY201 EGU2012-3831
S. Jevrejeva, J. Moore, and A. Grinsted
 Trends and acceleration in regional sea levels
- XY202 EGU2012-3699
A. Cazenave, O. Henry, S. Munier, B. Meyssignac, T. Delcroix, W. Llovel, H. Palanisamy, and A. Gordon
 Estimating ENSO influence on the global mean sea level during 1993-2010
- XY203 EGU2012-3874
S. Jevrejeva, J. Moore, and A. Grinsted
 About the difference between sea level projections by 2100 using semi-empirical and process based models.
- XY204 EGU2012-4764
M. Benavent, J. Arnoso, and E. J. Vélez
 Tides at the east coast of Lanzarote Island
- XY205 EGU2012-5062
R. V. Donner, R. Ehrcke, S. M. Barbosa, J. Wagner, J. F. Donges, and J. Kurths
 Spatial patterns of linear and nonparametric long-term trends in Baltic sea-level variability
- XY206 EGU2012-5493
 M. Wenzel and **J. Schroeter**
 Regional and global sea level change since 1900 estimated from tide gauges and altimetry
- XY207 EGU2012-6050
M. Hewelt, B. Miziński, and T. Niedzielski
 Implementing algorithms for modelling and prediction of sea level change using threshold models

- XY208 EGU2012-6286
G. Chepurin and J. Carton
Sea level Atlantic-to-Arctic: an examination of the altimeter record
- XY209 EGU2012-6811
E. C. Pavlis, K. Evans, P. Milas, D. Paradissis, B. A. Massinas, and X. Frantzis
Aegean Sea Level Network: Eastern Mediterranean Altimeter Calibration Network - eMACnet
- XY210 EGU2012-6331
J.J. Martinez Benjamin, J. Gili, R. Lopez, A. Tapia, E. Bosch, B. Perez, and F. Pros
Monitoring Sea Level by Tide Gauges and GPS at Barcelona and Estartit Harbours
- XY211 EGU2012-7671
G. Metreveli, N. Tsvitsivadze, K. Tavartkiladze, G. Dokhnadze, L. Lagidze, and N. Motsonelidze
Characteristic Features of Sea Level Series Analysis in the World Ocean Current Climatic Eustasy Research
- XY212 EGU2012-6746
T. Suzuki and M. Ishii
Decadal to inter-decadal sea level changes in the North Pacific
- XY213 EGU2012-10078
A. Hibbert
The Semiannual Oscillation of Southern Ocean Sea Level
- XY214 EGU2012-6765
A. Fadil, P. Denys, and R. Tenzer
Sea Level Rise In New Zealand: Vertical Land Motion from GPS, and Combined Satellite Altimetry And Tide Gauge Sea Level Records
- XY215 EGU2012-10420
A. P. Matthews, E. Bradshaw, K. M. Gordon, S. J. Holgate, S. Jevrejeva, L. J. Rickards, M. E. Tamisiea, and P. L. Woodworth
The Permanent Service for Mean Sea Level: A review of recent updates
- XY216 EGU2012-14377
M. Ablain, Y. Faugere, G. Larnicol, N. Picot, A. Cazenave, and J. Benveniste
Improvement of global and regional mean sea level derived from satellite altimetry multi missions
- XY217 EGU2012-7704
L. Scarascia and P. Lionello
Links between Sea Level in the northern Adriatic sea and large scale patterns
- XY218 EGU2012-12935
Y. Cheng and O.B. Andersen
Sea level annual cycle in sea level from tide gauges, altimetry and ocean models in the Polar Seas
- XY219 EGU2012-14142
M. Beenstock, E. Frank, D. Felsenstein, and Y. Rengewertz
Tide Gauge Location and the Measurement of Global Sea Level Rise
- XY220 EGU2012-13526
S. Esselborn
Patterns of Sea Level Variability in the North Atlantic
- XY221 EGU2012-12100
A. Bonaduce and N. Pinardi
Low frequency Sea Level Variability: correlation between altimetry and tide gauges in the Mediterranean Sea
- XY222 EGU2012-11534
S. Morucci, R. Inghilesi, and A. Orasi
Analysis of Long-Term Sea Level Variation in the Italian Seas
- XY223 EGU2012-1536
h. chen, P. Tkalich, and P. Malanotte-Rizzoli
The forced and free response of the South China Sea to the large scale monsoon system
- XY224 EGU2012-2746
P. L. Svendsen, O. B. Andersen, and A. A. Nielsen
Sea level reconstruction from satellite altimetry and tide gauge data
- XY225 EGU2012-11013
A. Ollivier, G. Valladeau, J.F. Legeais, Y. Faugere, N. Picot, and P. Femenias
Towards an improved altimeter time series for Envisat climate applications
- XY226 EGU2012-3726
D. Gomis and **G. Jordà**
Inconsistencies in sea level pressure trends between different atmospheric products. Impact on sea level trend estimation
- XY227 EGU2012-8688
T. Schmith, S. Johansen, and P. Thejll
Statistical analysis of global surface temperature and sea level using cointegration methods
- XY228 EGU2012-11364
B.D. Hamlington, R.R. Leben, and K.-Y. Kim
Improving Sea Level Reconstructions Using Non-Sea Level Measurements

OS2.3 – Oceanography at coastal scales. Modelling, coupling and observations – Posters

Convener: A. Sánchez-Arcilla | Co-Conveners: E. Stanev, J. Wolf, S. Carniel

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dr. Sandro Carniel

- A298 EGU2012-1135
C. S. Kim, H. S. Lim, K. S. Park, and J. S. Yang
Coastal water quality modeling accounting for groundwater influence in tidal lake in Korea
- A299 EGU2012-1909
M. Grifoll, A. Aretxabaleta, M. Espino, and J.C. Warner
Current variability and momentum balance in the along-shore flow for the Catalan inner-shelf.
- A300 EGU2012-3133
L. Lamas, A. Peliz, P. Oliveira, and J. Dias
Cross-shore flow on the inner-shelf off southwest Portugal
- A301 EGU2012-3208
T. Keen, T. Campbell, and J. Dykes
Geospatial Analysis of Tidally Driven Flow in Mississippi Sound, U.S.A.
- A302 EGU2012-4865
M.C. Sousa, N. Vaz, I. Alvarez, and J.M. Dias
Wind forcing response of the dispersal of Minho estuarine plume
- A303 EGU2012-6044
F. Gouillon, M. Boutet, R. Baraille, and Y. Morel
River plume dynamics : sensitivity to the river numerical implementation and model grid resolution
- A304 EGU2012-7631
D. Pujol and H. Nepf
Breaker-generated turbulence in and above a seagrass meadow
- A305 EGU2012-7744
R. Tolosana-Delgado, A. Soret, O. Jorba, J.M. Baldasano, and A. Sánchez-Arcilla
Coupling of WRF meteorological model to WAM spectral wave model through sea surface roughness at the Balearic Sea: impact on wind and wave forecasts
- A306 EGU2012-8018
P. de Ruggiero, E. Napolitano, R. Iacono, S. Pierini, G. Spezie, A. Montuori, and M. Migliaccio
Circulation modeling of a Tyrrhenian coastal area, with an analysis of Cosmo SkyMed SAR wind forcing capabilities
- A307 EGU2012-8995
H. Michaud, Y. Leredde, E. Berthebaud, C. Estournel, P. Marsaleix, B. Guerinel, S. Thorin, and T. Schvartz
Impacts of a beach nourishment on hydrodynamics and morphodynamics during storms and consequences on the health of Posidonia meadows
- A308 EGU2012-9046
I. Iermano, M. Uttieri, E. Zambianchi, B. Buonocore, D. Cianelli, P. Falco, and G. Zambardino
Integration of numerical modeling and observations for the Gulf of Naples monitoring network
- A309 EGU2012-10089
J. Fernandez, M. Grifoll, and M. Espino
Sediment dispersal mechanism in North-western Mediterranean Sea during a storm event due to a flash-flood river
- A310 EGU2012-11766
A. Lefebvre and C. Winter
A numerical investigation of flow separation over bedforms in tidal flows
- A311 EGU2012-11907
R. Limeburner, **Y. Abualnaja**, and R. Beardsley
Bottom Pressure Variability in the Red Sea
- A312 EGU2012-12465
N. El-Allaoui, T. Serra, and **M. Soler**
Wave induced velocities inside and outside a riparian seagrass bed.
- A313 EGU2012-12469
T. Raub, K. Getzlaff, A. Lehmann, and D. Jacob
Comparison of air-sea fluxes in REMO and BSIOM at the Baltic Sea
- A314 EGU2012-12504
P. Osuna, B. Esquivel-Trava, and F. J. Ocampo-Torres
About the role of the source terms on the spatial structure of the wave field in hurricanes
- A315 EGU2012-12947
A. Russo, A. Coluccelli, M. Deserti, A. Valentini, A. Benetazzo, and S. Carniel
An operational coupled wave-current forecasting system for the northern Adriatic Sea

- A316 EGU2012-192
x. Lu, T. Soomere, E. Stanev, and J. Murawski
Event driven approach for the identification of the environmentally safe fairway in the south-western Baltic Sea and Kattegat
- A317 EGU2012-351
A. Gianni and I. Zacharias
Modelling the interactions between semi-enclosed anoxic basins and the open sea
- A318 EGU2012-561
E Alevizos
Low-Altitude Coastal Aerial Photogrammetry for High-Resolution Seabed Imaging and Habitat Mapping of Shallow Areas
- A319 EGU2012-813
P. Xu, X. Mao, L. Zhao, Z. Liu, and W. Jiang
In-situ and numerical study on tidal asymmetry in Xiangshan bay
- A320 EGU2012-1838
w Fu
A pre-operational 3-D variational data assimilation system in the North/Baltic Sea
- A321 EGU2012-2713
A. Jordi, A. Amores, S. Montserrat, and G. Basterretxea
Sources of short-term sea level oscillations in a natural harbor and their influence on sediment resuspension (Maó, Mediterranean Sea)
- A322 EGU2012-3237
F. Falcini, S. Fagherazzi, and D. Jerolmack
Wave-supported sediment gravity flows currents: effects of fluid-induced pressure gradients
- A323 EGU2012-3388
A. Trasiña-Castro, O. Aburto-Oropeza, E. González-Rodríguez, and M.A. Cosío-López
Cabo Pulmo: a comparison between in situ and satellite oceanographic measurements
- A324 EGU2012-4736
P. Hall
Modelling a storm surge event in Liverpool Bay with FVCOM.
- A325 EGU2012-5221
M. Sclavo, F. Barbariol, A. Benetazzo, and S. Carniel
Wave Energy assessment in the NW Adriatic Sea
- A326 EGU2012-5461
H. Michaud, P. Marsaleix, Y. Leredde, C. Estournel, F. Bourrin, F. Lyard, C. Mayet, and F. Ardhuin
Implementation and validation of a 3D wave-induced current model from the surf zone to the inner-shelf
- A327 EGU2012-5487
S. Nash, M. Hartnett, A. McKinstry, E. Ragnoli, and D. Nagle
High resolution modelling and observation of wind-driven surface currents in a semi-enclosed estuary
- A328 EGU2012-5616
R. Mendes, M. C. Sousa, N. Vaz, M. deCastro, and J. M. Dias
A preliminary study of the Ria de Aveiro plume dispersal
- A329 EGU2012-7215
D. Pujol, T. Serra, J. Colomer, and X. Casamitjana
Effects of seagrass structure on a wave dominated flow
- A330 EGU2012-8020
I. Noehren, G. Breitbach, and F. Schroeder
GMES and Down-stream Services Following User Requirements: Examples on Regional And Coastal Scale
- A331 EGU2012-8207
M. Rahbani
Applicability of a numerical model to predict vertical distribution of suspended sediment concentration along the depth in Dithmarschen Bight
- A332 EGU2012-10584
F. M. Falcieri, A. Bergamasco, A. Coluccelli, and A. Russo
River runoff and coastal dynamics behavior: daily variability versus monthly mean discharges.
- A333 EGU2012-10684
E. Ragnoli, F. O Donncha, and M. Hartnett
Characterizing ocean gyres formation within a bay using vorticity and HF radar measurements
- A334 EGU2012-11385
P. Cipollini, P. Harwood, H. Snaith, S. Vignudelli, L. West, S. Zecchetto, and C. Donlon
The use of coastal altimetry to support storm surge studies in project eSurge
- A335 EGU2012-11405
M. T. Delpey, F. Ardhuin, and P. Otheguy
Effects of waves on water dispersion in a semi-enclosed estuarine bay

- A336 EGU2012-11929
A.-C. Bennis, F. Dumas, F. Ardhuin, B. Blanke, and J. Lepesqueur
 Mixing and bottom friction: parametrization and application to the surf zone
- A337 EGU2012-12825
J. Molemaker
 Sub-Mesoscale Flows in the Coastal Ocean
- A338 EGU2012-12967
H. Tolvanen and T. Suominen
 In situ sampling in coastal waters - in search for an adequate spatial resolution for chlorophyll monitoring

OS3.1 – 'Sensitivity of marine ecosystems, biogeochemical cycles and carbon uptake to global change'. – Orals
 Convener: B. Salihoglu | Co-Conveners: A. V. Borges, R. Sabia, Dr. Fernández Prieto, B. Barnier, C. Garbe, B. Ward, C. Donlon, D. Woolf, Dr. de Leeuw, V. Garçon, S. Pinnock, R. Steinfeldt, A. F. Rios, K. Lygre, C. Robinson

Room: 9

Chairperson: Veronique Garçon, Reiner Steinfeldt, Roberto Sabia

- 08:30–08:45 EGU2012-5123
 R Sanders, **R Lampitt**, J Riley, F Lemoigne, C Marsay, S Giering, and A Martin
 Modelling the non steady state downward flux of particles at the PAP site in 2009
- 08:45–09:00 EGU2012-11077
J. R. Clark, S. J. Daines, and T. M. Lenton
 Controls on phytoplankton cell size distributions in contrasting physical environments
- 09:00–09:15 EGU2012-6089
S. Torres-Valdes, T. Tsubouchi, S. Bacon, and A. Naveira-Garabato
 Export of Nutrients from the Arctic Ocean
- 09:15–09:30 EGU2012-5154
J. Karstensen, M. Villagarcía, J. Fischer, A. Körtzinger, S. Hartman, and O. Llinas
 Seasonal and interannual near-surface nitrate variability in the subpolar North Atlantic
- 09:30–09:45 EGU2012-8383
 F. Planchon, A.-J. Cavagna, D. Cardinal, L. André, and **F. Dehairs**
 Late summer carbon export and remineralisation in the Southern Ocean determined with the combined ²³⁴Th and particulate biogenic Ba tracers
- 09:45–10:00 EGU2012-11531
A. F. Rios, A. Velo, R. Steinfeldt, S. Khatiwala, L. Bopp, and F.F. Perez
 Comparisons of anthropogenic CO₂ storage between Models and Observations in the North Atlantic Ocean

COFFEE BREAK

Chairperson: Veronique Garçon, Reiner Steinfeldt, Roberto Sabia

- 10:30–10:45 EGU2012-10742
M. Pavic, S. Cunningham, P. Brown, U. Schuster, and A. Watson
 Variability of carbon fluxes across 24.5°N of the North Atlantic since 1992
- 10:45–11:00 EGU2012-644
A. Laurantou and N. Metzl
 Decadal evolution of carbon sink within a strong bloom area in the subantarctic zone
- 11:00–11:15 EGU2012-7476
R. Steinfeldt, M. Rhein, and D. Kieke
 Anthropogenic carbon uptake by North Atlantic Deep Water
- 11:15–11:30 EGU2012-7779
C. Garbe, V. Garçon, A. Butz, H. Yahia, J. Sudre, S. Illig, B. Dewitte, A. Paulmier, and I. Dadou
 Climatically-Active Gases in the Eastern Boundary Upwelling and Oxygen Minimum Zone (OMZ) Systems
- 11:30–11:45 EGU2012-5336
G. de Leeuw, H. Korhonen, J. Ovadnevaite, A. Manders-Groot, L. Sogacheva, H. Lappalainen, M. Schaap, C. O'Dowd, and S. Pinnock
 Using satellite data to determine sea spray aerosol production.
- 11:45–12:00 EGU2012-8783
N. Reul, Y. Quilfen, B. Chapron, J. Vialard, E. Vincent, J. Tenerelli, C. Boyer de Montégut, D. Vandemark, and M. Lengaigne
 Observations of Ocean surface response to Hurricane Igor: A Salty Tropical Cyclone Wake observed from Space

OS4.6/EOS3 – Ocean Science Outreach and Education (co-organized) – Posters

Convener: V. Rosmorduc | Co-Conveners: V. Byfield, D. De Staerke, M. Srinivasan

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- A339 EGU2012-25
C.-M. Liu and I.-C. Chen
Taiwan's experience in ocean education at the level of junior high school: a textbook-editing project of MEEP
- A340 EGU2012-3609
V. Byfield
Using Oceanography to Support Active Learning
- A341 EGU2012-5189
P. Tuddenham and K. Bishop
15 Years of Ocean Education and Outreach Activities by the College of Exploration.
- A342 EGU2012-8377
M. Stroobant, M. Locritani, D. Marini, L. Sabbadini, C. Carmisciano, G. Manzella, M. Magaldi, S. Aliani and the DLTM Team
The Ligurian Cluster for Marine Technologies (DLTM): matching local research and industrial needs on oceanographic data.
- A343 EGU2012-10613
C. Thompson, A. W. Bingham, L. Plesea, C. Alarcon, and J. R. Hall
State of the Ocean: Presenting Near Real Time Ocean Parameters and Contextual Layers on Google Earth as an Exploration and Discovery Tool for Public Consumption
- A344 EGU2012-11418
B.D. Hamlington and R.R. Leben
Climate Science Education for Underrepresented Students through Collaboration with CABPES

OS5.1/AS1.8 – Internal Gravity Waves (co-organized) – Orals

Convener: R. Plougonven | Co-Conveners: U. Achatz, E. Becker, C. Staquet

Room: 7

Chairperson: n.n.

- 08:30–08:45 EGU2012-13510
A. O'Leary, D. Parker, J. Peakall, A. Ross, P. Knippertz, and J. Marsham
Interfacial waves generated by gravity currents in two-layer fluid.
- 08:45–09:00 EGU2012-13628
M. A. C. Teixeira, J. L. Argain, and **P. M. A. Miranda**
Orographic gravity wave drag amplification by parametric resonance
- 09:00–09:15 EGU2012-9418
H.-J. Choi and H.-Y. Chun
Impacts of Convective Gravity Wave Drag in the Southern Hemisphere Winter Stratosphere
- 09:15–09:30 EGU2012-4930
S. Remmler, M. D. Fruman, S. Hickel, and U. Achatz
3D DNS and LES of Breaking Inertia-Gravity Waves
- 09:30–09:45 EGU2012-13325
R. Sharman, S. Trier, and T. Lane
Convectively-generated gravity waves and clear-air turbulence (CAT)
- 09:45–10:00 EGU2012-5120
A. Schneider, A. Theuerkauf, M. Gerding, and F.-J. Lübken
In-situ turbulence observations in the stratospheric wind and temperature field with LITOS

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-10211
T. Gerkema and H. van Haren
Absence of internal tidal beams due to non-uniform stratification
- 10:45–11:00 EGU2012-11962
s. falahat and j. nycander
Comparison of computed tidally generated internal waves in the deep ocean with turbulence observation

- 11:00–11:15 EGU2012-6285
A.K. Kaminski and M.R. Flynn
Modal decomposition of tidally-forced internal waves
- 11:15–11:30 EGU2012-1589
A. Hertzog, M. J. Alexander, and R. Plougonven
Intermittency of gravity-wave momentum flux in the stratosphere
- 11:30–11:45 EGU2012-2766
S. Borchert, U. Achatz, F. Rieper, and M. D. Fruman
Gravity Wave Emission by Spontaneous Imbalance of Baroclinic Waves in the Continuously Stratified Rotating Annulus
- 11:45–12:00 EGU2012-13327
L. Strauss, S. Serafin, and V. Grubišić
Wave-induced boundary-layer separation: A case study comparing airborne observations and results from a mesoscale model

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

Convener: A. Babanin | Co-Conveners: M. Onorato, F. Qiao

Room: 9

Chairperson: n.n.

- 13:30–13:45 EGU2012-11981
P. Liu
On a set of 20th century monumental events that shaped the modern discipline of ocean wind wave's research
- 13:45–14:00 EGU2012-13132
A. Osborne
Construction of Fast Numerical Methods for Nonlinear Wave Equations
- 14:00–14:15 EGU2012-8424
K. Trulsen, T. M. Arnesen Taklo, and J. C. Nieto Borge
Experimental validation of the linear dispersion relation, application to the interpretation of radar images
- 14:15–14:30 EGU2012-7032
A. Iafrati and D. Durante
Detailed simulations of air-water interaction phenomena in ocean waves
- 14:30–14:45 EGU2012-6621
J. Gemmrich and C. Garrett
Characteristics of inertial currents observed in offshore wave records
- 14:45–15:00 EGU2012-13045
X. Bertin, K. Li, A. Roland, J.F. Breilf, and E. Chaumillon
Short-wave contributions in the storm surge associated with Xynthia, February 2010, western France
- Chairperson: n.n.
- 15:30–15:45 EGU2012-1053
L. Cavaleri, M. Hemer, and B. Fox-Kemper
Wind waves and climate
- 15:45–16:00 EGU2012-7569
M. Dobrynin and J. Murawsky
Wind waves in a changing climate projected using CMIP5 experiments
- 16:00–16:15 EGU2012-946
R. Rashmi, P. Vethamony, and **V. M. Aboobacker**
Air-sea interactions during tropical cyclone in the Indian Ocean
- 16:15–16:30 EGU2012-12148
Yu. Troitskaya, E. Ezhova, A. Semenova, and I. Soustova
Effect of sea sprays on air-sea momentum exchange at severe wind conditions
- 16:30–16:45 EGU2012-12240
A. Soloviev, S. Matt, and A. Fujimura
Disruption of the air-sea interface and formation of two-phase transitional layer in hurricane conditions
- 16:45–17:00 EGU2012-4825
U. Hogstrom, A. Smedman, and A. Rutgersson
Air-sea interaction features in the Baltic Sea and at a Pacific trade-wind site - an inter-comparison study

Friday, 27 April

CL4.4 – Modern and Palaeomonsoon (co-listed) – Orals

Convener: S. Prasad | Co-Conveners: N. Basavaiah, K. Raghavan, U. Cubasch, T. Nakagawa, H. Schulz, M. Strecker, A. Brauer

Room: 13

Chairperson: n.n.

- 08:30–08:45 EGU2012-7138
S. F. M. Breitenbach, B. Plessen, F. Lechleitner, N. Marwan, J. F. Adkins, and G. H. Haug
 The glacial Indian summer monsoon - precipitation changes during Heinrich and D-O events in NE India
- 08:45–09:00 EGU2012-4749
N. Basavaiah and N. Juyal
 Indian Summer Monsoon: A Reconstruction Based on Terrestrial Archive During the Last 30 ka from Indian Subcontinent
- 09:00–09:15 EGU2012-12731
H. Schulz, P. Munz, K. Pascher, A. Lückge, B. Gaye, and M. Kucera
 Reconstruction of westerly and monsoonal atmospheric systems affecting climate of Central Asia: a view from sediment records of the Eastern Mediterranean and the Northern Arabian Sea
- 09:15–09:30 EGU2012-1659
P.D. Clift, D. Hu, P. Böning, S. Wan, and H. Brumsack
 Deep-sea weathering and erosion records of monsoon variations in the northern South China Sea
- 09:30–09:45 EGU2012-7293
K. Raghavan, T.P. Sabin, M. Mujumdar, and P. Priya
 Extreme monsoon precipitation events over South Asia in a warming world
- 09:45–10:00 EGU2012-8604
A. Menon, A. Levermann, and J. Schewe
 Future increase of west African monsoon due to sea ice melt

CL4.4 – Modern and Palaeomonsoon (co-listed) – Posters

Convener: S. Prasad | Co-Conveners: N. Basavaiah, K. Raghavan, U. Cubasch, T. Nakagawa, H. Schulz, M. Strecker, A. Brauer

Hall Z | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- Z64 EGU2012-187
S. Polanski, F. Hanf, D. Befort, F. Menzel, U. Cubasch, and G.C. Leckebusch
 Indian Summer Monsoon Variability and its Physical Mechanisms in the last Millennium
- Z65 EGU2012-2480
J. Schewe, A. Levermann, and H. Cheng
 A critical humidity threshold for monsoon transitions
- Z66 EGU2012-5777
K. Rehfeld, N. Marwan, S. Breitenbach, and J. Kurths
 Holocene monsoon variability as resolved in small complex networks from palaeodata
- Z67 EGU2012-9974
S. Wild, G.C. Leckebusch, D.J. Befort, and U. Cubasch
 South Asian Monsoon Variability and its Relation to Midlatitude Teleconnections
- Z68 EGU2012-13093
M. P. Karami, A. Berger, N. Herold, and Q. Z. Yin
 A climate model study of an intense Asian Monsoon in a La Niña-like climate of MIS-13
- Z69 EGU2012-227
S. P. Prizomwala, N. Bhatt, A. M. Hirt, and W. Winkler
 High Resolution Mid to Late Holocene Paleoclimatic Reconstruction from the Mudflats of Gulf of Kachchh Coast, Western India
- Z70 EGU2012-701
F. A. Lechleitner, S. F. M. Breitenbach, H. Cheng, J. F. Adkins, B. Plessen, and G. H. Haug
 The last deglaciation in NE India reconstructed from a stalagmite from Mawmluh cave
- Z71 EGU2012-927
Y Dixit, D.A. Hodell, and C.A. Petrie
 Holocene monsoon variability inferred from palaeolake sediments in NW India.

- Z72 EGU2012-2018
S. Prasad, N Basavaiah, A Anoop, B Plessen, P Menzel, B Gaye, A Brauer, M Wiesner, R Naumann, and N Nowaczyk
Holocene climate variability inferred from geochemical proxies in monsoonal Central India
- Z73 EGU2012-4170
A. Böll and B. Gaye
A high resolution 2000 year record of monsoon variability in the Arabian Sea
- Z74 EGU2012-4206
P. Menzel, B. Gaye, M. Wiesner, S. Prasad, N. Basavaiah, M. Stebich, A. Anoop, N. Riedel, and A. Brauer
Indications of human activity from amino acid and amino sugar analyses on Holocene sediments from lake Lonar, central India
- Z75 EGU2012-4831
A. Dallmeyer, M. Claussen, Y. Wang, and U. Herzschuh
Spatial differences in the Holocene precipitation change within the Asian monsoon region - a model data comparison
- Z76 EGU2012-5238
A.T. Gurlan, C. Chauvel, and C. Voisin
ÉNd IN SEAWATER RECORDS OCEAN TEMPERATURE CHANGES WITH A TIME DELAY
- Z77 EGU2012-6648
A. Anoop, S. Prasad, R. Krishnan, R. Naumann, P. Dulski, S. Gärber, N. Basavaiah, K. Deenadayalan, and A. Brauer
Extreme events and spatiotemporal changes in the westerlies and Indian summer monsoon during the early-mid Holocene in NW Himalayas
- Z78 EGU2012-6660
X. Huang, H. Oberhänsli, M. Mathis, **S. Prasad**, and H. von Suchodoletz
A Holocene lacustrine record of Lake Sonkul: hydro-climatic changes in central Asia and possible interactions between westerlies and Asian monsoon
- Z79 EGU2012-8116
W.E. Piller, M. Reuter, A.K. Kern, and M. Harzhauser
Miocene climate seasonality in southern India - first direct evidence for a weak Indian monsoon during the Middle Miocene Climate Optimum
- Z80 EGU2012-12692
M. Zech, M. Tuthorn, R. Zech, F. Schlütz, W. Zech, and B. Glaser
A 16 ka lacustrine 18O record from High Himalaya reflecting the Indian Monsoon variability

NP6.1 – Mixing, Diffusion and Lagrangian transport in Geophysical Flows. (co-listed) – Orals

Convener: J. M. Redondo | Co-Conveners: J. LaCasce, M. J. Olascoaga, Karolyi, A. Mariano, P. López González-Nieto

Room: 28

Chairperson: n.n.

- 08:30–08:45 EGU2012-869
E. Boland, A. F. Thompson, E. Shuckburgh, and P. H. Haynes
The Formation of Non-Zonal Jets over Sloped Topography
- 08:45–09:00 EGU2012-9732
A. Rodríguez-Santana, M. Emelianov, V. Paka, S.N. Estrada-Allis, M. Arcos-Pulido, M. Hernández-Arencibia, D. Barahona, B. Aguiar-González, A. Marrero-Díaz, P. De la Fuente, F. Machín, and J.L. Pelegrí
Diapycnal Mixing in the Cape Ghir upwelling region
- 09:00–09:15 EGU2012-1216
R. Malek-Madani
Computing Coherent Structures from a Shallow Water Model of the Chesapeake Bay
- 09:15–09:30 EGU2012-3585
S. Berti and G. Lapeyre
Lagrangian reconstructions of tracer fields at ocean surface
- 09:30–09:45 EGU2012-3818
S. E. Scott, I. I. Rypina, L. J. Pratt, and M. G. Brown
Analyzing Fluid Flows and Understanding Transport via Ergodicity Defect Analysis
- 09:45–10:00 EGU2012-2759
L. Averbukh, O. Kurkina, and A. Kurkin
Dynamics of surfactants in the field of edge and internal waves in coastal areas

NP6.1 – Mixing, Diffusion and Lagrangian transport in Geophysical Flows. (co-listed) – Posters

Convener: J. M. Redondo | Co-Conveners: J. LaCasce, M. J. Olascoaga, Karolyi, A. Mariano, P. López González-Nieto

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- XY284 EGU2012-6271
S. Riha and C. Eden
Lagrangian Signatures of Baroclinically Unstable Flow in a Primitive Equation Model: From the Onset to the Decay of Exponential Perturbation Growth
- XY285 EGU2012-13513
J.D. Flanagan, E.A. Haun, A.S. Lefler, and T. Radko
On the Dynamics of Thermohaline Staircases
- XY286 EGU2012-14014
M. Diez, J.M. Redondo, O.B. Mahjoub, and E. Sekula
Turbulent Diffusion in Non-Homogeneous Environments
- XY287 EGU2012-9297
A.-C. Schulz, T. H. Badewien, and O. Zielinski
Estimation of Turbulence in an East Frisian Tidal Channel
- XY288 EGU2012-3486
H.I.S. Nogueira, C. Adduce, E. Alves, and M.J. Franca
Periodic cycle of stretching and breaking of the head of gravity currents
- XY289 EGU2012-13700
D. Balwada, K. Speer, J.H. LaCasce, and B. Owens
Preliminary results from DIMES: Dispersion in the ACC
- XY290 EGU2012-4501
F. Huhn, A. von Kameke, V. Pérez-Muñuzuri, M. J. Olascoaga, and F. B. Beron-Vera
Zonal jets in the Madagascar plankton bloom
- XY291 EGU2012-10131
R. Abernathey, J. Marshall, and R. Tulloch
Global Tracer-Based Diagnostics of Eddy Mixing from AVISO Satellite Velocities
- XY292 EGU2012-4460
F. Huhn, A. von Kameke, P. Montero, S. Allen-Perkins, A. Venancio, and V. Pérez-Muñuzuri
Surface transport in the Ria de Vigo - Transport barriers in a tidal estuary with a complex geometry

OS1.2 – The North Atlantic: natural variability and global change – Posters

Convener: M. Rhein | Co-Conveners: R.J. Greatbatch

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Reiner Steinfeldt

- XY311 EGU2012-1052
L.I. Carracedo, M. García, H. Mercier, P. Conde, P. Lherminier, F.F. Pérez, and M. Gilcoto
Interannual variability of water masses transports across A25-OVIDE section (subpolar atlantic gyre)
- XY312 EGU2012-1069
A.E. Vyazilova and A.V. Smirnov
Links between thermohaline anomalies in Northwest Atlantic and Nordic Seas
- XY313 EGU2012-5128
C. Denker, D. Kieke, B. Klein, H. Klein, and M. Rhein
Water mass properties on their way over the Mid-Atlantic-Ridge through the Faraday Fracture Zone
- XY314 EGU2012-4363
A. Smirnov and A. Korablev
Structure and long-term variability of oceanographic characteristics in the Nordic Seas derived from observed and gridded (DIVA software) datasets
- XY315 EGU2012-5810
A. Rubchenia, A. Popov, A. Fedorova, and N. Lebedev
Interpretation of time series (salinity and temperature) layers in North Atlantic from 1950 to 2011
- XY316 EGU2012-5570
E. Tzortzi, C.P. Gommenginger, S. Josey, and M.A. Srokosz
How does surface salinity and rain affect the North Atlantic ocean circulation?
- XY317 EGU2012-4967
C. Mielke, E. Frajka-Williams, and J Baehr
Observed and simulated seasonal variability of the AMOC at 26°N and 41°N
- XY318 EGU2012-6122
O. Khmel'nitskaya
Using the optimum multiparameter analysis to study the water masses of the North Atlantic

- XY319 EGU2012-9770
E. Burrillon, S.S. Drijfhout, and H.A. Dijkstra
Cause and effect of variations in the sinking of deep water in the MOC
- XY320 EGU2012-12738
M.-j. Messias, A. J. Watson, P. J. Brown, and B.A. King
Evidence of Greenland Sea Water at 24 degrees N from the Greenland Sea Tracer Experiment
- XY321 EGU2012-13372
M. G. Magaldi and T. W. N. Haine
Hydrostatic and non-hydrostatic simulations of the East Greenland Spill Jet
- XY322 EGU2012-6282
L. Schneider, D. Kieke, K. Jochumsen, M. Rhein, D. Quadfasel, E. Varotsu, N. Serra, E. Colbourne, and I. Yashayaev
Export of Labrador Sea Water through Flemish Pass
- XY323 EGU2012-4708
M. Korhonen, B. Rudels, U. Schauer, S. Pisarev, B. Rabe, and A. Wisotzki
Reduction of salinity and temperature observed in the Atlantic layer in the eastern Eurasian Basin of the Arctic Ocean in summer 2011
- XY324 EGU2012-5218
C. Troupin and F. Machín
Negative wind anomalies generated a diminution of productivity in the North Atlantic in 2010
- XY325 EGU2012-1953
A. Nummelin
Convection in the Greenland Sea in winter 2010-2011: Comparison between model and observations
- XY326 EGU2012-5900
N. C. Wells
MOC, Heat Storage and Surface Heat Flux in 2009/2010.
- XY327 EGU2012-2127
N. Danialt, H. Mercier, P. Lherminier, A. Sarafanov, and A. Falina
The 2002-2010 mean circulation across the Greenland to Portugal A25-OVIDE section
- XY328 EGU2012-1399
X. Zhao and J. Li
Winter-to-Winter Recurrence (WWR) of Air-Sea System in the Northern Hemisphere
- XY329 EGU2012-7641
T. Martin, M. Latif, and A. Reintges
Uncertainties in freshwater and MOC predictions in the North Atlantic region
- XY330 EGU2012-3099
W. Mueller, D. Matei, M. Bersch, J. Jungclauss, K. Lohmann, and J. Marotzke
A 20th-century reanalysis forced ocean model to recover North Atlantic climate variability from 1870-2007
- XY331 EGU2012-11293
A. Born, T.F. Stocker, and A.B. Sandø
Salt transport in the Irminger Current: a regional and a global model
- XY332 EGU2012-9630
S.M. Olsen and **T. Schmith**
Greenland meltwater experiments
- XY333 EGU2012-8828
D. V. Sein, M. Gröger, E. Maier-Reimer, and **U. Mikolajewicz**
Modeling anthropogenic Climate Change of the northwest European Shelves and the northeast Atlantic
- XY334 EGU2012-7148
B. Filyushkin, S. Moshonkin, **S. Myslenkov**, and N. Kozhelupova
Simulation of interannual variability of overflow transport through the Denmark Strait
- XY335 EGU2012-10826
Y.-O. Kwon and C. Frankignoul
Multi-decadal Variability of Atlantic Meridional Overturning Circulation in the Community Climate System Model 3
- XY336 EGU2012-5594
A. Born, T.F. Stocker, C.C. Raible, and A. Levermann
Is the Atlantic subpolar gyre bistable in comprehensive coupled climate models?
- XY337 EGU2012-5884
A. Megann, A. New, and A. Blaker
Model representation of salinity anomalies and the stability of the North Atlantic overturning circulation
- XY338 EGU2012-6093
M. Sonnewald, J. J.-M. Hirschi, and R. Marsh
Oceanic dominance of interannual subtropical North Atlantic heat content variability
- XY339 EGU2012-6482
M. Brunetti, E. Fenu, and M. Beniston
Stability properties of the North Atlantic Ocean Circulation

- XY340 EGU2012-10074
Y. Ruprich-Robert and C. Cassou
Mechanisms of the North Atlantic multidecadal internal variability in the CNRM-CM5 model
- XY341 EGU2012-3109
B. Tiedje, A. Köhl, and J. Baehr
North Atlantic heat transport and AMOC: Potential predictability in the subtropical and subpolar gyre
- XY342 EGU2012-11526
H. Pillar, D. Marshall, and H. Johnson
The Dependence of the Atlantic Overturning Circulation on Meridional Density Gradients
- XY343 EGU2012-4886
K. Shimizu
Dynamics of long baroclinic Rossby waves along 26°N in the Atlantic
- XY344 EGU2012-2192
W. P. Sijp
Characterising meridional overturning bistability as a dynamical system using a minimal set of state variables.
- XY345 EGU2012-3129
E. D. da Costa and M. Jukes
Structural Uncertainty in the Winter NAO index
- XY346 EGU2012-5138
T. Christoudias, A. Pozzer, and J. Lelieveld
Influence of the North Atlantic Oscillation on air pollution transport
- XY347 EGU2012-7364
J. de Laat and M. Crok
A late 20th century European climate shift
- XY348 EGU2012-8421
M.V. Anisimov, V.I. Byshev, S.N. Moshonkin, V.G. Neiman, Ju.A. Romanov, I.V. Serykh, and V.B. Zalesny
On a Short-Term Climate Change in the North Atlantic Ocean
- XY349 EGU2012-13175
V.A. Melnikov, L.V. Moskalenko, N.N. Golenko, and M.N. Golenko
Boreal Atmospheric circulation patterns on the basis of the world network weather station data
- XY350 EGU2012-13435
J. A. Añel, M. Blanco-Durán, L. Gimeno, and L. de la Torre
Recovery of meteorological data for the observatory of A Guarda, Spain

CL4.2/OS1.3 – Inter-Ocean Gateways: Past, Modern and Future Processes and Environments (co-organized) – Orals

Convener: K. Husum | Co-Conveners: R. F. Spielhagen, G. Lohmann, U. Schauer, L. Jonkers, M. Ziegler, G. Knorr

Room: 16

Chairperson: K. Husum, U. Schauer

- 08:30–08:45 EGU2012-6063
J. Müller, K. Werner, and R. Stein
Holocene sea ice in the main Arctic gateway
- 08:45–09:00 EGU2012-7773
S. Aagaard-Sørensen, K. Husum, M. Hald, T. Marchitto, and F. Godtliebsen
Holocene Atlantic Water temperature reconstruction in the Nordic Seas based on foraminiferal Mg/Ca ratios
- 09:00–09:15 EGU2012-10679
M. Blaschek and H. Renssen
The Influence of Greenland melt water on the temporal and spatial response of the Holocene Thermal Maximum in the Nordic Seas: a modelling study
- 09:15–09:30 EGU2012-11593
L. de Steur, E. Hansen, C. Mauritzen, and A. Beszczynska-Moeller
Transport of the East Greenland Current in Fram Strait
- 09:30–09:45 EGU2012-3640
I. A. Dmitrenko, S. A. Kirillov, V. V. Ivanov, U. Schauer, Y. Aksenov, B. A. de Cuevas, I. V. Polyakov, M. Janout, M. Makhotin, and V. S. Lien
Atlantic Water inflow into the Arctic Ocean through the St. Anna Trough
- 09:45–10:00 EGU2012-13807
P. E. Isachsen and O. A. Nøst
The air-sea transformation and diapycnal overturning circulation within the Nordic Seas

COFFEE BREAK

Chairperson: G. Knorr, M. Ziegler

- 10:30–10:45 EGU2012-9810
T. W. N. Haine and K. Stewart
 Arctic Freshwater Export: Prospects, Impacts, and Challenges
- 10:45–11:00 EGU2012-4543
V.S. Lien, F.V. Vikebø, and Ø. Skagseth
 A mechanism for fluctuations between Atlantic inflow branches to the Arctic
- 11:00–11:15 EGU2012-7621
R Zahn and GATEWAYS project members
 Saltwater transport through the Indian-Atlantic ocean gateway: Does it modulate the Atlantic MOC?
- 11:15–11:30 EGU2012-8978
M. Prange, V. Varma, and M. Schulz
 Inter-ocean gateway flows during the present and last interglacial periods
- 11:30–11:45 EGU2012-7269
F. Lamy, H.W. Arz, R. Kilian, O. Baeza Urrea, M. Caniupan, C. Kissel, and C. Lange
 Millennial-scale ocean current intensity changes off southernmost Chile and implications for Drake Passage throughflow
- 11:45–12:00 EGU2012-9842
I. N. McCave, S.C. Crowhurst, C.-D. Hillenbrand, and G. Kuhn
 Constant flow speed of the ACC through Drake Passage between glacial maximum and Holocene.

CL4.2/OS1.3 – Inter-Ocean Gateways: Past, Modern and Future Processes and Environments (co-organized) – Posters

Convener: K. Husum | Co-Conveners: R. F. Spielhagen, G. Lohmann, U. Schauer, L. Jonkers, M. Ziegler, G. Knorr

Hall Z | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: K. Husum, L. Jonkers

- Z30 EGU2012-14476
S. Berben, K. Husum, and M. Hald
 Sub-centennial Holocene fluctuations of surface water masses in the western Barents Sea
- Z31 EGU2012-2714
P. Cabedo Sanz, A. Navarro Rodriguez, S.T. Belt, T.A. Brown, J. Knies, K. Husum, J. Giraudeau, and J. Andrews
 Calibration and application of the IP25 biomarker for Arctic sea ice reconstructions
- Z32 EGU2012-10651
F.J. Davies, H. Goosse, and H. Renssen
 Simulating the natural variability of the freshwater budget of the Arctic ocean from the mid to late Holocene using LOVECLIM
- Z33 EGU2012-1993
C. Dylmer, J. Giraudeau, E. Frédérique, A. de Vernal, J. Knies, K. Husum, and S. Belt
 Northward advection of Atlantic Water in Fram strait during the late Holocene: a view from mixed layer proxies
- Z34 EGU2012-6030
J.C. Faust, J. Knies, J. Giraudeau, and G. Milzer
 Geochemical investigations of fjord surface sediments as basis for Holocene climate change studies in the Trondheimsfjord area
- Z35 EGU2012-7635
D.E. Groot, S. Aagaard Sørensen, K. Husum, and M. Hald
 Holocene intermediate and bottom water mass reconstructions of the western Barents Sea
- Z36 EGU2012-2716
A. Navarro Rodriguez, P. Cabedo Sanz, S. Belt, T. Brown, J. Knies, K. Husum, and J. Giraudeau
 Analysis of sea ice and phytoplankton biomarkers in marine sediments from the Nordic Seas - a calibration study
- Z37 EGU2012-2958
I. Maier, M. Felix, J. Knies, and U. Mann
 Historic surface water productivity changes in the Barents Sea
- Z38 EGU2012-2887
G. Milzer, J. Giraudeau, J. Faust, J. Knies, S. Schmidt, and C. Rühlemann
 Benthic Foraminiferal Stable Isotope and Dinocyst Assemblages in Sediments of the Trondheimfjord Area (Mid-Norway): Proxies for Regional Oceanographic and Climate Changes?
- Z39 EGU2012-2962
T. Pados and R. F. Spielhagen
 Modern distribution of planktic foraminifers in the Fram Strait (Arctic Ocean) compared to sea floor species assemblages

- Z40 EGU2012-5112
B. Sternal, W. Szczuciński, M. Forwick, M. Zajczkowski, S. Lorenc, and T.O. Vorren
Sedimentary record of postglacial variability in near-bottom currents, sediment supply and ice rafting on the continental shelf off SW Spitsbergen
- Z41 EGU2012-2370
M. M. Telesiński and R. F. Spielhagen
Late Glacial and Holocene paleoceanography of the central and northern Greenland Sea based on foraminifera, stable isotopes and sediments
- Z42 EGU2012-4750
K. Werner, R.F. Spielhagen, E. Kandiano, and H.C. Hass
Stepwise transition from deglacial/Early Holocene to modern-like conditions in the eastern Fram Strait, sub-Arctic north, inferred from planktic foraminifer fauna and sea surface temperatures
- Z43 EGU2012-11739
K. Werner, M. Frank, C. Teschner, M. Zieringer, and R.F. Spielhagen
Holocene fluctuations of neodymium isotope ratios in eastern Fram Strait sediments - An indication for deepwater variability?
- Z44 EGU2012-5410
G. Chepurin and J. Carton
Sub-arctic and Arctic sea surface temperature and its relation to ocean heat content 1982-2010
- Z45 EGU2012-7017
F. Greil and A. Beszczynska-Möller
Statistical analysis of oceanographic fields in Fram Strait
- Z46 EGU2012-7881
B. I. Moat, S. A. Josey, B. Sinha, and J. P. Grist
Response of the Fram Strait transport to surface density forcing
- Z47 EGU2012-2617
S.N. Moshonkin, **A.V. Gusev**, V.B. Zalesny, A.V. Bagno, and N.A. Diansky
Numerical modelling of the Atlantic Water inflow in Arctic Ocean and Beaufort Gyre fresh water content climatic variability
- Z48 EGU2012-5369
C. Roth, E. Behrens, and A. Biastoch
The impact of the Atlantic-Arctic exchange on rising ocean bottom temperatures and the fate of gas hydrates
- Z49 EGU2012-1859
U. Schauer, A. Beszczynska-Möller, T. Krumpen, F. Greil, and E. Fahrbach
Warming of the Atlantic water in Fram Strait and its impact on the ice cover
- Z50 EGU2012-2816
F. Wobus, G.I. Shapiro, J.M. Huthnance, and M.A.M. Maqueda
The piercing of the Atlantic Layer by a dense water cascade in an idealised modelling study inspired by the Storfjorden overflow
- Z51 EGU2012-8931
M. Ártun, T. Eldevik, L. H. Smedsrud, Ø. Skagseth, and R. B. Ingvaldsen
Quantifying the influence of Atlantic heat on Barents Sea ice variability and retreat
- Z52 EGU2012-3974
N. Barrier, D. Ferreira, and J. Marshall
Impact of opening of the Central America Seaway on climate in a coupled atmosphere-ocean-sea-ice model
- Z53 EGU2012-11354
K. Braun, M. Bar-Matthews, A. Ayalon, C. Marean, A. I. R. Herries, R. Zahn, and A. Matthews
Influences of the Agulhas Current on South African terrestrial climate as inferred from speleothem stable isotope records
- Z54 EGU2012-5484
C. Brierley and A. Fedorov
Can inter-ocean gateways explain long-term cooling since the early Pliocene?
- Z55 EGU2012-5756
E. Khadun, J.v.d. Lubbe, T. Blanz, and R. Schneider
80 kyr record of palaeoceanographic conditions from southeastern Africa
- Z56 EGU2012-8815
G. Marino, R. Zahn, P. Ziveri, M. Ziegler, I.R. Hall, and H. Elderfield
Impact of the salt leakage through the Indian-Atlantic ocean gateway on the Atlantic MOC
- Z57 EGU2012-10456
M. Parari and R. Zahn
Do variations in Mozambique Channel hydrography impact the marine climatology of the Agulhas gateway between the Indian Ocean and Atlantic?
- Z58 EGU2012-4522
C. Purcell, G. Knorr, I. Hall, and G. Lohmann
The influence of Agulhas Leakage dynamics on the Atlantic Meridional Overturning Circulation during glacial-interglacial transitions

- Z59 EGU2012-3276
T. Qu and T.-L. Chiang
Northward intrusion of South Pacific intermediate water along the Philippine coast as seen from a global GCM
- Z60 EGU2012-8133
P. Scussolini and F.J.C. Peeters
Evolution of the southeast Atlantic thermocline during Marine Isotopic Stages 6-5: is it related to variations in the Agulhas Leakage?
- Z61 EGU2012-344
M. Simon, I.R. Hall, S. Barker, and M. Ziegler
Investigating the impact of millennial scale Agulhas Current System variability on global ocean circulation and climate
- Z62 EGU2012-6144
J. Steinhardt, U. Fallet, R. Tjallingii, and G.-J. A. Brummer
Core top particle component analysis from the southwestern Indian Ocean
- Z63 EGU2012-5248
M. Ziegler, I.R. Hall, P.J. Siret, and R. Zahn
Pleistocene ice-rafted debris events recorded at the Agulhas Plateau - indicators of intermittent Indian-Atlantic gateway closure

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

Convener: Y. H. Park | Co-Conveners: R. Timmermann, K. J. Heywood

Room: 5

Chairperson: Y.-H. Park, K. Heywood

- 08:30–08:45 EGU2012-2787
O. Huhn, M. Rhein, and K. Bulsiewicz
Early results from combined historic chlorofluorocarbon and first sulphur hexafluoride measurements in the Weddell Sea - variability of ventilation rates and anthropogenic carbon
- 08:45–09:00 EGU2012-804
M. S. Donnelly, H. Leach, and V. Strass
Modelling the Weddell Gateway: An Inverse Approach to Determining Volume Transport at the Lazarev Sea
- 09:00–09:15 EGU2012-6440
K. J. Heywood and C. P. Chavanne
Variability of volume transport of the Antarctic Slope Current in the Southeast Weddell Sea
- 09:15–09:30 EGU2012-7820
M. Årthun, K. W. Nicholls, L. Boehme, and M. A. Fedak
Seasonal evolution of ocean conditions over the southern Weddell Sea continental shelf
- 09:30–09:45 EGU2012-8161
E. Fahrbach, K.J. Heywood, M. Hoppema, G. Rohardt, and A.F. Thompson
Variability in the properties of the bottom water in the Weddell Sea
- 09:45–10:00 EGU2012-6870
T. W. Kim, H. K. Ha, A. K. Wåhlin, S. H. Lee, and J. H. Lee
Spatial-temporal variation of warm circumpolar deep water in central Amundsen Sea

COFFEE BREAK

Chairperson: K. Heywood, R. Timmermann

- 10:30–10:45 EGU2012-8059
S. Waterman, A. C. Naveira Garabato, and K. L. Polzin
The Southern Ocean FINEstructure project: Turbulent dissipation and mixing rates and mechanisms in a Southern Ocean mixing hotspot.
- 10:45–11:00 EGU2012-6413
S. Gille, A. Gilroy, M. Mazloff, R. Morrow, U. Zajaczkowski, and N. Zilberman
Warming in the Southern Ocean: Assessing the impact of eddies and meandering fronts
- 11:00–11:15 EGU2012-5362
R. Tarakanov
On the penetration depth of the Antarctic Circumpolar Current
- 11:15–11:30 EGU2012-2206
M. Latif, T. Martin, and W. Park
Multi-Centennial Variability Controlled by Southern Ocean Convection: Mechanisms and Global Impacts

- 11:30–11:45 EGU2012-11064
j.-b. sallee, R. Matear, S Rintoul, and A Lenton
 The physical transport of anthropogenic carbon into the Southern Ocean interior
- 11:45–12:00 EGU2012-13333
S. Dwivedi, T. W. N. Haine, and C. E. Del Castillo
 A Biochemical Upper Ocean State Estimate in the Southern Ocean GasEX Region

OS1.6 – Ocean dynamics and Air-sea interactions within the tropics – Orals

Convener: A. LAZAR | Co-Conveners: M. Dengler, P. Chang

Room: 9

Chairperson: Ping Chang, Marcus Dengler, Alban Lazar

- 13:30–13:45 EGU2012-13437
P. Estrade, A. Lazar, and S. Ndoeye
 Estimation of the vertical velocities associated with large scale dynamics
- 13:45–14:00 EGU2012-11446
F. Colas, V. Echevin, S. Masson, X. Capet, G. Samson, F. Lemarie, C. Hourdin, and S. Pous
 Nearshore wind stress and sea surface temperature mesoscale coupling in the Peru upwelling region
- 14:00–14:15 EGU2012-11438
R. Meynadier, G. De Coëtlogon, M. Leduc-Leballeur, S Bastin, A.-C. Peter, S. Janicot, O. Bock, and C. Flamant
 Investigation of the ocean-atmosphere-continent coupling in the Gulf of Guinea and West Africa at intraseasonal timescales in boreal spring and summer with a regional atmospheric model (WRF)
- 14:15–14:30 EGU2012-7730
I. Richter, S. Behera, B. Taguchi, Y. Masumoto, and T. Yamagata
 Two types of Atlantic Niños: ENSO-like vs. off-equatorially forced events
- 14:30–14:45 EGU2012-3136
P. Brandt, R. J. Greatbatch, S.-H. Didwischus, M. Claus, V. Hormann, A. Funk, and M. Dengler
 Equatorial deep jets in the Atlantic Ocean
- 14:45–15:00 EGU2012-11334
K. Drushka, E. Guilyardi, M. Lengaigne, J. Vialard, and H. Bellenger
 Westerly wind bursts and the dynamical response of the western Pacific warm pool
- Chairperson: Marcus Dengler, Alban Lazar, Ping Chang
- 15:30–15:45 EGU2012-11117
L. Shay
 Tropical Cyclone Induced Air-Sea Interactions Over Oceanic Fronts
- 15:45–16:00 EGU2012-1874
 K. Balaguru, **P. Chang**, R. Saravanan, L.R. Leung, Z. Xu, M. Li, and J.-S. Hsieh
 Effect of Ocean Barrier Layers on Tropical Cyclone Intensification
- 16:00–16:15 EGU2012-11855
C.M. Patricola, P. Chang, R. Saravanan, and R. Montuoro
 The Effect of Atmosphere-Ocean-Wave Interactions and Model Resolution on Hurricane Katrina in a Coupled Regional Climate Model
- 16:15–16:30 EGU2012-4923
H. Berger, A.M. Tréguier, and N. Perenne
 Dynamic contributions to the sea surface salinity variations along the equator and the coast of the Gulf of Guinea
- 16:30–16:45 EGU2012-5910
M. Schlundt, G. Krahmann, P. Brandt, J. Karstensen, and K. Bumke
 Mixed layer freshwater budget in the eastern tropical Atlantic during 2011 cold tongue development
- 16:45–17:00 EGU2012-1651
G. Alory, C. Maes, T. Delcroix, N. Reul, and S. Illig
 Seasonal dynamics of Sea Surface Salinity off Panama: the Far Eastern Pacific Fresh Pool

OS1.6 – Ocean dynamics and Air-sea interactions within the tropics – Posters

Convener: A. LAZAR | Co-Conveners: M. Dengler, P. Chang

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Alban Lazar, Ping Chang, Marcus Dengler

- XY351 EGU2012-989
D. Banyte, T. Tanhua, M. Visbeck, D. Wallace, J. Karstensen, G. Krahmann, A. Schneider, and L. Stramma
 Diapycnal diffusivity at the upper boundary of the North Tropical Atlantic oxygen minimum zone

- XY352 EGU2012-13724
M. Dengler, P. Brandt, M. J. McPhaden, S. Thomsen, G. Krahmann, T. Fischer, P. Freitag, and R. Hummels
 Upper ocean mixing processes and their impact on the mixed layer heat balance during the onset of the Atlantic Cold Tongue.
- XY353 EGU2012-888
M. Martín-Rey, I. Polo, B. Rodríguez-Fonseca, A. Lazar, S. Labetoulle, and C. Peter
 The influence of the Subtropical Highs in the development of the Atlantic Niños since 1970s
- XY354 EGU2012-10937
H. Kao and G. Lagerloef
 Identifying the Western Pacific Salinity Front Using Aquarius Measurement
- XY355 EGU2012-1071
A. L. Dieng, S. M. Sall, A. Lazar, and L. Eymard
 cyclogenesis: effects of surface ocean conditions on the birth of tropical depressions off the West African coasts
- XY356 EGU2012-1149
M. Diakhate, A. Lazar, G. de Coetlogon, and A. T. Gaye
 Ocean-atmosphere interactions in the Tropical Atlantic at intraseasonal timescales
- XY357 EGU2012-1631
Y. Wang
 Compensation of Meridional Heat Transport: Testing the Bjerknes Hypothesis in a Freshening World
- XY358 EGU2012-11797
J. Peña-Izquierdo, J.L. Pelegrí, and E. Mason
 Water mass renovation in the northeastern Tropical Atlantic
- XY359 EGU2012-11824
M. Leduc-Leballeur, G. De Coëtlogon, and L. Eymard
 Role of air-sea interactions on the coastal rainfall in the Gulf of Guinea during boreal spring
- XY360 EGU2012-7149
B. Thompson and P. Tkalich
 SST Variability over the Southern South China Sea: Local effects and Remote forcing
- XY361 EGU2012-9005
J. Hahn, P. Brandt, A. Körtzinger, R. J. Greatbatch, G. Krahmann, and A. Funk
 Fine- to mesoscale oxygen variability at intermediate depth in the tropical North East Atlantic along 23°W
- XY362 EGU2012-5797
H. Ding, N. Keenlyside, and M. Latif
 Sensitivity of Equatorial Atlantic Variability to Mean State Biases
- XY363 EGU2012-891
J. A. Kurczyn, E. Beier, M.F. Lavín, and A. Chaigneau
 Mesoscale eddies in the NE Pacific tropical-subtropical zone.
- XY364 EGU2012-1620
G. Caniaux, H. Giordani, J.-L. Redelsperger, and M. Wade
 Role of vertical velocities in the cooling of the Atlantic cold tongue

CL4.6/AS1.15/OS1.7 – Tropical Climate Variability and Teleconnections: past, present and future (co-organized) – Orals

Convener: B. Rodríguez de Fonseca | Co-Conveners: E. Mohino, T. Losada, J. Garcia-Serrano, F. Kucharski, I. Polo

Room: 16

Chairperson: Fred Kucharski and Belen Rodríguez

- 13:30–13:45 EGU2012-1524
H. Tatebe, Y. Imada, M. Kimoto, and H. Hasumi
 South Pacific Ocean controls the phase reversal and periodicity of the decadal and bi-decadal ENSO-like variabilities
- 13:45–14:00 EGU2012-1875
H. Dayan, J. Vialard, T. Izumo, M. Lengaigne, and P. Terray
 External interannual ENSO forcing : which regions outside equatorial Pacific may influence the evolution of ENSO ?
- 14:00–14:15 EGU2012-2177
C. Frauen and D. Dommenges
 Influences of the tropical Indian and Atlantic Oceans on the predictability of ENSO
- 14:15–14:30 EGU2012-12977
I. Polo, B. W. Dong, and R. T. Sutton
 Tropical Interannual Variability Changes from a Substantial Weakening of the Atlantic Meridional Overturning Circulation

- 14:30–14:45 EGU2012-533
J. Lopez-Parages and B. Rodriguez-Fonseca
 Multidecadal modulation of El Niño influence on the Euro-Mediterranean rainfall
- 14:45–15:00 EGU2012-6146
L. Terray
 Modes of forced and internal decadal variability in the Tropics and ExtraTropics from CMIP5 models
 Chairperson: Belén Rodríguez and Irene Polo
- 15:30–15:45 EGU2012-10239
B.-M. Joseph
 Predictability of rainy season onset and cessation in east Africa
- 15:45–16:00 EGU2012-10340
PA. Monerie, B. Fontaine, and P. Roucou
 Future changes in the African monsoon through a pool of CMIP5 models
- 16:00–16:15 EGU2012-12365
B. Dieppois, A. Durand, M. Fournier, A. Diedhiou, B. Fontaine, N. Massei, Z. Nouaceur, and D. Sebag
 Low-frequency Sahel rainfall variability and Atlantic Sea Surface Temperatures during the last century
- 16:15–16:30 EGU2012-12670
 B. Cook, J. Yoon, and **N. Zeng**
 Future Drying of the Southern Amazon Projected by IPCC Climate Models
- 16:30–16:45 EGU2012-7225
B. Scherllin-Pirscher, C. Deser, S.-P. Ho, C. Chou, W. Randel, and Y.-W. Kuo
 Upper tropospheric and lower stratospheric ENSO signal derived from GPS radio occultation temperature
- 16:45–17:00 EGU2012-3869
E. Lim, H. Hendon, and H. Rashid
 Dynamical forecast of low-frequency variability of the Southern Annular Mode

CL4.6/AS1.15/OS1.7 – Tropical Climate Variability and Teleconnections: past, present and future (co-organized) –

Posters

Convener: B. Rodríguez de Fonseca | Co-Conveners: E. Mohino, T. Losada, J. Garcia-Serrano, F. Kucharski, I. Polo

Hall Z | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Fred Kucharski and Irene Polo

- Z81 EGU2012-980
A. Fischel, M.-S. Seidenkrantz, M. Kucera, and A. Kujipers
 Holocene climate variability in the tropics - high resolution records from the Anegada-Jungfern Passage, NE-Caribbean
- Z82 EGU2012-5528
V. Khon, W. Park, M. Latif, I. Mokhov, and B. Schneider
 The Hadley and Walker circulations and changes of the hydrological cycle during the Holocene and Eemian from climate model simulations
- Z83 EGU2012-4574
H.-G. Lim and S.-W Yeh
 Volcanic effect on the tropical sea surface temperature in a millennium coupled model simulation
- Z84 EGU2012-4297
 N.S. Fuckar, **R. Farneti**, S.P. Xie, E. Maroon, and D.M.W. Frierson
 Could changes in the extratropical ocean circulation modify the mean tropical climate and ITCZ?
- Z85 EGU2012-4380
M. Fujita, M. Hara, and H. G. Takahashi
 Diurnal cycle of precipitation over the eastern Indian Ocean off Sumatra Island during different IOD phases
- Z86 EGU2012-9584
R. Farneti, F. Kucharski, and F. Molteni
 On the mechanisms of Interdecadal Pacific Oscillation-type variability
- Z87 EGU2012-12885
I. Polo, M. Martin-Rey, B. Rodriguez-Fonseca, C. R. Mechoso, and F. Kucharski
 Processes in the Influence of Tropical Atlantic Sea Surface Temperatures on Pacific la Nina Onset
- Z88 EGU2012-13488
 B. Rodríguez de Fonseca, I. Polo, T. Losada, **E. Mohino**, and R. Mechoso
 Non stationary impact of the Equatorial Atlantic on the El Niño Southern Oscillation
- Z89 EGU2012-13050
T. Losada and B. Rodríguez-Fonseca
 Atmospheric Response to Changes in the Atlantic Equatorial Mode and in the Background State of SST.

- Z90 EGU2012-8144
A G Turner, B M Harris, and E J Highwood
Monsoon collapse following tropical super-volcanic eruptions
- Z91 EGU2012-1362
T. Bayr and D. Dommenget
The Land-Sea Warming Contrast as the Driver of Tropical Sea Level Pressure Changes
- Z92 EGU2012-2633
F. Kucharski, N. Zeng, and E. Kalnay
A further assessment of vegetation feedback on decadal Sahel rainfall variability
- Z93 EGU2012-5207
D. Folini, D. Baumgartner, and M. Wild
20th century precipitation changes in the Sahel region: sensitivity studies with ECHAM5-HAM
- Z94 EGU2012-7561
C. Seiler
Climate Variability and Trends in Bolivia
- Z95 EGU2012-8305
A G Turner, M Joshi, E S Robertson, and S J Woolnough
The effect of Arabian Sea optical properties on SST biases and the South Asian summer monsoon in a coupled GCM
- Z96 EGU2012-10406
C. Williams, R. Allan, and D. Kniveton
Comparing atmosphere-land surface feedbacks from models within the tropics (CALM). Part 1: Evaluation of CMIP5 GCMs to simulate the land surface-atmosphere feedback
- Z97 EGU2012-10729
S. Wild, J.M. Eden, M. Widmann, and G.C. Leckebusch
Spatial structure and potential predictability of summer precipitation in Ethiopia
- Z98 EGU2012-13841
F.S. Syed, **H. Körnich**, and M. Tjernström
On the fog variability over south Asia
- Z99 EGU2012-313
V. Platonov, E. Semenov, and E. Sokolikhina
Extreme La-Nina 2010/11 and the vigorous flood at the north-east of Australia.
- Z100 EGU2012-1929
J. Collins, D. Roache, and J. Yoo
Assessment of the 2011 Atlantic Hurricane Season
- Z101 EGU2012-2426
e. scoccimarro, s. gualdi, and a. navarra
Hurricanes interaction with the Arctic Climate
- Z102 EGU2012-3177
P. Braesicke, S. H. Ooi, and A. A. Samah
Borneo Vortices: A case study and its relation to climatology
- Z103 EGU2012-5669
J. Runge and J. Kurths
A model-free definition of coupling strength for assessing the influence between climatic processes
- Z104 EGU2012-6320
M. Jacques-Coper and S. Brönnimann
Summertime Climate Variability and Teleconnections over Southern South America during the 20th Century
- Z105 EGU2012-6428
I. Herceg Bulic
ENSO impact on North Atlantic/European region in a changing climate
- Z106 EGU2012-6698
E.-C. Chang, S.-W. Yeh, S.-Y. Hong, J.-E. Kim, and R. Wu
Analysis on a teleconnection patterns between tropical ocean SSTs and extratropics by using a global downscaled precipitation dataset
- Z107 EGU2012-4590
S.-M. Lim and S.-W. Yeh
Possible link the tropical SST anomalies and Arctic Oscillation on the low-frequency timescales during the boreal winter
- Z108 EGU2012-58
A.A. Ekaykin, A.V. Kozachek, V.Ya. Lipenkov, Yu.A. Shibaev, and R. Vaikmae
On the relationship between the climate variability in middle-low latitudes of the Southern Hemisphere and central Antarctica over the past 350 years

Convener: S. Somot | Co-Conveners: M. Gregoire, E. Özsoy, A. Pascual

Room: 5

Chairperson: S. Somot, E. Ozsoy

- 13:30–13:45 EGU2012-787
M. Bensi, V. Cardin, and M. Ga??
 Thermohaline variability and mesoscale activities observed at the E2M3A deep site in the south Adriatic Sea
- 13:45–14:00 EGU2012-12099
A. Gogou*, A. Sanchez-Vidal*, S. Stavrakakis, X. Durrieu de Madron, A.M. Calafat, M. Stabholz, S. Psarra, M. Canals, S. Heussner, I. Stavrakaki, and E. Papathanassiou
 Carbon Flux to the Deep in three open sites of the Southern European Seas
- 14:00–14:15 EGU2012-11948
I. Bouloubassi, A. Gogou, S. Stavrakakis, A. Sanchez-Vidal, and M. Grégoire
 Downward biogenic fluxes in the SW Black Sea: dynamics of their compositional and temporal patterns
- 14:15–14:30 EGU2012-178
S. Karimova
 Satellite observations of eddies in the Baltic, Black and Caspian seas
- 14:30–14:45 EGU2012-2755
A. Pascual, J. Bouffard, S. Ruiz, B. Buongiorno Nardelli, and R. Escudier
 Recent advances on mesoscale variability in the Western Mediterranean Sea: complementarity between satellite altimetry and other sensors
- 14:45–15:00 EGU2012-4692
A. Peliz
 Alboran jets, gyres and eddies in a 20-year high resolution simulation

Chairperson: M. Gregoire, A. Pascual

- 15:30–15:45 EGU2012-6229
J. Soto-Navarro, S. Somot, F. Sevault, J. Beuvier, F. Criado-Aldeanueva, J. García-Lafuente, and A. Sánchez-Román
 Study of the exchange flow through the Strait of Gibraltar with the NEMOMED8 Ocean Circulation Model: model validation, interannual variability and trends.
- 15:45–16:00 EGU2012-12311
C. Dubois, F. Sevault, and S. Somot
 Impact of the heat and salt content in the Atlantic on the Western Mediterranean Deep Water masses formation
- 16:00–16:15 EGU2012-11230
A. Elizalde and U. Mikolajewicz
 Resolving explicitly the Black Sea in the Mediterranean Sea simulations using a fully coupled atmosphere-ocean model.
- 16:15–16:30 EGU2012-11614
A. Theocharis, G. Krokos, and G. Korres
 An internal mechanism driving decadal oscillations of the thermohaline circulation and properties in the Eastern Mediterranean
- 16:30–16:45 EGU2012-4437
G. Mattia, M. Vichi, M. Zavatarelli, and P. Oddo
 The wind-driven response of the Mediterranean sea biogeochemistry to the Eastern Mediterranean Transient. A numerical model study.
- 16:45–17:00 EGU2012-11669
L. Velea, R. Bojariu, and T. Chronis
 Evaluation of air-sea exchange over Black Sea from a regional climate simulation

OS2.2/EG3/CL2.12 – Advances in understanding of the multi-disciplinary dynamics of the Southern European Seas (Mediterranean and Black Sea) (co-organized) – Posters

Convener: S. Somot | Co-Conveners: M. Gregoire, E. Özsoy, A. Pascual

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: S. Somot

- XY365 EGU2012-901
V.V. Fomin, V.B. Zalesny, N.A. Diansky, and A.V. Gusev
 Black and Azov Sea circulation numerical modelling on the basis of splitting technique
- XY366 EGU2012-2606
I. Vilibic, S. Matijevic, and J. Sepic
 Long-term changes in the middle Adriatic oceanographic properties

- XY367 EGU2012-2809
A. Sanchez-Roman, J. Garcia-Lafuente, R. Sanchez-Leal, J. Delgado, J. Soto-Navarro, and C. Naranjo
 Seasonal and Inter-annual signals in the Mediterranean Outflow observed in Espartel Sill (western Strait of Gibraltar) during the last decade
- XY368 EGU2012-3036
P. Censi, M. Raso, F. Saiano, and P. Zuddas
 HOW Zr/Hf AND Gd ANOMALY SIGNATURES CAN DEPICT SOLID-LIQUID INTERACTIONS IN SEAWATER
- XY369 EGU2012-3655
G. Korotaev, Yu. Ratner, A. Kholod, M. Martynov, M. Ivanchik, S. Denmyshev, V. Dorofeev, V. Knysh, V. Moiseenko, A. Kybryakov, T. Churilova, and V. Suslin
 Variability of the Black Sea from My Ocean Black Sea Monitoring and Forecasting Center Products
- XY370 EGU2012-3972
V.S. Arkhipkin, E.A. Malyarenko, and G.V. Surkova
 Analysis of storm waves on the Caspian Sea
- XY371 EGU2012-4188
V. Dorofeyev, T. Oguz, G. Korotaev, and L. Sukhikh
 Hindcast and Forecast of the Black Sea Ecosystem on the Basis of 3D Interdisciplinary Model
- XY372 EGU2012-4244
 D. Boutov and **A. Peliz**
 Atmospheric forcing and Sea Surface Temperature response in the Gulf of Cadiz-Alboran Sea system in a 20 years simulation
- XY373 EGU2012-4300
 E. Clementi, **M. Zavatarelli**, P. Oddo, G. Volpe, S. Colella, and V. Djurdjevic
 Validation of a 3D coupled physical-biogeochemical model in the Adriatic Sea
- XY374 EGU2012-4423
S. Ruiz, L. Renault, B. Garau, and J. Tintoré
 Underwater glider observations and modeling of an abrupt mixing event in the upper ocean
- XY375 EGU2012-4432
A.I. Kubryakov, G.K. Korotayev, F.-X. Thoorens, O. Liungman, and C. Ambjorn
 New tool for the Black Sea environmental safety: BlackSea Track Web
- XY376 EGU2012-4751
G. Surkova, A. Kislov, and P. Koltermann
 Large-scale atmospheric circulation and extreme wind events during the Black sea storms
- XY377 EGU2012-4877
B. Petelin, V. Malacic, A. Malej, M. Kukar, and I. Kononenko
 Multi-level Association Rules and Directed Graphs for the Lagrangian Analysis of the Mediterranean Ocean Forecasting System (MFS)
- XY378 EGU2012-5633
F.N. Gippius and V.S. Arkhipkin
 Hydrological regime of the Black Sea waters: numerical modeling
- XY379 EGU2012-5643
A. K. Stips, E. Garcia Gorriz, and G. Lessin
 Linear trends or regime shifts: statistical analysis of data and biogeochemical model simulations for the last 50 years in the Aegean Sea
- XY380 EGU2012-6016
B. L'Hévéder, L. Li, F. Sevault, and S. Somot
 Interannual variability of deep convection in the Gulf of Lions in a Atmosphere-Ocean Regional Climate Model for the Mediterranean area.
- XY381 EGU2012-6292
S. Riha and A. Peliz
 An Idealized Isopycnal 2-Layer Model of the Alboran Sea
- XY382 EGU2012-7200
T. Churilova and V. Suslin
 Black Sea spectral bio-optical models based on satellite data and their applications for assessment of spatial and temporal variability in waters transparency, chlorophyll a content and primary production
- XY383 EGU2012-7591
R. Balbín, A. Aparicio, J.L. López-Jurado, and M.M Flexas
 Interannual variability of Dissolved Oxygen values around the Balearic Islands
- XY384 EGU2012-8476
A. Aparicio, J.L. López-Jurado, R. Balbín, J. Jansá, and B. Amengual
 IBAMar 2.0: 36 years sampling on the Western Mediterranean Sea
- XY385 EGU2012-8932
E. Padorno, R. Aznar, E. Álvarez-Fanjul, S. Somot, F. Sevault, M. Déqué, M. Herrmann, G. Jordá, M. Marcos, and D. Gomis
 Impact of climate change scenarios in the Mediterranean Sea from a regional ocean model

- XY386 EGU2012-9349
M. Adani, G. Korres, P. Oddo, and N. Pinardi
Coupling OGCM and Wave model through the drag coefficient
- XY387 EGU2012-12232
C. Naranjo, J. García-Lafuente, G. Sannino, J.C. Sanchez-Garrido, J. Soto-Navarro, E. Bruque, S. Sammartino, A. Sanchez-Roman, and C. Calero
The WMDW path from its formation place to the Gibraltar gateway.
- XY388 EGU2012-7836
R. Soczka Mandac and **B. Bogunovi?**
Spatial and temporal variability of R1 in the Bay of Koper (Gulf of Trieste)
- XY389 EGU2012-4851
G. Sannino and A. Carillo
Effect of explicit tides in an eddy resolving Mediterranean model with increased resolution at Gibraltar.
- XY390 EGU2012-12855
A. Capet, J.M Beckers, A. Barth, and **M. Grégoire**
Interannual variability of Black Sea's hydrodynamics and connection to atmospheric patterns: model study.
- XY391 EGU2012-716
N. Sokolikhina, E. Semenov, and E. Sokolikhina
Meteorological and Synoptic Aspects of the Novorossiysk Bora Forming and Evolution

OS2.3 – Oceanography at coastal scales. Modelling, coupling and observations – Orals

Convener: A. Sánchez-Arcilla | Co-Conveners: E. Stanev, J. Wolf, S. Carniel

Room: 12

Chairperson: Dr. Emil Stanev

- 08:30–08:45 EGU2012-5077
A. Benetazzo, S. Carniel, M. Sclavo, and A. Bergamasco
Assessment of current effect on waves in a semi-enclosed basin
- 08:45–09:00 EGU2012-2665
A. Sánchez-Arcilla, A. Soret, E. Stanev, J. Wolf, M. Espino, and M. Sclavo
Modelling framework for coastal-scale oceanographic predictions
- 09:00–09:15 EGU2012-10048
J. Fernandez, J. Lopez, F. Jerez, F. Hermosilla, and M. Espino
Coastal Operational Oceanography: understanding user needs
- 09:15–09:30 EGU2012-1906
M. Grifoll, J.C. Warner, M. Espino, and A. Sánchez-Arcilla
Multi-scale coupled modelling of waves and currents on the Catalan shelf.
- 09:30–09:45 EGU2012-7419
K. Wahle, A. Behrens, and H. Guenther
Wave current interaction in the German Bight and Wadden Sea
- 09:45–10:00 EGU2012-13461
J. Wolf, L.R. Bricheno, J.E. Brown, and R. Bolaños
A coupled modelling system for the Irish Sea and Liverpool Bay with application to coastal flood forecasting and beyond

COFFEE BREAK

Chairperson: Dr. Judith Wolf

- 10:30–10:45 EGU2012-2163
C. A. Blain, M. K. Cambazoglu, R. S. Linzell, K. M. Dresback, and R. L. Kolar
Wind Error and Strategies for Mitigation in Modeling Coastal Dynamics
- 10:45–11:00 EGU2012-968
F. J. Ocampo-Torres, P. Osuna, H. García-Nava, and L. Cavaleri
Exploring the effect of opposing swell on the wave growth through numerical simulation of the wave directional spectrum
- 11:00–11:15 EGU2012-8288
M. Liste, M. Grifoll, I. Keupers, and J. Monbaliu
Numerical simulation of the river and urban discharges into the Sea: Application to the Catalan Coast.
- 11:15–11:30 EGU2012-9352
M. J. Howarth, M.R. Palmer, J.A. Polton, and C.K. O'Neill
Estimation of coastal density gradients

- 11:30–11:45 EGU2012-11897
R. Inghilesi, L. Ottolenghi, C. Pizzi, F. Bignami, R. Santoleri, A. Orasi, and S. Morucci
 Numerical simulation of the coastal dispersion associated with river discharges in the Mediterranean Sea
- 11:45–12:00 EGU2012-11722
 J. Lepesqueur, **F. Ardhuin**, and A.-C. Bennis
 Bottom friction and wave-induced roughness

LUNCH BREAK

Chairperson: Prof. Agustin Sanchez-Arcilla

- 13:30–13:45 EGU2012-300
G.L. Liu, Z. Liu, and H.W. Gao
 The Importance of Synchronized Observations in Coastal Seas with Large Intra-Tidal Temperature Variation and Intermittent Thermocline
- 13:45–14:00 EGU2012-470
N. Villaceros-Robineau, J.H. Herrera, C.G. Castro, S. Piedracoba, and G. Rosón
 First studies of bottom boundary currents in the Ría de Vigo (NW Iberian upwelling system)
- 14:00–14:15 EGU2012-9552
M. Palmer, C. O'Neill, C. Spingys, C. Mahaffey, and J. Polton
 The Fate and Fortune of the River Mersey Plume: Using Ocean gliders to validate and improve coupled coastal ocean models.
- 14:15–14:30 EGU2012-12416
J. Schulz-Stellenfleth, E.V. Stanev, and J. Seemann
 Analysis of one year of HF radar data acquired in the German Bight
- 14:30–14:45 EGU2012-12387
W. Petersen, J. Staneva, S. Grayek, J. Schulz-Stellenfleth, and E. Stanev
 FerryBox within the Coastal Observatory COSYNA: Examples of observations and potential benefit for data assimilation in hydrodynamic models
- 14:45–15:00 EGU2012-12649
C. Dufau, S. Labroue, S. Peyridieu, F. Collard, M. Cancet, A. Guillot, N. Picot, and T. Guinle
 The PISTACH product: altimeter data for coastal ocean

OS5.1/AS1.8 – Internal Gravity Waves (co-organized) – Posters

Convener: R. Plougonven | Co-Conveners: U. Achatz, E. Becker, C. Staquet

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XY392 EGU2012-2041
L. Hoffmann, M. J. Alexander, and X. Xue
 Global Occurrence Frequencies of Stratospheric Gravity Waves from Atmospheric Infrared Sounder Observations
- XY393 EGU2012-6895
A. J. McDonald
 Coherent gravity wave occurrence rates in paired satellite observations
- XY394 EGU2012-4999
A.G. Pavelyev, V. Gubenko, Y.-A. Liou, K. Zhang, A.A. Pavelyev, J. Wickert, and Yu. Kuleshov
 Radio occultation criterion and detection of internal gravity waves
- XY395 EGU2012-6208
A.C. Bushell, D.R. Jackson, and N. Butchart
 Assessing and improving the representation of sources for non-orographic gravity wave schemes in Earth-System Models
- XY396 EGU2012-5167
 F. Lott, L. Guez, and **P. Maury**
 A stochastic parameterization of non-orographic gravity waves, impact on the equatorial stratosphere
- XY397 EGU2012-7810
F. Lott, R. Plougonven, and J. Vanneste
 Gravity waves generated by sheared three-dimensional potential vorticity anomalies
- XY398 EGU2012-250
Z. Jing and Y. Qi
 Persistent phytoplankton bloom and surface cooling induced by the internal tidal mixing

- XY399 EGU2012-4420
S. Tobias and P. Bartello
Sensitivity of stratified turbulence to the buoyancy Reynolds number
- XY400 EGU2012-4532
J. Muraschko, M. Fruman, U. Achatz, S. Hickel, and Y. Toledo
On the application of WKB theory for the simulation of multi-scale gravity wave interactions
- XY401 EGU2012-4821
C. Glawe, R. Klein, A.R. Kerstein, and H. Schmidt
Towards the simulation of gravity waves using the One-Dimensional Turbulence model
- XY402 EGU2012-8429
O.E. Kurkina, A.A. Kurkin, and E.A. Rouvinskaya
Higher-order weakly nonlinear theory for internal waves in three-layer fluid
- XY403 EGU2012-11408
A. Paci, Y. Dossmann, F. Auclair, E.R. Johnson, L. Lacaze, A. Belleudy, J. Colin, and J.G. Esler
Topographic internal waves in the laboratory: two experiments carried in the CNRM-GAME stratified water tank
- XY404 EGU2012-12554
K.C. Viner, C.C. Epifanio, and J.D. Doyle
Resonant Instability in Steady Mountain Waves with Realistic Background Conditions
- XY406 EGU2012-5604
H. Teitelbaum, M. Moustaooui, and A. Mahalov
Variation of the intensity of waves on Sierra Nevada (Owens Valley) due to the proximity of a Cyclone
- XY407 EGU2012-13699
B.L. Kristinsdóttir and H. Ólafsson
If there is a mountain nearby, the wind extremes are gravity waves
- XY408 EGU2012-13721
H. Ólafsson and H. Ágústsson
On the sea breeze and the slope winds and their interaction
- XY409 EGU2012-19
C.-M. Liu, W.-Y. Hsu, R.-Y. Yang, and H.-H. Hwung
Experimental study on the wave damping for the fluid-mud system

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

Convener: A. Babanin | Co-Conveners: M. Onorato, F. Qiao

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Alex Babanin, Fangli Qiao, Miguel Onorato

- XY410 EGU2012-536
A. Pleskachevsky and S. Lehner
Sea state variability observed by high resolution satellite radar images
- XY411 EGU2012-8263
I. Shugan, Hwung-Hweng Hwung, and Ray-Yeng Yang
Wave - current interactions
- XY412 EGU2012-8542
V. Grigorieva, S. Badulin, and S. Gulev
Voluntary Observing Ship (VOS) data as an experimental background of wind-sea studies
- XY413 EGU2012-1669
A. Mironov, D. Hauser, and C.A. Guerin
Airborne measurements of the statistics of breaking waves and their simultaneous microwave radar return
- XY414 EGU2012-1671
A. Mironov, D. Hauser, M. Kosnik, V. Dulov, and C.A. Guerin
Statistical characterization of short wind-waves from stereo images of the sea surface
- XY415 EGU2012-10940
V. C. Khon, I. I. Mokhov, **F. A. Pogarskiy**, A. Rinke, K. Dethloff, and H. Matthes
Changes of sea wave activity in the Arctic during the 21st century from climate model simulations
- XY416 EGU2012-3278
A. Babanin
Swell-Dissipation Function for Wave Models
- XY417 EGU2012-3279
A. Ribal, M. Stiassnie, **A. Babanin**, and I. Young
On the instability of wave-fields with JONSWAP spectra to inhomogeneous disturbances, and the consequent long-time evolution

- XY418 EGU2012-3280
C.-H. Ting, **A. Babanin**, and D. Chalikov
Dependence of Drag Coefficient on the Wind Gustiness
- XY419 EGU2012-4337
R. Puscasu, **A.V. Babanin**, M. Stiassnie, D. Chalikov, and I.R. Young
On computing nonlinear wave-wave interactions - open questions and latest developments
- XY420 EGU2012-4387
M. Ghanous, **A. Babanin**, and D. Chalikov
Non-breaking wave induced ocean mixing
- XY421 EGU2012-12187
Yu. Troitskaya, E. Ezhova, D. Sergeev, A. Kandaurov, G. Baidakov, and M. Vdovin
On effect of wind surface waves on mass and momentum transfer in a stratified turbulent boundary layer
- XY422 EGU2012-6439
J.C. Nieto-Borge and K. Reichert
Analysis of wave groupiness in space and time derived from time series of marine radar images of the sea surface
- XY423 EGU2012-3593
F. L. Qiao, Z. Y. Song, and Y. J. Song
The surface wave-induced vertical mixing in the ocean can improve the performance of climate models
- XY424 EGU2012-3796
Q. Shu, F. Qiao, Z. Song, C. Xia, and Y. Yang
Improvement of MOM4 by including non-breaking surface wave-induced vertical mixing
- XY425 EGU2012-3982
Y. Song, **F. Qiao**, and Z. Song
Ocean wave induced mixing effects on SST by cloud-radiation feedback in tropical atmosphere
- XY426 EGU2012-10227
A. D. Jenkins, I. Barstad, A. Gupta, and M. Adakudlu
Modelling wave—boundary layer interaction for wind power applications
- XY427 EGU2012-11947
F. J. Ocampo-Torres, P. Osuna, H. García-Nava, B. R. Furevik, and H. Branger
Detailed studies on the effect of combined wind-sea and opposing swell on the ocean-atmosphere fluxes
- XY428 EGU2012-3576
C.-A. Guérin and G. Caulliez
Higher-order statistical analysis of short wind wave fields
- XY429 EGU2012-13120
K. Lisæter and N. Winther
A coupled wave-atmosphere model for offshore weather forecasting
- XY430 EGU2012-10508
VM Aboobacker, **P Tklich**, SK Gulev, and V Grigorieva
Wind wave variability in the South China Sea
- XY431 EGU2012-714
S.V. Samiksha, P. Vethamony, **V.M. Aboobacker**, and R. Rashmi
Role of south Indian Ocean swells in modulating the north Indian Ocean wave climate through modelling and remote sensing
- XY432 EGU2012-6018
L. Bricheno, A. Soret, J. Wolf, and O. Jorba
The effect of high resolution winds on modelling surface waves
- XY433 EGU2012-13519
J. Wolf and L.R. Bricheno
The wave climate of the NW European Continental Shelf

