

EGU General Assembly 2011
Programme Group Programme
CL – Climate: Past, Present, Future

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Monday, 04 April

CL0 – Open Session on Climate: Past, Present and Future (including Hans Oeschger Medal Lecture) – Orals

Convener: Denis-Didier Rousseau | Co-Conveners: Marie-Alexandrine Sicre

Room: 15

Chairperson: n.n.

- 10:30–10:45 EGU2011-8328
Bastian Hoffmann, Sebastian Häfele, and Ute Karl
 Quantification of the impact of climate change on thermal power plants in Germany - A System Dynamics modelling approach
- 10:45–11:00 EGU2011-9933
Antonia Zeidler and Paul Dobesberger
 Vulnerability assessment of climate change impact on natural hazards in energy systems
- 11:00–11:15 EGU2011-3894
H. Damon Matthews, Susan Solomon, and Raymond Pierrehumbert
 Cumulative carbon as a policy framework for avoiding dangerous climate impacts
- 11:15–11:30 EGU2011-8784
Erica Cacciotti, Giuseppe Benanti, Matthew Saunders, Brian Tobin, and Bruce Osborne
 Soil rewetting and the "Birch effect" in different ecosystems
- 11:30–11:45 EGU2011-6063
Martin Hirschi, Sibylle Stöckli, Martin Dubrovsky, Christoph Spirig, Mathias W. Rotach, Pierluigi Calanca, and Jörg Samietz
 Agricultural pests under future climate conditions in Switzerland
- 11:45–12:00 EGU2011-13494
Xiuhua Zhu
 multidecadal variability of the atlantic meridional overturning circulation

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-283
Aiko Voigt, Dorian S. Abbot, Ray T. Pierrehumbert, and Jochem Marotzke
 Initiation of a Marinoan Snowball Earth in a state-of-the-art atmosphere-ocean general circulation model
- 13:45–14:00 EGU2011-4566
Sylvain Richoz, Leopold Krystyn, Thomas J. Algeo, Om N. Bagharva, Micha Horacek, and Christoph Spötl
 Environmental control on earliest Triassic pelagic faunal recovery: geochemical and sedimentary evidence from the southeastern Tethys margin.
- 14:00–14:15 EGU2011-1712
Thomas Neubauer, Oleg Mandic, and Mathias Harzhauser
 Rapid morphotype replacement triggered by extrinsic factors in Miocene lake mollusks from the Dinaride Lake System (Sinj Basin, SE Croatia)
- 14:15–14:30 EGU2011-9133
Danielle Grogan, Jessica Whiteside, Danny Musher, Sarah Rosengard, Marc Vankeuren, and Richard Pancost
 Early Eocene hyperthermals: evidence of million-year orbital pacing in lacustrine records
- 14:30–14:45 EGU2011-12637
Alexander J.P. Houben, Steven M. Bohaty, Stefan Schouten, Gert-Jan Reichart, Appy Sluijs, and Henk Brinkhuis
 New insights in the onset of Antarctic glaciation
- 14:45–15:00 EGU2011-6734
Patrick Grunert, Mathias Harzhauser, Werner E. Piller, and Arne Micheels
 Changing Miocene seasonality patterns in Central Europe deduced from the Crassostrea isotope archive
- Chairperson: n.n.
- 15:30–16:30 EGU2011-14200
Robert Delmas
 Initiating CO₂ and ion measurements from ice cores (Hans Oeschger Medal Lecture)
- 16:30–16:45 EGU2011-4575
Gerald M. Ganssen, Frank Peeters, and Brett Metcalfe
 Proxy records from planktonic foraminifera: Pitfalls and perspectives

16:45–17:00 EGU2011-12292

Julia Becker and Ian Hall

Reconstruction of North Atlantic Deep Water variability during the past 450 kyr

CL0 – Open Session on Climate: Past, Present and Future (including Hans Oeschger Medal Lecture) – Posters

Convener: Denis-Didier Rousseau | Co-Conveners: Marie-Alexandrine Sicre

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marie-Alexandrine Sicre & Pietro Bernardara

XL1 EGU2011-224

Valentin Sapunov and Lev Karlin

Dynamics of climate and world history

XL2 EGU2011-5937

Hitoshi Hasegawa, Hisao Ando, Takashi Hasegawa, Toru Ohta, Masanobu Yamamoto, Noriko Hasebe, Gang Li, and Niiden Ichinnorov

Depositional environments of the mid-Cretaceous lacustrine deposits in southeast Mongolia: Implication for terrestrial environmental changes at the OAE interval

XL3 EGU2011-993

Olga Kossovaya

Extinction of Guadalupian Rugose corals - example of biotic response to Kamura event (South Primorye, Russia)

XL4 EGU2011-8079

Michaela Grein, Christoph Oehm, Anita Roth-Nebelsick, Wilfried Konrad, and Torsten UtescherAtmospheric CO₂ at the Oligocene/Miocene transition reconstructed by using fossil plant material

XL5 EGU2011-5035

Bethany Fox, Gary Wilson, Daphne Lee, Andrew Gorman, Daniel Jones, and Uwe Kaulfuss

Climate and environment in early Miocene New Zealand: new evidence from an Otago maar lake

XL6 EGU2011-13587

Brandon H. Murphy, James C. Zachos, and Ursula RöhlPaired $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ Records of ETM2 from the Pacific and Indian Ocean basins

XL7 EGU2011-7992

Hülya Alçiçek and Frank Wesselingh

Palaeogeographical and paleoclimatic implications of the Neogene Baklan basin of SW Anatolia (Turkey) and record of new cardiid bivalve fauna

XL8 EGU2011-12724

Johan Vellekoop, Henk Brinkhuis, Simone Galeotti, Jan Smit, Stefan Schouten, Gert-Jan Reichert, Robert Speijer, Johan W. H. Weijers, and Appy Sluijs

The Aftermath of the Cretaceous-Paleogene Bolide Impact

XL9 EGU2011-5726

Andreas Lueckge, Gaudenz Deplazes, Georg Scheeder, Gerald Haug, and Jürgen Pätzold

Hydrographic oscillations in the northeastern Arabian Sea during the past 80 ka

XL10 EGU2011-9539

Ligia Pérez-Cruz, Adela Monreal-Gómez, Priyadarsi D. Roy, Jaime Urrutia-Fucugauchi, Patricia Ramos, and Rufino Lozano

Tropical Pacific Climate Variability from the Late Pleistocene to Holocene: A Multi-Proxy Study of Sedimentary Records From the Southern Gulf of California

XL11 EGU2011-10932

Robert Mulvaney, Nerilie Abram, Carole Arrowsmith, Jérôme Chappellaz, and Richard Hindmarsh

A new late glacial and Holocene ice core palaeoclimate record from James Ross Island, Antarctica

XL12 EGU2011-4617

Mathias Trachsel, Samuel U. Nussbaumer, Friedhelm Steinhilber, Petra Breitenmoser, Jürg Beer, Martin Grosjean, Albert Hafner, Hanspeter Holzhauser, Heinz Wanner, and Heinz J. Zumbühl

Alpine climate during the Holocene: a comparison between records of glaciers, lake sediments and solar activity

XL13 EGU2011-11047

Ivan Kalugin, Andrey Darin, Lyudmila Holodova, Natalia Maksimova, Vladimir Myglan, Dmitry Ovchinnikov, and Natalia Rudaya

High-frequency environmental variability restored by geochemistry of lake sediments

XL14 EGU2011-7598

Kornelia Radics, Csilla N. Peline, and Judit Bartholy

Regional tendencies of wind characteristics from measured and reanalysis data sets over Hungary

XL15 EGU2011-11406

Paul Berrisford, Hitoshi Sato, Paul Poli, and Dick Dee

Climate monitoring using ERA-Interim in near real time

- XL16 EGU2011-2992
David Smyth
Climate change impacts and recommended adaptive actions in the construction industry
- XL17 EGU2011-7065
Robert Steiger
The impact of climate change on the skiing tourism industry
- XL18 EGU2011-11530
Julia Nagy, Judit Bartholy, Rita Pongracz, Ildiko Pieczka, and Levente Hufnagel
Regional climate change impacts on wild animal's living territory in Central Europe
- XL19 EGU2011-6251
Kirsti Jylhä, Hanna Tietäväinen, Kimmo Ruosteenoja, Targo Kalamees, Juha Jokisalo, Simo Ilomets, Reijo Hyvönen, and Seppo Saku
Climate change and energy demand for heating and cooling of buildings in Finland
- XL20 EGU2011-11438
Danuta Limanowka, Małgorzata Kepinska-Kasprzak, Robert Pyrc, and Piotr Kilar
Weather conditions in development of climatic water balance in Dunajec and Prosna catchments in Poland
- XL21 EGU2011-9157
Mustapha El Maayar, Adriana Bruggeman, and Manfred Lange
Climate change and food security in the Mediterranean Basin
- XL22 EGU2011-3721
Philipp Schajer, Florian Ortner, Florian Hanzer, Thomas Marke, and Ulrich Strasser
Climate trends in Tyrol and Styria (Austria) during the last decades

CL1.12 – INTEgrating Ice core, MARine and TERrestrial records (INTIMATE) and the role of land/ocean/atmosphere interactions over the last 60,000 years – Orals

Convener: Wim Hoek | Co-Conveners: Paul Hughes, Sune O. Rasmussen, Michelle Garneau, Karen Luise Knudsen, Simon Blockley, Hans Renssen, Tim Daley, Guillaume St-Onge

Room: 15

Chairperson: n.n.

- 08:30–08:45 EGU2011-3240
Thomas Blunier, Jérôme Chappellaz, Simon Schüpbach, Christopher Stowasser, Edward Brook, Julia Rosen, Rémi Dallmayr, Olivier Pascual, Matthias Bigler, and Diana Leuenberger
Continuous Methane Concentration Measurements along the NEEM Core
- 08:45–09:00 EGU2011-5713
Ina Neugebauer, Nadine Dräger, Peter Dulski, Birgit Plessen, Ulrike Herzsuh, and Achim Brauer
The first continuous Younger Dryas varve chronology from Northeastern Germany: the Rehwiese palaeolake record (Berlin)
- 09:00–09:15 EGU2011-9788
Michael E. Weber, Gerhard Kuhn, Peter U. Clark, and Daniela Sprenk
Antarctic ice-sheet retreat and sea-level rise during the last deglaciation
- 09:15–09:30 EGU2011-12961
Tim Daley, Keith Barber, Neil Loader, and F. Alayne Street-Perrott
Improved understanding of Holocene climate change from stable-isotopic analysis of Sphagnum alpha-cellulose in raised peat bogs
- 09:30–09:45 EGU2011-2956
Stefan Mulitza and André Paul
Late Holocene variability of Saharan dust mobilisation: relation to ocean circulation and human activity
- 09:45–10:00 EGU2011-7826
Gabriel Magnan and Michelle Garneau
Holocene paleohydrology and carbon accumulation in the ombrotrophic peatlands of the North Shore of the Gulf of Saint-Lawrence, Northeastern Canada

CL1.12 – INTEgrating Ice core, MARine and TERrestrial records (INTIMATE) and the role of land/ocean/atmosphere interactions over the last 60,000 years – Posters

Convener: Wim Hoek | Co-Conveners: Paul Hughes, Sune O. Rasmussen, Michelle Garneau, Karen Luise Knudsen, Simon Blockley, Hans Renssen, Tim Daley, Guillaume St-Onge

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL23 EGU2011-13138
Sune Olander Rasmussen, Hans Renssen, **Wim Hoek**, Marit-Solveig Seidenkrantz, Anders Svensson, and Niki Evelpidou
INTIMATE: INTEgrating Ice core, MARine and TERrestrial records (60,000 to 8000 years ago)
- XL24 EGU2011-5610
Anders Svensson, Matthias Bigler, Thomas Blunier, Hubertus Fischer, Sigfus J. Johnsen, Sepp Kipfstuhl, Sune O. Rasmussen, Jørgen P. Steffensen, Bo M. Vinther, and Anna Wegner
Direct linking of Greenland and Antarctic ice cores
- XL25 EGU2011-7873
Frédéric Parrenin, Jean-Robert Petit, Roberto Udisti, Mirko Severi, Eric Wolff, and Jakob Schwander
Refining stratigraphic correlation between the EPICA Dome C and Vostok ice cores for the last 150 kyr
- XL26 EGU2011-5670
Ralf Kaegi, Andreas Ruckstuhl, Brian Sinnet, and Jürg Beer
Comparison of particles recovered from the Greenland Ice Core Project using computer controlled scanning electron microscopy
- XL27 EGU2011-4836
Catherine Kissel, Carlo Laj, and Hervé Guillou
Long distance sediment/sediment and sediment/ice correlations during glacial period using the changes in the earth magnetic field
- XL28 EGU2011-9005
Julia Rosen, Edward Brook, Jeffrey Severinghaus, and Logan Mitchell
New insights on the phasing of atmospheric methane and temperature change during the Last Glacial Termination from the North Greenland Eemian (NEEM) Ice Core
- XL29 EGU2011-8164
Katrin Wolff, Anna Wegner, Hubertus Fischer, and Michael Schulz
High resolution dust measurements of different climatic periods in the NorthGRIP ice core
- XL30 EGU2011-4793
Katarzyna Zamelczyk, Katrine Husum, and Morten Hald
Atlantic Water advection to the Fram Strait during the last interglacial-glacial period (29,000-16,000 years BP) elucidated from planktic foraminifera and geochemical and stable isotope evidences
- XL31 EGU2011-6604
Erin McClymont, Raja Ganeshram, Alan Haywood, Paul Valdes, Laetitia Pichevin, Helen Talbot, Bart van Dongen, and Thunell Robert
Challenges for seasonal and ENSO analogues of tropical Pacific climate response to Termination 1
- XL32 EGU2011-13169
Wim Hoek, Nelleke van Asch, and Sjoerd Bohncke
Pingo remnants as recorders of Late Weichselian climate and environmental change
- XL33 EGU2011-9834
Michael Blaschek, Cedric J. Van Meerbeeck, and Hans Renssen
The temporal and spatial response of the Nordic Seas surface conditions to external and internal forcings during the Holocene - A Data-Model comparison
- XL34 EGU2011-13364
Paul Hughes and the PRECIP Team
Holocene land-ocean-atmosphere interactions on the eastern seaboard of North America
- XL35 EGU2011-6095
Stephan Rella and Masao Uchida
Northwest Pacific mid-depth ventilation changes during the Holocene and their link to atmospheric circulation
- XL36 EGU2011-9626
Alice Schaffhauser, Serge Payette, Michelle Garneau, Elisabeth Robert, and Ann Delwaide
Interactions between soil, vegetation and fire in the formation of a bog
- XL37 EGU2011-5414
Christopher Simmons, Lawrence Mysak, and H Damon Matthews
The Holocene's natural carbon cycle according to a model of intermediate complexity: the role of Southern Ocean ventilation
- XL38 EGU2011-11563
Annett Junginger and Martin H. Trauth
Solar Variations and Holocene East African Climate
- XL39 EGU2011-580
Ke Wang, Hongbo Zheng, Ryuji Tada, and Yan Zheng
High-resolution paleoenvironmental and paleoclimatic record of core MD06-3040 from East China Sea
- XL40 EGU2011-13390
Lester Lembke-Jene, Ralf Tiedemann, Dirk Nuernberg, Natalia Bubenshchikova, Sergey Gorbarenko, and Wolf-Christian Dullo
Dynamics in Holocene Northwest Pacific Intermediate Water Ventilation: Interactions with the Southeast Asian Monsoon System

- XL41 EGU2011-12809
Gunnar Mallon and the NERC-PRECIP Team
 Comparison of instrumental and reconstructed climate data from Maritime Canada

CL1.22 – Advances in the development and application of terrestrial paleoclimate proxies – Orals

Convener: William D'Andrea | Co-Conveners: Raymond Bradley, Nicholas Balascio

Room: 19

Chairperson: William D'Andrea

- 13:30–13:45 EGU2011-3967
Juerg Beer, Friedhelm Steinhilber, and Jose Abreu
 Predictability of Solar Forcing
- 13:45–14:00 EGU2011-7971
Petra Breitenmoser, Jürg Beer, Stefan Brönnimann, David Frank, Friedhelm Steinhilber, and Wanner Heinz
 Solar and volcanic fingerprints in tree ring chronologies over the past 2000 years
- 14:00–14:15 EGU2011-10305
Michael Sarnthein, Birgit Schneider, and Pieter M. Grootes
 Glacial-to-deglacial changes in ocean deepwater ventilation ages and the ocean's capacity to store atmospheric CO₂
- 14:15–14:30 EGU2011-3129
Oliver Heiri, André F. Lotter and the EUCLIM Team
 European climate change at the end of the last glaciation: chironomid-based temperature reconstruction on a continental scale
- 14:30–14:45 EGU2011-4664
Christine Hatté, Caroline Gauthier, Denis-Didier Rousseau, Pierre Antoine, Markus Fuchs, France Lagroix, Olivier Moine, Adriana Sima, Lenka Lisa, and Jiri Svoboda
 First isotopic organic geochemical data of the Dolni Vestonice (Czech Republic) loess sequence: evidence of Westerlies influence all along the last climate cycle
- 14:45–15:00 EGU2011-4474
Peter Ditlevsen and Sigfus Johnsen
 Tipping points: Early warning and wishful thinking
- Chairperson: Raymond Bradley
- 15:30–15:45 EGU2011-1463
Helge Niemann, Stefanie B. Wirth, Alina Stadnitskaia, Adrian Gilli, Flavio S. Anselmetti, Jaap S. Sinninghe Damsté, Stefan Schouten, Ellen C. Hoppmans, and Moritz F. Lehmann
 Validation and application of a novel, terrestrial biomarker-based paleo thermometer to Holocene sediments of Lake Cadagno, Switzerland
- 15:45–16:00 EGU2011-13203
William D'Andrea, Raymond Bradley, David Vaillencourt, and Xiaohui Huang
 Calibrating the alkenone paleothermometer for lakes
- 16:00–16:15 EGU2011-8303
Yannick Garcin, Valérie Schwab-Lavri?, Gerd Gleixner, Ansgar Kahmen, Gilbert Todou, Olivier Séné, Jean-Michel Onana, Gaston Achoundong, and Dirk Sachse
 Hydrogen isotope ratios of lacustrine sedimentary n-alkanes as proxies of tropical African hydrology: new insights from a calibration transect across Cameroon
- 16:15–16:30 EGU2011-5436
Steven Voelker, Paul-Emile Noiro-Cosson, Michael Stambaugh, Erin McMurry, Frederick Meinzer, Barbara Lachenbruch, and Richard Guyette
 Development and application of a paleoclimate proxy for spring temperatures in central North America: did low temperatures limit tree physiological function during the Younger-Dryas?
- 16:30–16:45 EGU2011-6570
Hanno Meyer, Alexander Dereviagin, Thomas Opel, and Kirstin Hoffmann
 Late Holocene winter warming reconstructed from 14C-dated ice wedges, central Lena Delta, Northern Siberia
- 16:45–17:00 EGU2011-11782
Gabriella Barta
 Paleoenvironmental reconstruction based on the analysis of secondary carbonates - a case study from the SüttÅ' loess-paleosol sequence, Hungary

CL1.22 – Advances in the development and application of terrestrial paleoclimate proxies – Posters

Convener: William D'Andrea | Co-Conveners: Raymond Bradley, Nicholas Balascio

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Raymond Bradley & William D'Andrea

- XL42 EGU2011-898
Svetlana Khamnueva, Andrey Mitusov, and Hans-Rudolf Bork
Geoarchaeological approach for palaeoenvironment and local climate reconstruction in Holocene
- XL43 EGU2011-10741
Pascal Yiou, Jérôme Servonnat, Masakazu Yoshimori, Myriam Khodri, and Ayako Abe-Ouchi
Comparison of weather regimes over the North Atlantic in two millennium coupled simulations (IPSLCM4 and MIROC)
- XL44 EGU2011-9513
Izabela Maris and Nicolae Anastasiu
Paleoclimatic implications of the red continental deposits from south-western Transylvania (Late Cretaceous - Paleogene)
- XL45 EGU2011-2248
Cristian Necula, Fjo De Ridder, Cristian Panaiotu, Alida Timar Gabor, Stefan Vasiliniuc, and Daniela Dimofte
A continuous time scale for Romanian loess based on magnetic data
- XL46 EGU2011-11364
Sebastien Joannin, Jean-Jacques Cornée, Philippe Münch, Michel Fornari, Iuliana Vasiliev, Wout Krijgsman, Samuel Nahapetyan, Ivan Gabrielyan, Vincent Ollivier, and Paul Roiron
Early Pleistocene climate cycles in continental deposits of the Lesser Caucasus of Armenia inferred from palynology, magnetostratigraphy, and $40\text{Ar}/39\text{Ar}$ dating.
- XL47 EGU2011-11019
Jörg Völkel, Matthias Leopold, Juliane Huber, and David Dethier
Parameters and genetic interpretation of a palaeosol from the Colorado Front Range, USA
- XL48 EGU2011-8889
Sonay Boyraz, Nizamettin Kazanc?, and Hong Wang
Paleopedological, mineralogical properties and paleo-environmental implications of Late Miocene paleosols in Denizli area (SW TURKEY)
- XL49 EGU2011-11576
Pascal Philippot, **Yoram Teitler**, and Martine Gerard
Ubiquitous subaerial weathering at regional and temporal scales during emersion of the Fortescue Late Archean igneous province, Western Australia
- XL50 EGU2011-13334
Gabriella Barta, Erzsébet Horváth, and Em?ke Fodor
Macro-, micro- and nanoscale analysis of secondary carbonates
- XL51 EGU2011-9588
Peter Douglas, **Mark Pagani**, Timothy Eglinton, Mark Brenner, Jason Curtis, and David Hodell
The process of leaf-wax transport to tropical lake sediments and its significance for inferring past changes in climate and carbon cycling
- XL52 EGU2011-1835
Janez Turk
High resolution paleotemperature proxy obtained from clastic sediments in cave environment (Example from Divje Babe 1 Palaeolithic site)
- XL53 EGU2011-5709
Volker Rath, Ilmo T. Kukkonen, Liisa Kivekaes, Jan Safanda, and Vladimir Cermak
Past surface temperature changes as estimated from the Outokumpu deep borehole, Southern Finland: methods and results

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

Convener: Monika Rhein | Co-Conveners: Richard Greatbatch

Room: D

Chairperson: Rhein

- 08:30–08:45 EGU2011-4416
Herle Mercier, Pascale Lherminier, Claire Gourcuff, Artem Sarafanov, Anastasia Falina, Nathalie Daniault, Bruno Ferron, Thierry Huck, and Virginie Thierry
Variability of the circulation and heat transport from six occupations of the A25 Greenland-Portugal OVIDE section between 1997 and 2010
- 08:45–09:00 EGU2011-7199
Kjetil Våge, Robert S. Pickart, Michael A. Spall, Héðinn Valdimarsson, Steingrímur Jónsson, Daniel J. Torres, Svein Østerhus, and Tor Eldevik
Formation of Denmark Strait Overflow Water via boundary currents and transformation in the central Iceland Sea

- 09:00–09:15 EGU2011-11489
Bogi Hansen, Karin Margretha Larsen, Svein Østerhus, and Detlef Quadfasel
 Mixing of the Faroe Bank Channel overflow by convective events
- 09:15–09:30 EGU2011-12484
Tor Eldevik and Jan Even Ø. Nilsen
 Northern constraints on the Atlantic thermohaline circulation
- 09:30–09:45 EGU2011-6002
Kerstin Jochumsen and Detlef Quadfasel
 Denmark Strait exchanges: structure and variability
- 09:45–10:00 EGU2011-2276
Achim Roessler, Monika Rhein, Christian Mertens, and Dagmar Kieke
 Four year transport and pathway time series of the subpolar gyre inferred by integral methods

COFFEE BREAK

Chairperson: Kieke

- 10:30–10:45 EGU2011-3122
Ilaria Stendardo and Nicolas Gruber
 Five decades of oxygen trends in the North Atlantic
- 10:45–11:00 EGU2011-3613
Michael A. Spall
 On the role of eddies in the heat transport and overturning circulation in the Nordic Seas
- 11:00–11:15 EGU2011-4645
Anne Marie Treguier, Julie Deshayes, Raphael Dussin, and Jean-Marc Molines
 Interannual variability of the subpolar Atlantic and role of eddies: contribution of numerical models at increasing spatial resolution.
- 11:15–11:30 EGU2011-5721
Erik Behrens, Claus W. Böning, and Arne Biastoch
 Can eddies affect the freshwater distribution and the reaction of the MOC in Greenland melting scenarios?
- 11:30–11:45 EGU2011-7175
Geoffrey Gebbie
 Tracking Glacial Ocean Waters from Surface Source to the Seafloor: An Inverse Method Applied to the Last 25,000 years
- 11:45–12:00 EGU2011-8680
Thomas Martin and Mojib Latif
 The long-term freshwater budget and the relation to the MOC in the North Atlantic.

Chairperson: Roessler

- 15:30–15:45 EGU2011-3407
Dagmar Kieke, Monika Rhein, and Reiner Steinfeldt
 Revealing LSW formation from a decade of tracer measurements in the subpolar North Atlantic
- 15:45–16:00 EGU2011-2739
Amy Bower, Dan Amrhein, and Ross Hendry
 Are Labrador Sea Water eddies an important transport mechanism in the AMOC?
- 16:00–16:15 EGU2011-13214
Igor Yashayaev
 Hydrography of the Labrador Sea in the first decade of the 21st century
- 16:15–16:30 EGU2011-12805
 Tatiana Rykova, **Fiamma Straneo**, and Amy Bower
 The West Greenland Current System of the Labrador Sea from 1992-2008
- 16:30–16:45 EGU2011-3856
Reiner Steinfeldt, Monika Rhein, and Dagmar Kieke
 Ventilation, formation, and export rates of North Atlantic Deep Water
- 16:45–17:00 EGU2011-548
Erik van Sebille, Molly O. Baringer, William E. Johns, Christopher S. Meinen, Lisa M. Beal, M. Femke de Jong, and Hendrik M. van Aken
 The subtropical signal of Labrador Sea Water variability and the leakiness of the Deep Western Boundary Current

OS1.6/AS2.5/CL2.11 – Air-sea interactions from meso to regional scales within the tropics (co-organized) – Orals
 Convener: Alban LAZAR | Co-Conveners: Marcus Dengler, Steve Woolnough, Ping Chang

Room: 7

Chairperson: Marcus Dengler, Alban Lazar

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

COFFEE BREAK

Chairperson: Alban Lazar, Ping Chang

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

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marcus Dengler, Alban Lazar

- XY583 EGU2011-14197
Gilles Reverdin, Jacqueline Boutin, Simon Morisset, Nicolas Martin, Claire Hénocq, Fabienne Gaillard, and Nicolas Reul
Tropical near-surface stratification during intense rainfall
- XY584 EGU2011-1713
Lili Zeng
Observed seasonal variability of barrier layer in the South China Sea, from meso to regional scales

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

CL2.16 – Urban climate, urban heat island and urban biometeorology – Orals

Convener: Konstantinos Kourtidis | Co-Conveners: Koen de Ridder

Room: 19

Chairperson: Konstantinos Kourtidis, Bino Maiheu

- 08:30–09:00 EGU2011-12709
gerald mills
Urban climatology: The state of the field.
- 09:00–09:15 EGU2011-1436
Maja Zuvela-Aloise, Barbara Früh, Christoph Matulla, and Reinhard Böhm
Urban climate of Vienna - modelling study of urban heat stress under climate change conditions
- 09:15–09:30 EGU2011-12837
Benedicte Dousset, Françoise Gourmelon, Karine Laaidi, Abdelkrim Zeghnoun, Emmanuel Giraudet, Philippe Bretin, and Stéphanie Vandentorren
Summer warming trends, heat waves and health impact in the Paris metropolitan area
- 09:30–09:45 EGU2011-1646
Iphigenia Keramitsoglou, Chris Kiranoudis, Bino Maiheu, Koen De Ridder, Giulio Ceriola, Ioannis Daglis, Paolo Manunta, and Marc Paganini
Spatial and temporal distribution of heat wave hazard and risk in Athens, Greece, using artificial intelligence fuzzy logic
- 09:45–10:00 EGU2011-1342
Chapman Lee
Introduction to the Birmingham Climate Laboratory

COFFEE BREAK

Chairperson: Koen DeRidder, Benedicte Dousset

- 10:30–10:45 EGU2011-5245
Tsing-Chang Chen and Ming-Cheng Yen
 Enhancement of Afternoon Thunderstorm Activity by Urbanization in a Valley for the Past Four Decades: Taipei
- 10:45–11:00 EGU2011-11565
Björn Lietzke and Roland Vogt
 Variability of CO₂ in an urban environment: from street canyon to neighbourhood scale
- 11:00–11:15 EGU2011-171
Bino Maiheu, Koen De Ridder, Benedicte Doucet, Paolo Manuta, Giulio Ceriola, and Iphigenia Keramitsoglou
 Modelling air temperature via assimilation of satellite derived LST within the Urban Heat Island project
- 11:15–11:30 EGU2011-11062
Julia Hidalgo, Bruno Bueno, and Valéry Masson
 How to obtain atmospheric forcing fields for Surface Energy Balance models in climatic studies
- 11:30–11:45 EGU2011-12274
Bruno Bueno and Grégoire Pigeon
 Development and evaluation of a comprehensive building energy model in the Town Energy Balance scheme
- 11:45–12:00 EGU2011-11391
Stephanie Keogh, Gerald Mills, and Rowan Fealy
 The energy budget of the urban surface: Two locations in Dublin

CL2.16 – Urban climate, urban heat island and urban biometeorology – Posters

Convener: Konstantinos Kourtidis | Co-Conveners: Koen de Ridder

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Koen DeRidder, Konstantinos Kourtidis

- XL54 EGU2011-2633
 Gert-Jan Steeneveld, Sytse Koopmans, Bert Heusinkveld, **Reinder Ronda**, Bert van Hove, and Bert Holtslag
 Quantification of the urban heat island effect and human comfort in the Netherlands using data from hobby meteorologists: role of vegetation in the city.
- XL55 EGU2011-5854
Reinder Ronda, Gert-Jan Steeneveld, Bert van Hove, and Bert Holtslag
 Investigating the causes of the Urban Heat Island effect in Rotterdam using WRF
- XL56 EGU2011-13394
Martin Wattenbach and Ulrich Cubasch
 MILIEU an interdisciplinary project on urban systems studies in the city of Berlin (Germany)
- XL57 EGU2011-3484
Benjamin Bechtel, Katharina J Schmidt, Jürgen Böhner, Christian Daneke, Thomas Langkamp, and Jürgen Oßenbrügge
 Floristic mapping as new proxy for the long-term urban heat island in Hamburg and comparison with annual characteristics of surface temperature
- XL58 EGU2011-8644
Tatiana Prieto-Lopez, Lee Chapman, Chris Hamilton, and John Thornes
 Characterization of a micronet and urban heat island effect using atmospheric data in Birmingham UK
- XL59 EGU2011-12586
Bernhard Wolfslehner, Elisabeth Pötzelberger, and Richard Petritsch
 Modelling climate change effects in urban and peri-urban forest areas of the City of Vienna
- XL60 EGU2011-5468
Petr Dobrovolný, Rudolf Brázdil, and Lukáš Krahula
 Spatial variability of land surface temperatures and air temperature measurements in Brno area (Czech Republic)
- XL61 EGU2011-12791
Lilla Égerházi and Noémi Kántor
 Outdoor thermal comfort - experimental investigations on two recreational urban spaces in Szeged, Hungary
- XL62 EGU2011-2789
Juan A. Acero, Jon Arrizabalaga, Sebastian Kupski, and Lutz Katzschner
 Analysis of local climate areas in Bilbao with on-site measurements
- XL63 EGU2011-4350
Xian-Xiang Li, Tieh Yong Koh, Dara Entekhabi, Leslie K Norford, and Matthias Roth
 High-resolution modelling of urban environment in Singapore using coupled WRF/UCM system

- XL64 EGU2011-1367
Konstantinos Kourtidis, Aristeidis Georgoulas, Spyridon Rapsomanikis, Ifigenia Keramitsoglou, Ioannis A. Daglis, and Paolo Manunta
A study of the Athens Urban Heat Island effect during the 2009 THERMOPOLIS campaign
- XL65 EGU2011-7756
Henrique Andrade, Maria-João Alcoforado, and **Paulo Canário**
Estimating the influence of building volumetry in the urban thermal field in Lisbon (Portugal)
- XL66 EGU2011-3647
Koen de Ridder, Cedric Bertrand, and Abhijit Sarkar
Simulating the heat island of Paris using remotely sensed thermal surface parameters
- XL67 EGU2011-810
Ariane Sakhy, Malika Madelin, and Gérard Beltrando
Multi-scalar estimation of spatial and temporal extension of urban heat island during the heat wave of august 2003 in Paris: effects on excess mortality
- XL68 EGU2011-5453
Matthias Demuzere, Nicole Van Lipzig, Nigel Tapper, and Jason Beringer
Offline validation of Community Land Model v4.0: A case study for Toulouse (France) and Melbourne (Australia)
- XL69 EGU2011-915
Sylvie Leroyer, **Stephane Belair**, and Jocelyn Mailhot
Off-line Numerical Weather Prediction over Montreal with the Canadian Urban Modeling System
- XL70 EGU2011-12466
Pavel Konstantinov and Alexander Kislov
Climate change in Moscow in different building-up scenarios (simulation with simple urban canopy model)
- XL71 EGU2011-9606
Elena A. Grigorieva and Chris R. de Freitas
Evaluation of human bioclimatic indices for a thermally extreme climate zone
- XL72 EGU2011-13125
Noémi Kántor and Lilla Égerházi
Outdoor thermal comfort - review on the main relationships and methodological components of a comprehensive study
- XL73 EGU2011-6414
Takayuki Tokairin, Hirotaka Mishima, and Toshihiro Kitada
Influence of cold air from an urban green area on nocturnal temperature reduction
- XL74 EGU2011-2885
Lalu Das, James D. Annan, **Julia C. Hargreaves**, and Seita Emori
Centennial scale warming over Japan: are the rural stations really rural?
- XL75 EGU2011-7819
Sarah Sandoval, Felix Ament, and Annette Eschenbach
Observing moisture and energy exchange of urban soils and the impact on local climate
- XL76 EGU2011-4870
Zhihua Wang, Elie Bou-Zeid, and James Smith
A coupled energy and water transport model for urban surfaces
- XL77 EGU2011-2964
Sebastian Schubert, Susanne Grossman-Clarke, and Alberto Martilli
Implementation, modification and testing of the Building Energy Parameterization Scheme (BEP) in the Climate Local Model
- XL78 EGU2011-11071
Uta Moderow, Valeri Goldberg, and Christian Bernhofer
Modelling the influence of urban environmental conditions on CO₂-uptake
- XL79 EGU2011-13294
Thomas Lauvaux, Eric Crosson, and Chris Rella
Urban Scale Inversions: Verifying Inventories within Urban Areas by Monitoring GHG Atmospheric Concentrations Using a Network of High Performance Analyzers
- XL80 EGU2011-4660
Rachid Abida, Matteo Zampieri, and Georgiy Stenchikov
Analyses of Regional Patterns of Rapid Temperature Change in the Middle East, North Africa, and the Mediterranean

CL3.1/NP5.5 – Decadal, seasonal and monthly forecasts (co-organized) – Orals

Convener: Francisco J. Doblas-Reyes | Co-Conveners: Geert Jan van Oldenborgh, Mark Liniger, Stéphane Vannitsem

Room: 17

Chairperson: Dominik Renggli, Francisco Doblas-Reyes

- 08:30–08:45 EGU2011-1251
Patricia Okely, Debra Hudson, Oscar Alves, and Yonghong Yin
 Towards coupled data assimilation in an intraseasonal-seasonal ensemble forecast system
- 08:45–09:00 EGU2011-10030
Johanna Baehr, Wolfgang Müller, Michael Botzet, Robert Piontek, Luis Kornblueh, and Daniela Matei
 Towards seasonal forecasts with the coupled climate model ECHAM6/MPIOM
- 09:00–09:15 EGU2011-6033
Thomas Jung, Laura Ferranti, Gereon Gollan, Richard Greatbatch, Torben Kunz, Jean-Jacques Morcrette, and Frederic Vitart
 Diagnosing the origin and predictability of extratropical circulation anomalies
- 09:15–09:30 EGU2011-1109
 Hui Du, Yves Soufflet, Francisco J Doblas-Reyes, **Virginie Guemas**, Javier Garcia-Serrano, and Muhammad Asif
 Spread induced by initial perturbations in decadal forecasts: Where are the major sources of uncertainties?
- 09:30–09:45 EGU2011-1678
Robert Piontek and Johanna Baehr
 Ensemble generation for decadal scale forecasts using breeding in the ocean
- 09:45–10:00 EGU2011-11828
Bert Wouters, Geert Jan van Oldenborgh, and Wilco Hazeleger
 Decadal predictability of the North-Atlantic region in the EC-Earth model

CL3.1/NP5.5 – Decadal, seasonal and monthly forecasts (co-organized) – Posters

Convener: Francisco J. Doblas-Reyes | Co-Conveners: Geert Jan van Oldenborgh, Mark Liniger, Stéphane Vannitsem

Hall XL | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Virginie Guémas, Mark Liniger

- XL81 EGU2011-4258
Dmitri Kondrashov, Mickael Chekroun, Michael Ghil, and Andrew Robertson
 MJO empirical modeling and prediction by past "noise"
- XL82 EGU2011-2724
Christine Traeger-Chatterjee, Richard W. Mueller, Joerg Trentmann, and Joerg Bendix
 Analysis of extreme European summers and prior spring conditions
- XL83 EGU2011-2948
Matthieu Chevallier and David Salas y Melia
 Seasonal predictability of the Arctic sea-ice in a coupled GCM: a diagnostic approach
- XL84 EGU2011-8863
Tim Kruschke, Gregor C. Leckebusch, Dominik Renggli, and Uwe Ulbrich
 Frequency of synoptic-scale winter storms over western North America: decadal variability arising from the Pacific Decadal Oscillation
- XL85 EGU2011-3378
Dominik Renggli, Gregor C. Leckebusch, Tim Kruschke, Uwe Ulbrich, and Eberhard Faust
 Sources of skill in forecasting North Atlantic winter storm activity in dynamical seasonal prediction models
- XL86 EGU2011-9239
Judah Cohen
 How useful was ENSO in predicting Northern Hemisphere climate anomalies over the past two winters?
- XL87 EGU2011-4140
Andrea Alessandri, Andrea Borrelli, Antonio Navarra, Alberto Arribas, Michel Déqué, Philippe Rogel, and Antje Weisheimer
 Evaluation of probabilistic quality and value of the ENSEMBLES multi-model seasonal forecasts: comparison with DEMETER
- XL88 EGU2011-5223
Constantin Andronache
 Seasonal forecast of Atlantic tropical cyclones during intense ENSO events
- XL89 EGU2011-5433
Yuriy Kuleshov, Andrew Charles, Andrew Cottrill, David Jones, Harry Hendon, Eun-Pa Lim, and Roald de Wit
 Pacific Adaptation Strategy Assistance Program: Climate prediction capacities strengthened in the National Meteorological Services
- XL90 EGU2011-5901
Mimi Liu, Bin Wang, and Yongqiang Yu
 Pacific decadal oscillation hindcasts in the FGOALS2_g coupled climate model

- XL91 EGU2011-6091
Alessio Bellucci, Silvio Gualdi, Enrico Scoccimarro, Antonio Navarra, Simona Masina, and Andrea Storto
Decadal climate predictions with the CMCC-CM coupled OAGCM initialized with ocean analyses.
- XL92 EGU2011-4758
Takashi Mochizuki, Masahide Kimoto, Masayoshi Ishii, Hiroaki Tatebe, Yoshiki Komuro, and Takashi Sakamoto
Decadal Prediction in the Pacific using a High Resolution Climate Model
- XL93 EGU2011-2927
Violette Zunz, Hugues Goosse, Svetlana Dubinkina, and Yoann Sallaz-Damaz
Influence of Initialization Method on the Quality of Decadal Climate Predictions
- XL94 EGU2011-3605
Reidun Gangstø, Andreas Weigel, and **Mark Liniger**
The impact of drift correction and detrending on the skill of ENSEMBLES decadal predictions
- XL95 EGU2011-14016
Geert Jan van Oldenborgh and **Francisco Doblas-Reyes**
An estimate of the reliability of climate model trends

CL3.2 – Extreme Events and Impacts – Orals

Convener: Martin Beniston | Co-Conveners: Stéphane Goyette, Paul Della-Marta

Room: 17

Chairperson: Paul Della-Marta

- 10:30–10:45 EGU2011-9601
Claudio Cassardo, Marco Galli, Naima Vela, and Seon K. Park
Heat and cold spells over the Alpine region in the future climate
- 10:45–11:00 EGU2011-1117
Else van den Besselaar, Albert Klein Tank, and Gerard van der Schrier
Changing precipitation extremes in Europe
- 11:00–11:15 EGU2011-12745
Effie Kostopoulou, Christos Giannakopoulos, Panos Hadjinicolaou, Jos Lelieveld, and Manfred Lange
Changes in climate, extreme climate events and associated sectoral impacts for the Eastern Mediterranean and the Middle East: An integrated assessment of relevance to stakeholders
- 11:15–11:30 EGU2011-164
Debasish PaiMazumder, Laxmi Sushama, René Laprise, Naveed Khaliq, and Dave Sauchyn
Future projections and uncertainties of short and long-term drought characteristics over Canadian Prairies as simulated by the Canadian RCM
- 11:30–11:45 EGU2011-10350
Grigory Nikulin, Erik Kjellström, and Colin Jones
Future projections in extreme wind statistics over Europe
- 11:45–12:00 EGU2011-5620
Kai Born, Patrick Ludwig, Melanie K. Karremann, and Joaquim G. Pinto
A Statistical-Dynamical Downscaling Approach and Its Probabilistic Extension: Application on Storm Losses in Germany

CL3.2 – Extreme Events and Impacts – Posters

Convener: Martin Beniston | Co-Conveners: Stéphane Goyette, Paul Della-Marta

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Stéphane Goyette

- XL96 EGU2011-3844
Randall Dole, Martin Hoerling, Judith Perlwitz, Jon Eischeid, Don Murray, Phil Pегion, Xiaowei Quan, Taiyi Xu, and Tao Zhang
Was There a Basis for Anticipating the 2010 Russian Heat Wave?
- XL97 EGU2011-7757
Dariusz Graczyk and Adam Chorynski
Heat waves and cold waves in Poland - observations and projections.
- XL98 EGU2011-8178
Hylke de Vries, Reindert Haarsma, and Wilco Hazeleger
Local temperature response to winter-time atmospheric blocking
- XL99 EGU2011-8585
Rita Pongracz, Judit Bartholy, Eniko Boglar Bartha, Ildiko Pieczka, and Csaba Torma
How frequency and intensity of regional heat waves are projected to change in the Carpathian basin?

- XL100 EGU2011-1922
Isabel Hoyos-Rincon and **Astrid Baquero-Bernal**
Extreme Events in the Colombian Pacific and Caribbean Catchment Basins
- XL101 EGU2011-12501
Stephanie Eisner, Frank Voss, and Ellen Kynast
Statistical bias correction of global climate projections - Consequences for large scale modeling of flood flows
- XL102 EGU2011-5944
Luigia Brandimarte, Giuliano Di Baldassarre, Alberto Montanari, Harry Lins, Demetris Koutsoyiannis, and Günter Blöschl
The etiology of increasing flood losses in Africa: climate and population patterns
- XL103 EGU2011-11548
Sarah Kew, Frank Selten, and Geert Lenderink
Current and future moisture sources for extreme precipitation events in the European low countries
- XL104 EGU2011-8369
Debashish Pai Mazumder, Laxmi Sushama, Naveed Khaliq, Rene Laprise, and Subhankar Karmakar
Canadian RCM projected changes to flood events: A bivariate frequency analysis using the copula approach for the Ottawa River basin
- XL105 EGU2011-6532
Ana Casanueva, Concepcion Rodriguez-Puebla, Nube Gonzalez-Reviriego, and M.Dolores Frias
Influence of teleconnection patterns on extreme precipitation indices over Europe: consecutive wet days (CWD) and highest one day precipitation (RX1DAY)
- XL106 EGU2011-8345
Huan Zhang and Frank Sienz
Large-scale Climate and China daily precipitation extremes
- XL107 EGU2011-11362
Elisabeth Koch, Christian Maurer, Christa Hammerl, Theresa Hammerl, and Elfriede Pokorny
Extreme grape harvest data of Austria, Switzerland and France from A.D. 1523 to 2007 compared to corresponding instrumental/reconstructed temperature data and various documentary sources
- XL108 EGU2011-3596
Sophie Fukutome, **Mark Liniger**, and Maria Süveges
Automating Peak-over-Threshold with the Information Matrix test

HS7.3/CL3.7/NP1.4 – Climate, water and health (co-organized) – Orals

Convener: Andreas Langousis | Co-Conveners: Alexander Kolovos, Alin Andrei Carsteanu

Room: 33

Chairperson: A. Langousis and A. Carsteanu

- 13:30–13:45 EGU2011-7940
Oleksandr Kit, Matthias Luedeke, Diana Reckien, and Martin Budde
Assessment of vulnerability of urban slums to extreme precipitation events using remote sensing data in Hyderabad/India
- 13:45–14:00 EGU2011-5145
Olga Khabarova
People and environment: how and why we react to weather and space weather changes.
- 14:00–14:15 EGU2011-5058
Enrico Bertuzzo, Lorenzo Mari, Lorenzo Righetto, Renato Casagrandi, Marino Gatto, Ignacio Rodriguez-Iturbe, and Andrea Rinaldo
A spatially distributed model for the future evolution of the current Haiti cholera outbreak
- 14:15–14:30 EGU2011-6981
Evangelos Rozos and Christos Makropoulos
Ensuring water availability with complete urban water modelling
- 14:30–15:00 EGU2011-8918
Shafiqul Islam and Elfatih Eltahir
Hydroepidemiology: A synthesis of hydrological and epidemiological understanding for better intervention of water related diseases

HS7.3/CL3.7/NP1.4 – Climate, water and health (co-organized) – Posters

Convener: Andreas Langousis | Co-Conveners: Alexander Kolovos, Alin Andrei Carsteanu

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Carsteanu and A. Langousis

- A394 EGU2011-117
Andrey Guber, Yakov Pachepsky, and Daniel Shelton
Microbial water quality in streams as affected by high flow events
- A395 EGU2011-4691
Antarpreet Jutla, Ali Akanda, and Shafiqul Islam
Hydroepidemiology of Cholera: Predicting Outbreaks using Satellite Derived Global Cholera Index
- A396 EGU2011-5542
Cheng Yu She, Bing Mu Hsu, Shih Wei Huang, Po Min Kao, Shao Yu Liao, and Jung Sheng Chen
Evaluation of Cryptosporidium Inactivity in Difference Concentration of Chlorination
- A397 EGU2011-5499
Hsiang Yu Hsiao, Bing Mu Hsu, Kuan Hao Huang, Shih Wei Huang, Po Min Kao, Hung Jen Wang, Kuo Chih Tseng, Ming Jen Su, and Jung Sheng Chen
Detection and Identification of Salmonella spp. in a Taiwan Watershed by Molecular Technology
- A398 EGU2011-13200
Annemieke Gärdenäs, **Solomon Gebreyohannis Gebrehiwot**, Per-Erik Mellander, Jan Seibert, Kevin Bishop, and Woldeamlak Bewket
The potential impact of climate change on water balances of five catchments within the Blue Nile Basin for different scenarios of land-use
- A399 EGU2011-5148
Hatim Sharif
The Relationship between Climate and Influenza at Monthly Timescale
- A400 EGU2011-5483
Hsiu Feng Tsai, Bing Mu Hsu, Shih Wei Huang, Po Min Kao, Cheng Yu She, Jung Sheng Chen, and Liang Chen
Detection and Identification of Acanthamoeba in Taiwan aquatic Environment
- A401 EGU2011-4364
Ali S Akanda, Antarpreet Jutla, Elfatih Eltahir, and Shafiqul Islam
Hydroepidemiology of Cholera Transmission in Bangladesh: A Spatially Explicit and Seasonally Varying Cholera Prevalence Model
- A402 EGU2011-9478
Philippe Larroudé
Climate change and indicator of vulnerability with a 2DH model on four French beaches
- A403 EGU2011-4507
Lorenzo Mari, Enrico Bertuzzo, Lorenzo Righetto, Renato Casagrandi, Marino Gatto, Ignacio Rodriguez-Iturbe, and Andrea Rinaldo
Hydrological transport, human mobility and cholera epidemics: a spatially explicit modeling approach
- A404 EGU2011-6679
Adrian Tompkins, Francesca Di Giuseppe, Rachel Lowe, Franco Molteni, Andrew Morse, Claudio Piani, and Frederic Vitart
Using ECMWF precipitation and temperature forecasts to predict vector-borne disease in the QWeCI project
- A405 EGU2011-8467
Tabea Lissner, Dominik Reusser, Eva Kirschenmann, Anne Holsten, and Jürgen Kropp
Exploring the consequences of changes in water resource availability on human health and well-being
- A406 EGU2011-7062
Kuan Hao Huang, Bing Mu Hsu, Shih Wei Huang, Po Min Kao, Hung Jen Wang, Hsiang Yu Hsiao, Kuo Chih Tseng, Ming Jen Su, and Jung Sheng Chen
Seasonal distribution of Salmonella in stream water in Taiwan
- A407 EGU2011-9571
Bellie Sivakumar and Ashish Sharma
Impacts of global climate change on water resources: assessment, challenges, and remedies

CL3.8 – Probabilistic climate prediction on multi-decadal to multi-centennial time scales – Orals

Convener: Thomas Schneider von Deimling | Co-Conveners: James Annan, Reto Knutti

Room: 17

Chairperson: Thomas Schneider von Deimling

- 15:30–15:45 EGU2011-8159
Phil Holden, Neil Edwards, Kevin Oliver, Tim Lenton, and Richard Wilkinson
Emulation and probabilistic climate predictions
- 15:45–16:00 EGU2011-12983
Ben Booth, Chris Jones, Mat Collins, Ian Totterdell, Peter Cox, **Stephen Sitch**, Chris Huntingford, Richard Betts, Glen Harris, and Jason Lowe
Global warming uncertainties due to the land carbon cycle may exceed those due to socioeconomics

- 16:00–16:15 EGU2011-6141
Andreas Fischer, Andreas Weigel, Christoph Buser, Christoph Schär, Hans Rudolf Künsch, Mark Liniger, and Christof Appenzeller
 Climate Change Projections for Switzerland: A Bayesian multi-model Combination using ENSEMBLES Regional Climate Models
- 16:15–16:30 EGU2011-6674
Katja Frieler, Malte Meinshausen, Nadine Braun, and Bill Hare
 Probabilistic projections of regional temperature and precipitation change
- 16:30–16:45 EGU2011-13585
Dan Rowlands, Dave Frame, Tolu Aina, Milo Thurston, and Myles Allen
 Quantifying uncertainty in multi-decadal climate projections of surface temperature change
- 16:45–17:00 EGU2011-2860
James Annan and Julia Hargreaves
 Understanding and Interpreting Climate Model Ensembles

CL3.8 – Probabilistic climate prediction on multi-decadal to multi-centennial time scales – Posters

Convener: Thomas Schneider von Deimling | Co-Conveners: James Annan, Reto Knutti

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: James Annan

- XL109 EGU2011-1982
Andrei Sokolov and Erwan Monier
 Changing climate sensitivity through cloud adjustment.
- XL110 EGU2011-5411
Kuno Strassmann, Seita Emori, Yasuaki Hijioaka, Kiyoshi Takahashi, and Toshihiko Masui
 Simulating the impact of Carbon cycle and climate uncertainties in century-scale mitigation scenario simulations with the AIM/Impact[Policy] Integrated Assessment model
- XL111 EGU2011-6567
Martin Budde, Matthias K. B. Luedeke, Diana Reckien, and Oleksandr Kit
 Projections of impact relevant climate variables for the region of Hyderabad/India with focus on their uncertainty
- XL112 EGU2011-6979
Mio Matsueda and Hirokazu Endo
 Northern Hemisphere atmospheric blocking in 228-year ensemble simulation with a 60-km-mesh MRI-AGCM
- XL113 EGU2011-7535
Carl-Friedrich Schleussner, Katja Frieler, Malte Meinshausen, Jianjun Yin, and Anders Levermann
 Emulating Atlantic overturning strength for low emission scenarios: consequences for sea-level rise along the North American east coast
- XL114 EGU2011-8148
Florian Imbery, Sabrina Plagemann, and Joachim Namyslo
 Processing an ensemble of climate projections for the joint research project KLIWAS
- XL115 EGU2011-9563
 Tokuta Yokohata, **James Annan**, Julia Hargreaves, Charles Jackson, Michel Tobis, and Mathew Collins
 Reliability of structurally different perturbed physics and climate model ensembles
- XL116 EGU2011-10895
Jara Imbers Quintana, Chris Huntingford, Dáithí Stone, Petter Stott, and Myles Allen
 Sensitivity of detection and attribution of climate change to simulated climate variability
- XL117 EGU2011-11382
Neil Massey, Tolu Aina, Milo Thurston, Chris Huntingford, Daithi Stone, Peter Stott, and Myles Allen
 Using Very Large Ensembles, Storm Tracking and Volunteer Computing to Validate a Climate Model for Detection and Attribution Studies.
- XL118 EGU2011-13281
Martin Dubrovsky and Miroslav Trnka
 Projection of extreme precipitation and temperature characteristics with use of multi-GCM climate change scenarios and daily weather generator
- XL119 EGU2011-13576
Gregory Duane, Frank Selten, Noel Keenlyside, Wim Wiegnerinck, Juergen Kurths, and Ljupco Kocarev
 "Supermodelling" by Adaptive Synchronization of Different Climate Models
- XL120 EGU2011-13866
Jeffery Scott, Andrei Sokolov, Chris Forest, Stephanie Dutkiewicz, and Peter Stone
 Probabilistic Forecast for 21st Century Climate Based on an Ensemble of Simulations using a Business-As-Usual Scenario

- XL121 EGU2011-13988
Thomas Schneider von Deimling, Malte Meinshausen, Anders Levermann, Veronika Huber, and Katja Frieler
 Multi-centennial warming contribution from permafrost feedbacks
- XL122 EGU2011-14083
Mahé Perrette, Riccardo Riva, Felix Landerer, Katja Frieler, and Malte Meinshausen
 Probabilistic projection of regional sea-level changes

CL3.9 – Geoengineering techniques and what does volcanic activity tell us? – Orals

Convener: Olivier Boucher | Co-Conveners: Hauke Schmidt, Simone Tilmes, Georgiy Stenchikov, Claudia Timmreck, Hans-F. Graf

Room: 17

Chairperson: Simone Tilmes

- 13:30–13:45 EGU2011-10320
Matthew Toohey, Ulrike Niemeier, Claudia Timmreck, and Kirstin Krüger
 Nonlinear atmospheric circulation responses to tropical volcanic eruptions: implications for ice core-derived volcanic forcing reconstructions
- 13:45–14:00 EGU2011-13420
Florian Arfeuille, Eugene Rozanov, Thomas Peter, Andreas. M Fischer, Debra Weisenstein, and Stefan Brönnimann
 Modeling the "Year without summer" 1816 with the CCM SOCOL
- 14:00–14:15 EGU2011-10375
Francis Pope, Tony Cox, Markus Kalberer, Peter Braesicke, and Matt Watson
 Impact of Geo-Engineered Aerosols on Stratospheric Ozone Chemistry
- 14:15–14:30 EGU2011-7429
Ulrike Niemeier and Hauke Schmidt
 Impact of geoengineering on global climate - First GeoMIP simulations with ECHAM6/MPIOM
- 14:30–14:45 EGU2011-1372
Hannele Korhonen, Antti-Ilari Partanen, Sami Romakkaniemi, Veli-Matti Kerminen, Kari E.J. Lehtinen, and Harri Kokkola
 Cloud whitening with sea spray injections: direct and indirect forcings and effect of injected particle size
- 14:45–15:00 EGU2011-10413
Kari Alterskjær and Jón Egill Kristjánsson
 Sensitivity to deliberate injections of sea salt into marine clouds - observations and model simulations

CL3.9 – Geoengineering techniques and what does volcanic activity tell us? – Posters

Convener: Olivier Boucher | Co-Conveners: Hauke Schmidt, Simone Tilmes, Georgiy Stenchikov, Claudia Timmreck, Hans-F. Graf

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Claudia Timmreck

- XL123 EGU2011-1842
Wyss W.-S. Yim
 Volcanic eruptions since 1883 and East Asian monsoon variability
- XL124 EGU2011-1844
Wyss W.-S. Yim
 Extreme precipitation events related to volcanic eruptions
- XL125 EGU2011-5059
Marie Boichu, Clive Oppenheimer, Tjarda Roberts, Vitchko Tsanev, and Philip Kyle
 On bromine, nitrogen oxides and ozone depletion in the tropospheric plume of Erebus volcano (Antarctica)
- XL126 EGU2011-10167
Alexander Beitsch, Joachim Segschneider, Katharina Six, Victor Brovkin, Tatiana Ilyina, Johann Jungclaus, Stephan Lorenz, Davide Zanchettin, Thomas Raddatz, and Claudia Timmreck
 Impact of volcanic super-eruptions on the global carbon cycle
- XL127 EGU2011-3642
Thomas Kleinen, Davide Zanchettin, Alexander Beitsch, Victor Brovkin, Johann Jungclaus, Stephan Lorenz, Ulrike Niemeier, and Claudia Timmreck
 Biospheric response to the Young Toba Tuff super eruption 74ka BP
- XL128 EGU2011-11156
Christine Bingen, Charles Robert, Filip Vanhellemont, Quentin Errera, Didier Fussen, Nina Mateshvili, Emmanuel Dekemper, and Nicolas Loodts
 Most recent advances in the development of the stratospheric aerosol model MOSTRA

- XL129 EGU2011-2307
Claudia Timmreck, Hans-F. Graf, Stephan Lorenz, Ulrike Niemeier, Davide Zanchettin, Daniela Matei, Johann Jungclaus, and Thomas Crowley
 Aerosol particle size confines climate response to volcanic super eruptions
- XL130 EGU2011-7808
Valentina Aquila, Luke D. Oman, and Richard S. Stolarski
 Influence of aerosol heating on the stratospheric transport of the Mt. Pinatubo eruption
- XL131 EGU2011-3815
François Benduhn and Mark G. Lawrence
 A New Non-Diffusive Scheme of Particle Sedimentation for Use with Global Circulation Models. A Sensitivity Study in the Framework of a Geoengineered Stratosphere.
- XL133 EGU2011-2826
Simone Tilmes, Jean-Francois Lamarque, Alan Robock, Ben Kravitz, and James Hurrell
 Impact of global solar dimming on atmospheric dynamics and precipitation
- XL134 EGU2011-718
Catherine Scott, Naomi Vaughan, and Piers Forster
 Potential temperature induced carbon-cycle feedbacks from solar radiation management geoengineering
- XL135 EGU2011-6689
Marie Doutriaux-Boucher, Mark Ringer, Chris D Jones, Paul Halloran, and Olivier Boucher
 Reversibility of the Earth System under an "overshoot"
- XL136 EGU2011-2141
Piers Forster, Nem Vaughan and the Integrated Assessment of Geoengineering Proposals Team
 Metric Choice for an Integrated Assessment of Geoengineering Proposals
- XL137 EGU2011-13251
Matthew Watson and the SPICE Team
 Stratospheric Particle Injection for Climate Engineering
- XL138 EGU2011-7005
Kirsty Kuo, Hugh Hunt, Chris Burgoyne, and Peter Davidson
 Engineering challenges involved in reflective-aerosol delivery by a tethered-balloon system
- XL139 EGU2011-4326
John Latham and the coauthors Team
 Marine Cloud Brightening
- XL140 EGU2011-9655
Armand Neukermans, Gary Cooper, Jack Foster, Lee Galbraith, Bob Ormond, David Johnston, and Qin Wang
 Supercritical Saltwater Spray for Marine Cloud Brightening
- XL141 EGU2011-12830
Farhan Akhtar, Rob Pinder, Daven Henze, Dan Loughlin, and Robert Spurr
 Managing radiative forcing from sulfate and black carbon

CL4.4 – Regional Climate Modeling and impacts – Orals

Convener: Filippo Giorgi | Co-Conveners: Ashraf Zakey, Raymond Arritt

Room: 16

Chairperson: Giorgi

- 08:30–08:45 EGU2011-10315
Grigory Nikulin and Colin Jones
 Simulated precipitation within the CORDEX-Africa framework: evaluation phase.
- 08:45–09:00 EGU2011-12291
Julien Crétat, Clémence Macron, Benjamin Pohl, and Yves Richard
 Quantifying internal variability in a regional climate model. A case study in Southern Africa
- 09:00–09:15 EGU2011-10952
Boubacar Ibrahim, Jan Polcher, and Harouna Karambiri
 Rainy season characterization in Burkina Faso and its representation by regional climate models.
- 09:15–09:30 EGU2011-7034
Fabien Solmon, Marc Mallet, Nellie Elguindi, Filippo Giorgi, and Ashraf Zakey
 Study of the Impact of Saharan dust on West African regional climate using a regional climate model. Advantages, limits and sensitive issues
- 09:30–09:45 EGU2011-5359
Jason Evans, Matthew McCabe, and Xianhong Meng
 Modelling drought in south-east Australia using a regional climate model
- 09:45–10:00 EGU2011-4335
Raymond Arritt and the MRED Team
 Dynamical downscaling of global seasonal forecasts: the MRED project

COFFEE BREAK

Chairperson: Zakey

- 10:30–10:45 EGU2011-8171
Jonathan Gula and W. Richard Peltier
 Dynamical Downscaling over the Great Lakes Basin of North America using the WRF Regional Climate Model: The impact of the Great Lakes system on regional greenhouse warming
- 10:45–11:00 EGU2011-1401
Emilia Paula Diaconescu, René Laprise, and Ayrton Zadra
 Internal Variability of the Canadian Regional Climate Model and Singular Vectors Decomposition
- 11:00–11:15 EGU2011-3861
Anne Frigon, Biljana Music, and Michel Slivitzky
 Assessing climate change hydrological impacts and associated uncertainties over the Quebec/Labrador watersheds using the Canadian RCM
- 11:15–11:30 EGU2011-12351
 Silvina Solman, **Enrique Sánchez**, **Roberto García-Ochoa**, Hugo Berbery, Patrick Samuelsson, Armelle Reca Remedio, Sin-Chan Chou, Jose Marengo, Rosmeri Porfirio da Rocha, Laurent Li, Natalia Pessacg, and Claudio Menendez
 Modeling South America regional climate for present conditions from an ensemble of RCMs: model performance and uncertainties
- 11:30–11:45 EGU2011-9578
Marta Llopart, Rosmeri da Rocha, and Luiz Kruger
 CLM Coupled in the RegCM3 Model: a Sensitivity Analysis for the Amazon Rainforest
- 11:45–12:00 EGU2011-1961
Sin Chan Chou, José Antonio Marengo, Gillian Kay, Richard Betts, Lincoln M Alves, José F. Pesquero, Wagner R. Soares, Daniel C. Santos, André A. Lyra, Gustavo Sueiro and the INPE RCM Team
 Regional climate change projections in South America using the Eta CPTEC model driven by HadCM3 A1B scenario: Climatology and regional analyses for the Amazon, São Francisco and the Parana River Basins

LUNCH BREAK

Chairperson: Arritt

- 13:30–13:45 EGU2011-11325
 Suzanne Rosier, **Neil Massey**, Myles Allen and the weatherathome Team
 Volunteer Computing for Large Ensemble Regional Climate Modelling
- 13:45–14:00 EGU2011-6267
Filippo Giorgi and the RegCM4 .0 Team
 A new version of the regional climate model RegCM: RegCM4.0
- 14:00–14:15 EGU2011-4944
Erika Coppola, Filippo Giorgi, and Xunqiang Bi
 Validation of RegCM4 in a tropical channel configuration
- 14:15–14:30 EGU2011-2232
Jens H. Christensen, Fredrik Boberg, and Cathrine F. Maule
 Adding value by regional models revisited: Systematic errors do make sense!
- 14:30–14:45 EGU2011-11900
Omar Bellprat, Sven Kotlarski, Daniel Lüthi, and Christoph Schär
 Exploring perturbed physics ensembles of a regional climate model
- 14:45–15:00 EGU2011-10701
Kevin Sieck, Daniela Jacob, and Lorenzo Tomassini
 Influence of a stochastic parametrization on regional climate model results

Chairperson: Giorgi

- 15:30–15:45 EGU2011-10715
Paolo Michele Ruti and the MEDCordex Community - MED2C Team
 MED-CORDEX initiative for Mediterranean Climate studies.

- 15:45–16:00 EGU2011-5678
Alessandro Dell'Aquila, Sandro Calmanti, Paolo M Ruti, Adriana Carillo, Gianmaria Sannino, Maria Vittoria Struglia, and Vincenzo Artale
 The role of Ocean-atmosphere interactions in the description of the lee cyclogenesis events over the western Mediterranean Sea
- 16:00–16:15 EGU2011-7588
Douglas Maraun, Tim Osborn, and Henning Rust
 How well do the 25 km resolution regional climate models of the ENSEMBLES project represent the influence of the synoptic atmospheric circulation on UK local precipitation extremes?
- 16:15–16:30 EGU2011-11407
Judit Bartholy, Rita Pongracz, Andras Horanyi, Ilona Kruszselyi, Ildiko Pieczka, Peter Szabo, Gabriella Szepszo, and Csaba Torma
 Analysis of simulated regional climate change for the Carpathian Basin using the ensemble of four different regional climate models
- 16:30–16:45 EGU2011-1185
Christof Wilhelm, Diana Rechid, and Daniela Jacob
 Modeling land cover changes with the regional model REMO-iMOVE for Europe
- 16:45–17:00 EGU2011-10816
Anja Ludwig, Rockel Burkhardt, Felix Ament, and Insa Meinke
 The effect of three extreme land-use scenarios on regional climate change

CL4.4 – Regional Climate Modeling and impacts – Posters

Convener: Filippo Giorgi | Co-Conveners: Ashraf Zaakey, Raymond Arritt

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: To be determined

- XL142 EGU2011-9101
 Torleif M. Lunde, **Michel d. S. Mesquita**, Kevin I. Hodges, and Asgeir Sorteberg
 The Influence of African Easterly Waves on the Generation of Atlantic Tropical Cyclones in WRF Tropical-Channel Simulations
- XL143 EGU2011-850
Rachel White and Ralf Toumi
 The impact of soil moisture on the regional climate of the Olifants basin in South Africa
- XL144 EGU2011-10602
Laura Mariotti, Erika Coppola, Filippo Giorgi, Deepika Vaddi, and S.k. Dash
 Regional climate simulations over Africa and India using the new Regional Climate Model RegCM4
- XL145 EGU2011-13603
Tomas Halenka, Michal Belda, Josef Kvasnicak, and Jiri Miksovsky
 Convective Parameterization Tests in Simulations by RegCM for Africa CORDEX Domain
- XL146 EGU2011-6918
Valérie Dulière, Yongxin Zhang, and Eric P. Salathé Jr.
 Can regional climate models reproduce observed local extreme temperature and precipitation statistics over the U.S. Pacific Northwest?
- XL147 EGU2011-6472
Ruth Cerezo-Mota, Myles Allen, and Richard Jones
 The impacts of the Boundary Conditions over the North American Monsoon rainfall
- XL148 EGU2011-12865
Caroline Mourão, Sin Chan Chou, and José Antonio Marengo
 Numerical study of the 2005 severe drought in the Amazon Basin using Regional Climate Models over South America
- XL149 EGU2011-5226
Ambarish Karmalkar, Mathias Vuille, and Rene Garreaud
 How do climatic changes in the Andes vary with elevation and location (eastern versus western slopes)?
- XL150 EGU2011-1916
 Isabel Hoyos-Rincon, **Astrid Baquero-Bernal**, and Stefan Hagemann
 Water and Energy Balances in the Colombian Caribbean Catchment Basin
- XL151 EGU2011-8991
 Vidyunmala Veldore, **Michel d. S. Mesquita**, Torleif M. Lunde, Saurabh Bhardwaj, and Eystein Jansen
 Sensitivity Studies to Assess the Representation of Rainfall and Temperature over India using the WRF model in a Tropical Channel Setup
- XL152 EGU2011-10631
Andreas Dobler, Steffen Kothe, and Bodo Ahrens
 The representation of monsoon systems in regional climate models

- XL153 EGU2011-5557
Ashok Priyadarshan Dimri
Impact of Western Himalayan Topography and Landuse on Wintertime Precipitation
- XL154 EGU2011-1623
Dinan Wang, Christian Ohlwein, and Clemens Simmer
Higher resolution of the regional climate modelling for the two catchments in China
- XL155 EGU2011-6121
Deming Zhao and Congbin Fu
Regional Climate Simulations with RIEMS2.0 (Regional Integrated Environment Modeling System) in China
- XL156 EGU2011-7313
Masayuki Hara, Hiroyuki Kusaka, Fujio Kimura, and Yasutaka Wakazuki
Urban heat island intensity change over Tokyo metropolitan area during winter
- XL157 EGU2011-5950
Masuo Nakano, Sachie Kanada, and Teruyuki Kato
Intercomparison of precipitation-based extremes indices over Japan simulated by 60km and 20km-mesh AGCMs and 5km-mesh RCM
- XL158 EGU2011-9623
Hiroshi G. Takahashi
Difference in water vapor amount between reanalysis datasets: Application to regional climate models
- XL159 EGU2011-9829
Eun-Soon Im, Ji-Hye Kwon, Byong-Ju Lee, and Sang-Ok Han
Potential increase of flood hazards over Korea due to global warming simulated by the RegCM3 double-nested system
- XL160 EGU2011-10890
Ashraf Zakey, Alexander Baklanov, Filippo Giorgi, and Ulrik Korsholm
Impacts of traffic emissions on ozone production over Europe
- XL161 EGU2011-1170
Fabrizio D'Aprile, Nigel Tapper, Luigi Bartolozzi, and Alessandro Bottacci
Non-stationary similarity in trends of monthly rainfall in the Tuscan Apennine Alps
- XL162 EGU2011-2241
Ulla Heikkilä and Asgeir Sorteberg
Cluster analysis of increased future precipitation extremes on the Norwegian west coast
- XL163 EGU2011-3074
Oliver Gutjahr, Günther Heinemann, Markus C. Casper, and Andreas Rock
Statistical bias correction for daily precipitation fields from COSMO-CLM over the Nahe catchment area
- XL164 EGU2011-3115
Nadia Kitova, Eric Martin, Michel Déqué, Christian Pagé, Emilia Sanchez, Laurent Li, and Hubert Gallée
Impact of climate change on snow cover in the mountainous regions of France using high resolutions climate simulations
- XL165 EGU2011-7340
Katharina Klehmet and Burkhardt Rockel
Regional Studies with COSMO-CLM over Siberia
- XL166 EGU2011-8003
Nellie Elguindi and Filippo Giorgi
Using a one-dimensional lake model coupled to a regional climate model to improve the surface energy balance over large water bodies
- XL167 EGU2011-3135
Ha Ho, Burkhardt Rockel, Hartmut Kapitza, and Beate Geyer
Modelling Climate over Baltic Sea and North Sea Regions Using a Coupled Regional Ocean-Atmospheric Model
- XL168 EGU2011-9648
Wieslaw Maslowski, John Cassano, William Gutowski, and Dennis Lettenmaier
Regional Arctic Climate System Model (RACM) - Development and selected results
- XL169 EGU2011-3685
Stephanie Mayer, Ulla Heikkilä, Michel d. S. Mesquita, and Helge Drange
Risk-based design principles for energy installations due to climate change effects in the North Sea: A first validation of the ADAPT-Petromaks WRF climate runs
- XL170 EGU2011-4518
Sven Kotlarski, Daniel Lüthi, and Christoph Schär
Elevation Gradients of European Climate Change in the Regional Climate Model COSMO-CLM
- XL171 EGU2011-5469
Cathrine Fox Maule, **Peter Thejll**, and Jens Hesselbjerg Christensen
The Palmer Drought index: Comparing index values from ENSEMBLES models and observations.

- XL172 EGU2011-6171
Aristeidis Koutroulis and Ioannis Tsanis
Ability of ensemble RCMs to reproduce basic hydrometeorological variables for local impact studies. A comparison among two different hydroclimatic regions in Greece.
- XL173 EGU2011-7564
Klaus Haslinger, Ivonne Anders, Michael Hofstaetter, and Maja Zuvela-Aloise
EVACLIM - a process-orientated evaluation of climate simulations for Europe and the Greater Alpine Region
- XL174 EGU2011-8232
Benoît Guillod, Edouard L. Davin, Kündig Christine, and Sonia I. Seneviratne
The influence of prescribed soil type in a regional climate model
- XL175 EGU2011-6246
Andreas Fischer, Andreas Weigel, Mark Liniger, and Christof Appenzeller
Relative Role of Global and Regional Climate Models in Precipitation Projections over Switzerland
- XL176 EGU2011-11535
Ruth Lorenz, Edouard L. Davin, and Sonia I. Seneviratne
Detailed vegetation processes within a regional climate model impact the representation of land-atmosphere feedbacks
- XL177 EGU2011-8184
Pedro Jiménez-Guerrero, Juan Pedro Montávez, Raquel Romera, Marta Domínguez, Lluís Fita-Borrell, Jesús Fernández, William David Cabos, Giovanni Liguori, Enrique Sánchez, and Miguel Ángel Gaertner
Description of mean fields, interannual variability and extremes in an ensemble of ERA-Interim forced simulations over the Iberian Peninsula: results from the ESCENA project
- XL178 EGU2011-7481
Marta Domínguez, Raquel Romera, Lluís Fita-Borrell, Jesús Fernández, Pedro Jiménez-Guerrero, Juan Pedro Montávez, William David Cabos, Giovanni Liguori, Enrique Sánchez, and Miguel Ángel Gaertner
Climate change scenarios over Iberian Peninsula from regional climate models: ESCENA project
- XL179 EGU2011-12541
Miriam Álvarez Gallego, **William Cabos**, Giovanni Liguori, and Francisco J. Álvarez
Modeling precipitation zones in the Iberian Peninsula
- XL180 EGU2011-12319
Elena García-Bustamante, J. Fidel González-Rouco, Jorge Navarro, Pedro A. Jiménez, J. Pedro Montávez, Angela Hidalgo, and Etor E. Lucio-Eceiza
Relationship between wind power production over northeastern Iberia and North Atlantic atmospheric circulation
- XL181 EGU2011-12222
Angela Hidalgo, J. Fidel González-Rouco, Elena García-Bustamante, Pedro A. Jiménez, Jorge Navarro, Juan Pedro Montávez, and Etor E. Lucio Eceiza
Some relevant aspects on the ability of a regional model in reproducing the observed wind field
- XL182 EGU2011-10632
Noelia López de la Franca Arema, Raquel Romera, Marta Domínguez, and Enrique Sánchez
Generation of a database from regional climate change projections over Castilla-La Mancha region (Central Spain): analysis of climatic processes and impact evaluation assessment
- XL183 EGU2011-7568
Pauli Jokinen and Kirsti Jylhä
Migration of climatic zones in Europe based on regional climate model simulations
- XL184 EGU2011-8154
Uldis Bethers, Daiga Cep?te-Freišfelde, Juris Se??ikovs, and **Andrejs Timuhins**
Penalty function for measure of contemporary and future climate differences
- XL185 EGU2011-9384
Benjamin Quesada, Robert Vautard, Pascal Yiou, and Julien Cattiaux
European evaluation of regional (MM5) and global climate models (CMIP3/CMIP5): Are extreme cold and warm spells characteristics well represented?
- XL186 EGU2011-9429
Panos Hadjinicolaou, Evangelos Tyrlis, George Zittis, Meryem Tanarhte, and Jos Lelieveld
Simulation of recent past and 21st century climate in the eastern Mediterranean and the Middle East with the PRECIS regional climate model
- XL187 EGU2011-9876
Georgios Zittis, Panos Hadjinicolaou, Evangelos Tyrlis, and Jos Lelieveld
Identifying hot-spots of climate change in the Eastern Mediterranean and Middle East
- XL188 EGU2011-10356
Raquel Romera, Enrique Sánchez, Marta Domínguez, Clemente Gallardo, Miguel Ángel Gaertner, and Manuel Castro
PROMES regional climate modelling over three CORDEX domains: Mediterranean area, South America and Africa

Convener: Susanna Zerbini | Co-Conveners: Robert Reilinger, Mustapha Meghraoui

Room: 18

Chairperson: S. Zerbini and D. Mencin

Convener: Valter Maggi | Co-Conveners: Aurel Perșoiu, Christiane Grebe

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Valter Maggi, Christiane Grebe, Aurel Persoiu

- XL259 EGU2011-10177
Valter Maggi, Stefano Turri, Alfredo Bini, Barbara Stenni, and Roberto Udisti
 Cave-ice interaction in Moncodeno ice cave (Italy)
- XL260 EGU2011-10142
Valter Maggi, Stefano Turri, Aurel Per?oiu, Alfredo Bini, Bogdan Onac, Roberto Udisti, and Barbara Stenni
 Two millennia of ice accumulation in Focul Viu ice cave, Romania
- XL261 EGU2011-12886
Friedrich Obleitner and Christoph Spötl
 Temperature profiles in an Alpine ice cave (Eisriesenwelt, Austria)
- XL262 EGU2011-13892
Hi-Ryong Byun
 Use of ice cave for the storage of water resources

NP3.7 – Geophysical Downscaling Methods (co-listed) – Posters

Convener: Tobias Sauter | Co-Conveners: Victor Venema, Douglas Maraun, Erika Coppola

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Tobias Sauter

- XY524 EGU2011-1174
amadou Idrissa bokoye
 Assessment of the influence of the calibration period choice on empirical statistical downscaling modeling
- XY525 EGU2011-4753
Pascal Horton, Michel Jaboyedoff, and Charles Obled
 The Analogs method in the framework of severe rainfall forecasting in the Swiss Alps
- XY526 EGU2011-4806
Jiri Miksovsky, Petr Stepanek, Ales Farda, and Michal Belda
 Inter-variable relationships in the outputs of dynamical and statistical downscaling models
- XY527 EGU2011-5500
 Alexandru Dumitrescu, **Aristita Busuioc**, Baci Madalina, Sorin Cheval, and Liana Cazacioc
 ENSEMBLE RCM performance in reproducing temperature and precipitation regime in Romania. Application for Banat and Oltenia Plains.
- XY528 EGU2011-7632
Douglas Maraun
 How robust is bias correction under climate change? Assessing the direct approach for temperature and precipitation in a pseudo reality ?
- XY529 EGU2011-7699
Douglas Maraun, Fredrik Wetterhall, Martin Widmann, Sven Kotlarski, and Erika Coppola
 VALUE - A European wide network for the validation and development of downscaling methods
- XY530 EGU2011-8659
Anahita Amiri Farahani, Douglas Maraun, and Juerg Luterbacher
 Large-scale atmospheric circulation characteristics and their relations to local daily precipitation extremes in Hesse, central Germany
- XY531 EGU2011-8668
Bruno Emanuela, Portoghese Ivan, Guyennon Nicolas, Iacobellis Vito, and Vurro Michele
 Stochastic rainfall scenarios for hydrological impact studies
- XY532 EGU2011-9208
Aristita Busuioc, Alexandru Dumitrescu, Madalina Baci, Liana Cazacioc, and Sorin Cheval
 Estimation of changes in monthly temperature and precipitation over the Banat and Oltenia Plains in Romania. Comparison between statistical and dynamical downscaling techniques
- XY533 EGU2011-9216
Marlis Hofer, Ben Marzeion, and Thomas Mölg
 Skill assessment of reanalysis data for local-scale, daily air temperature on a tropical, glaciated mountain range (Peru)
- XY534 EGU2011-9536
Martin Dubrovsky, Martin Hirschi, and Christoph Spirig
 HOWGH: an hourly weather generator for pests modeling in present and future climates
- XY535 EGU2011-10037
Laura Mariotti, Erika Coppola, M.Bamba Sylla, Filippo Giorgi, and Claudio Piani
 Regional climate model simulation of projected 21st century climate change over an all-Africa domain: Comparison analysis of nested and driving model results.
- XY536 EGU2011-10522
Claudio Piani and Jan Haerter
 Grid point bias correction of climate models: remaining problems and suggested solutions.

- XY537 EGU2011-10693
Rabea Haas and **Kai Born**
Probabilistic Downscaling of Precipitation Data in a Subtropical Mountain Area: A two-step approach
- XY538 EGU2011-11796
Christoph Matulla, Claudia Springer, Emma Watson, Sebastian Wagner, Wolfgang Schöner, and Reinhold Steinacker
Downscaled GCM projections of winter and summer mass balance for Central European glaciers (2000-2100) from ensemble simulations with ECHAM5- MPIOM
- XY539 EGU2011-11961
Marco Turco, Pere Quintana Seguí, Maria-Carmen Llasat, Sixto Herrera, and José Manuel Gutiérrez
The analog method as a MOS-like downscaling for ENSEMBLES RCM-precipitation: application over Spain
- XY540 EGU2011-12218
Michaela Bray, Dawei Han, and Roger Falconer
Comparative Study of Meso-Scale Numerical Weather Models for Water System Analysis
- XY541 EGU2011-13501
Douglas Maraun and the Review Team
Precipitation Downscaling under Climate Change
- XY542 EGU2011-13807
Cui Chen, Jan Haerter, Stefan Hagemann, and **Claudio Piani**
A comparative study of uncertainty, originating from bias correction and other sources, in scenario discharge time series

NP4.1 – Time Series Analysis in the Geosciences - Concepts, Methods & Applications (co-listed) – Orals

Convener: Reik Donner | Co-Conveners: Susana Barbosa

Room: 13

Chairperson: Reik Donner, Susana Barbosa

- 08:30–08:45 EGU2011-291
Diego Rybski, Anne Holsten, and Jürgen P. Kropp
Analyzing the phase statistics of phenological records: fluctuations and correlations with temperature
- 08:45–09:00 EGU2011-5747
Sylvie Parey
Seasonality and climate change in temperature series of Europe and the United States
- 09:00–09:15 EGU2011-6382
Sebastian Bathiany, Martin Claussen, and Klaus Fraedrich
On the detectability of Early Warning Signals in a global atmosphere-vegetation model
- 09:15–09:30 EGU2011-1472
Valerie N. Livina and Timothy Lenton
Tipping points toolbox: novel techniques of time series analysis for studying transitions and bifurcations in climatic records
- 09:30–09:45 EGU2011-4344
Kira Rehfeld, Norbert Marwan, Jobst Heitzig, and Jürgen Kurths
Kernel-based correlation estimation for irregularly sampled time series
- 09:45–10:00 EGU2011-13320
George Caminha-Maciel and Marcia Ernesto
Spectral analysis of nonuniformly sampled data series: smoothing and improving resolution of spectral estimates by combining information from multiple series

COFFEE BREAK

Chairperson: Reik Donner, Susana Barbosa

- 10:30–10:45 EGU2011-6440
Andreas Groth and Michael Ghil
Robust identification of phase synchronization clusters via multivariate singular spectrum analysis
- 10:45–11:00 EGU2011-4367
Nishant Malik, Yong Zou, Norbert Marwan, and Jürgen Kurths
Employing nonlinear similarities to identify distinct dynamical regimes in short palaeo records
- 11:00–11:15 EGU2011-8408
Jobst Heitzig and Jakob Runge
Entropy train diagrams for information-based measures of statistical association

- 11:15–11:30 EGU2011-8056
Jin Chen, Marion Jegen-Kulcsar, Max Moorkamp, and Bjoern Heincke
 Using Empirical Mode Decomposition (EMD) for the processing of marine MT data
- 11:30–11:45 EGU2011-4493
Mahmoud El Araby, Noelle Odling, and Roger Clark
 Borehole water level response to barometric pressure fluctuations as an indicator of semi confined aquifer vulnerability: application to the East Yorkshire Chalk aquifer, UK
- 11:45–12:00 EGU2011-10331
Sylvain Mangiarotti, Laurent Drapeau, Raphaël Coudret, and Lionel Jarlan
 Low-dimensional modeling of the dynamics of rainfed wheat in semi-arid region of Settat (Morocco), from NDVI satellite data

NP4.1 – Time Series Analysis in the Geosciences - Concepts, Methods & Applications (co-listed) – Posters

Convener: Reik Donner | Co-Conveners: Susana Barbosa

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Norbert Marwan

- XY543 EGU2011-13461
Sarah Hallerberg, Alexander Ruzmaikin, and Joan Feynman
 Can high-energy proton events in solar wind be predicted via classification of precursory structures?
- XY544 EGU2011-5242
Alejandro Ramírez-Rojas and Elsa Leticia Flores-Marquez
 Non-extensivity analysis of seismicity occurred within four subduction regions in Mexico.
- XY545 EGU2011-5779
Nasim Karamzadeh, Peter Voss, Gholam Javan Doloei, and Alireza Moghaddamjoo
 Local Earthquake Onset Detection Based on Short Time Fourier Transform
- XY546 EGU2011-8942
Octavian G. Dulu and Nelida Florea
 19 years of continuous observation of Radon and Thoron emissions: a Time Series Analysis
- XY547 EGU2011-13643
Susana Barbosa, Hovav Zafir, Gideon Steinitz, Uri Malik, and Oksana Piatibratova
 Scale-based analysis of simultaneous ^{222}Rn rays and ^3He particles time series from subsurface radon
- XY548 EGU2011-13660
Manuel Scotto, Susana Barbosa, and Andres Alonso
 Clustering analysis of air temperature time series over Europe: quantile regression approach
- XY549 EGU2011-1985
António R. Tomé and Pedro M. A. Miranda
 Piecewise continuous trends of time series
- XY550 EGU2011-14013
Reik Donner and Marieke Lewanzik
 Nonparametric quantile regression for assessing the nonstationarity of extreme values in geoscientific time series
- XY551 EGU2011-13911
Reik Donner and Maria Koch
 Linear and nonlinear spatio-temporal dependences of precipitation and river runoffs in a catchment
- XY552 EGU2011-8392
Carlos Pires
 Estimation of Mutual Information from Maximum Entropy distributions and its application to geophysical time series
- XY553 EGU2011-11552
Jakob Runge, Jobst Heitzig, and Jürgen Kurths
 Information-theoretic methods to find possible causalities and relevant time lags between multiple time series
- XY554 EGU2011-4516
Robin Crockett
 Innate Cycle Correlation.
- XY555 EGU2011-10681
Elena Szolgayova
 Modelling and forecasting daily river discharge considering autoregressive heteroscedasticity
- XY556 EGU2011-2149
Xavier Lana, August Burgueño, Dolors Martinez, and Carina Serra
 NONLINEAR ANALYSIS OF THE NORTH ATLANTIC (NAO), ATLANTIC MULTIDECADAL (AMO) AND WESTERN MEDITERRANEAN (WeMO) OSCILLATIONS FOR THE COMMON PERIOD 1856-2009

- XY557 EGU2011-5014
Kreso Pandzic and Tanja Likso
 Comparing the Palmer Drought Index and the Standardized Precipitation Index for Pannonian Part of Croatia
- XY558 EGU2011-10210
Tamara Shulgina, Elena Genina, and Evgeny Gordov
 Selection of a dataset to characterize climate dynamics in Siberia
- XY559 EGU2011-2274
Michael Friedel and Keith Long
 A data-driven economic filter for mineral resource assessments

SSS1.3 – Molecular proxies for studying biogeochemical changes in the environment (co-listed) – Orals

Convener: Klaas G.J. Nierop | Co-Conveners: Boris Jansen, Ian Bull, Claudio Zaccane, Teodoro Miano, Luca Bragazza

Room: 9

Chairperson: Ian Bull / Luca Bragazza

- 08:30–08:45 EGU2011-3315
Helen Talbot, Martin Cooke, Chun Zhu, Luke Handley, Jung-Hyun Kim, Richard Pancost, and Thomas Wagner
 Novel bihopanoid molecular proxies for bacterial populations and processes
- 08:45–09:00 EGU2011-7514
Jens Altmann, Marjo Palviainen, Boris Jansen, and Karsten Kalbitz
 Stability of root and needle-derived biomarkers during litter decomposition
- 09:00–09:15 EGU2011-2961
Arnaud Huguet, Guido L.B. Wiesenberger, Martina Gocke, Céline Fosse, and Sylvie Derenne
 Rhizoliths in loess: evidence for the heterotrophic lifestyle of branched GDGT-producing bacteria
- 09:15–09:30 EGU2011-6730
Martina Gocke, Yakov Kuzyakov, and Guido L.B. Wiesenberger
 Rhizoliths in the loess-paleosol sequence of Nussloch (SW Germany): Differentiation between ancient and modern vegetation using n-alkanes
- 09:30–09:45 EGU2011-7809
Marie Spohn and Luise Giani
 Carbohydrates as Biomarkers for Studying Soil Biota and Land Use Change
- 09:45–10:00 EGU2011-5936
Axel Birkholz, Rienk Smittenberg, Irka Hajdas, Lukas Wacker, Jostein Bakke, and Stefano M. Bernasconi
 Reconstruction of soil organic carbon build-up and dynamics using compound-specific radiocarbon analysis of lake sediments

COFFEE BREAK

Chairperson: Claudio Zaccane/ Klaas Nierop

- 10:30–10:45 EGU2011-5055
Guido Wiesenberger, Bidisha Majumder, Martina Gocke, Yakov Kuzyakov, Jennifer Dungait, Liz Dixon, and Roland Bol
 Influence of soil moisture on plant biosynthesis, C incorporation and storage in soils at a molecular level
- 10:45–11:00 EGU2011-5552
Olivia Bertrand, Emmanuelle Montargès-Pelletier, Laurence Mansuy-Huault, Benoît Losson, Audrey Pernot, Jacqueline Argant, Pierre Faure, Emmanuel Garnier, Charles Kraemer, and Raymond Michels
 Geochemical and Historical study of a 700 year old pond, Lansquenet -Lorraine, France- A multidisciplinary approach
- 11:00–11:15 EGU2011-731
Rosaleen Mylotte, Michael H. B. Hayes, and Catherine Dalton
 Study of Estuarine Sediments From Galway Bay, Ireland
- 11:15–11:30 EGU2011-13051
pete maxfield
 Microbially mediated methane oxidation across a 4.1 million year soil chronosequence
- 11:30–11:45 EGU2011-7999
Julien Parisod, Mohammad Hassouna, Alexandre Buttler, and Luca Bragazza
 Spatial and temporal characterization of dissolved organic matter in bog water based on spectroscopic properties: the effects of humification

11:45–12:00 EGU2011-81

Maris Klavins, Inese Silamikele, Oskars Purmalis, and Linda Ansone

Organic matter humification and trace element accumulation in raised bogs depending on the peat properties

SSS1.3 – Molecular proxies for studying biogeochemical changes in the environment (co-listed) – Posters

Convener: Klaas G.J. Nierop | Co-Conveners: Boris Jansen, Ian Bull, Claudio Zaccane, Teodoro Miano, Luca Bragazza

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Boris Jansen / Teodoro Miano

Z39 EGU2011-60

Matt Galloway and Doug Cobos

Can a dewpoint hygrometer measure water potential at field capacity (-33 kPa)?

Z40 EGU2011-119

Marco Griepentrog, Alexander Heim, Frank Hagedorn, Rienk H. Smittenberg, and Michael W. I. Schmidt

Does nitrogen deposition affect the turnover of plant- and microbially-derived organic matter compounds differently?

Z41 EGU2011-425

Claudio Zaccane, Teodoro M. Miano, and William Shotyk

Can peat humic acids constitute the “memory

Z42 EGU2011-564

Daniel B. Wiedemeier, Simon G. Haberle, Evelyn S. Krull, and Michael W.I. Schmidt

New molecular marker and spectroscopic tools for reconstructing wildfire history

Z43 EGU2011-1249

Harald Biester, Yvonne-Marie Hermanns, and Antonio Martinez-Cortizas

The Influence of organic matter decay on the distribution of major and trace elements in ombrotrophic mires - a case study from the Harz mountains

Z44 EGU2011-1925

Karsten Kalbitz, **Boris Jansen**, and Emiel Van Loon

Using preserved extractable lipids in a multi-proxy reconstruction of past vegetation patterns

Z45 EGU2011-5042

Ian Bull, Andrew Rawlins, Philip Ineson, and Richard Evershed

The fate of collembola derived organic matter in soil

Z46 EGU2011-8952

Klaas G.J. Nierop, Cornelia I. Blaga, Gert-Jan Reichart, Tom Jilbert, Caroline P. Slomp, and Jaap S. Sinninghe Damsté

Hypoxia in the Baltic Sea as revealed by lipid biomarkers

Z47 EGU2011-5546

David Hiltbrunner, Michael W.I. Schmidt, and Stephan ZimmermannAfforestation of former pastures with *Picea abies* in a subalpine ecosystem affects the microbial community composition

Z48 EGU2011-6323

Ülle Sillasoo, Minna Väliranta, Angelika Portsmouth, and Margus Pensa

Relating fire and humification data in peat bog profiles

Z49 EGU2011-7811

Kelley Sterle, Örjan Gustafsson, Philip Gschwend, and Christopher Reddy

Centennial-scale variations in abundance and sources of black carbon aerosols as recorded in two lake sediment cores from NE USA and N. Europe

Z50 EGU2011-7899

Céline Estournel-Pelardy, **Laurent Grasset**, and André Amblès

First Multi-Shot thermochemolysis applied to the lipid-free organic fraction isolated from a peat (Jura Mountains, East France)

Z51 EGU2011-7966

Céline Estournel-Pelardy, Laurent Grasset, Leos Duskocil, and André Amblès

Comparison of three methods for the analysis of lignin in soils and sediments: CuO oxidation, thermochemolysis and Derivatization Followed by Reductive Cleavage method.

Z52 EGU2011-8043

Mirjam Studer, Samuel Abiven, Rolf T. W. Siegwolf, and Michael W. I. SchmidtMultiple-Isotope labelling (¹³C, ¹⁸O, ²H) in a Controlled Environment (MICE) as a new tool for studying the allocation of organic molecules within the plant-soil system?

Z53 EGU2011-8880

Carles M. Rubio, Luís Outeiro, **Francesc Ferrer**, and Xavier Úbeda

DIFFERENCES ON LOAM SOIL THERMAL PROPERTIES AFTER PRESCRIBED FIRE (Montgri Massif, Spain)

- Z54 EGU2011-12057
Marie Alexis, Katell Quénéa, Christelle Anquetil, and Farid Sellami
Hint of prehistoric fire uses: Step 1. Characterization of experimental fire residues
- Z55 EGU2011-13031
Arnoud Boom, Andrew S. Carr, Zoë Roberts, Alex Cumming, Brian M. Chase, Michael F. Meadows, and Matthew Britton
A systematic study of resistant organic matter and soil carbon dynamics in South African drylands.
- Z56 EGU2011-13147
Nadezda Vasilyeva, Evgeniy Y. Milanovskiy, Samuel Abiven, Michael Hilf, and Michael W.I. Schmidt
Pyrogenic carbon quantity and quality unchanged after 55 years of organic matter depletion in a Chernozem
- Z57 EGU2011-13296
Luis Roca, Maria Soriano, Vicente Pons, and Rafael Boluda
Soil organic fraction and its biological activity as parameters to assess soil quality .

Tuesday, 05 April

CL1.2 – Modelling paleoclimates from the Cretaceous to the Holocene (including Milutin Milankovic Medal Lecture) – Orals

Convener: Masa Kageyama | Co-Conveners: Dan Lunt, André Paul, Rachel Flecker, Michal Kucera, Louis François, Liselotte Diester-Haass, Anita Roth-Nebelsick

Room: 15

Chairperson: n.n.

10:30–11:30 EGU2011-14170

Andrey Ganopolski

Towards Generalized Milankovitch Theory (Milutin Milankovic Medal Lecture)

11:30–11:45 EGU2011-8424

André L. Berger and Qiuzhen Yin

Intercomparison of the last nine interglacials in response to insolation and CO₂

11:45–12:00 EGU2011-1837

Bas de Boer, Roderik S. W. van de Wal, Lucas J. Lourens, and Richard Bintanja

Transient nature of the Earth's climate and the implications on the interpretation of benthic $\delta^{18}O$ records

LUNCH BREAK

Chairperson: n.n.

13:30–13:45 EGU2011-3630

Alan Haywood, Daniel Hill, Aisling Dolan, and Sarah Bonham

Pliocene climate variability and tipping elements

13:45–14:00 EGU2011-11260

Noémie Hamon, Pierre Sepulchre, Yannick Donnadieu, and Gilles Ramstein

Modelling climatic and vegetational changes during the Middle Miocene (17 to 14 Ma)

14:00–14:15 EGU2011-8827

Ruža Ivanovič, Paul Valdes, Rachel Flecker, and Marcus Gutjahr

Did the Messinian Salinity Crisis affect global climate?

14:15–14:30 EGU2011-9827

Paul Valdes and Joy Singarayer

Vegetation-Climate interactions during the Last Glacial Cycle

14:30–14:45 EGU2011-10226

Michael Stärrz, Xun Gong, Rüdiger Stein, Dennis A. Darby, Frank Kauker, and Gerrit Lohmann

Glacial shortcut of Arctic sea-ice transport

14:45–15:00 EGU2011-10344

Freja Vamborg, Victor Brovkin, and Martin Claussen

Influence of a dynamic background albedo scheme on mid-Holocene North African rainfall

Chairperson: n.n.

15:30–15:45 EGU2011-2858

Julia C. Hargreaves, James D. Annan, Andre Paul, and Rumi Ohgaito

Are the PMIP climate models consistent with the MARGO data synthesis for the Last Glacial Maximum?

15:45–16:00 EGU2011-9693

Marie-Noëlle Woillez, Ryouta O'ishi, Masa Kageyama, Ayako Abe-Ouchi, and Gerhard Krinner

Simulating the glacial vegetation with two dynamical vegetation models

16:00–16:15 EGU2011-5630

Veronique Mariotti and W. Richard Peltier

Arctic Freshwater Forcing of the Younger-Dryas Climate Reversal

16:15–16:30 EGU2011-8235

Uwe Mikolajewicz, Fanny Adloff, Rosina Grimm, and Michal Kucera

A model/proxy comparison study of the upper ocean climate of the Mediterranean: focus on the Holocene Insolation Maximum and the Last Glacial Maximum

16:30–16:45 EGU2011-11985

Ingrid Jacquemin, **Louis François**, Liselotte Diester-Haass, Katharina Billups, and Kay-Christian Emeis

Modelling the Middle Miocene fluctuations in ocean biological productivity, ocean carbon isotopic composition and atmospheric CO₂ level

16:45–17:00 EGU2011-13232

Dan Lunt and Andy Ridgwell

A mechanism for the pacing of Eocene hyperthermals

CL1.2 – Modelling paleoclimates from the Cretaceous to the Holocene (including Milutin Milankovic Medal Lecture) –

Posters

Convener: Masa Kageyama | Co-Conveners: Dan Lunt, André Paul, Rachel Flecker, Michal Kucera, Louis François, Liselotte Diester-Haass, Anita Roth-Nebelsick

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY181 EGU2011-442

Aisling Dolan, Sebastian Koenig, Daniel Hill, Robert DeConto, and Alan Haywood

Pliocene Ice Sheet Modelling Intercomparison Project: PLISMIP - Simulating the Antarctic and Greenland ice sheets in the mid-Pliocene warm period

XY182 EGU2011-2680

Björg Risebrobakken, Zhang Zhongshi, Kerim Nisancioglu, and Carin Andersson

Pliocene climate at high Northern latitudes: Comparing data and model results

XY183 EGU2011-750

James Pope, Matthew Collins, Alan Haywood, Harry Dowsett, and Daniel Lunt

Understanding the Initial Results of the Plio-QUMP Project: Why was the model driven this way?

XY184 EGU2011-10174

Michael Stärz, Gregor Knorr, Arne Micheels, and Gerrit Lohmann

Assessing the sensitivity of Late Miocene vegetation in a fully coupled ASOGCM

XY185 EGU2011-10792

Uta Krebs-Kanzow, Wonsun Park, and Birgit Schneider

The Climate Impact of Late Neogene Ocean Gateway Changes

XY186 EGU2011-10971

Jan Backman, **Gerald Dickens**, Jack Baldauf, and Isabella Raffi

Detailed Stratigraphy and Correlation of Miocene to Recent Records at Drill Sites Along the Pacific Equator (315, 573, 851 and U1338)

XY187 EGU2011-7248

Martin Butzin, Gregor Knorr, Torsten Bickert, and Gerrit Lohmann

Marine carbon cycle response to Miocene climate simulations, a model-data comparison

XY188 EGU2011-10629

Anna von der Heydt, Michelle Tigchelaar, and Henk Dijkstra

A new mechanism for the two-step benthic stable isotope signal at the Eocene-Oligocene boundary

XY189 EGU2011-131

Liselotte Diester-Haass, Katharina Billups, Louis Francois, and Kay-C. Emeis

Cenozoic carbon isotope shifts and marine biological productivity: a review.

XY190 EGU2011-9886

Takasumi Kurahashi-Nakamura, Martin Losch, André Paul, Stefan Mulitza, and Michael Schulz

Twin experiments towards more robust simulations of past ocean circulation

XY191 EGU2011-3067

Ben Marzeion and Harald Bartenstein

Millennial-scale Oscillations in a Box Model of the Atlantic Overturning: The Role of Sea Ice

XY192 EGU2011-3287

Nils Fischer and Johann H. Jungclaus

Evolution and Variability of Ocean Circulation in a Transient Holocene Simulation

XY193 EGU2011-11168

Rubén Banderas Carreño and Marisa Montoya

Bipolar seesaw control of glacial Atlantic overturning

XY194 EGU2011-9642

Masa Kageyama, Ayako Abe-Ouchi, Ute Merkel, Bette Otto-Bliesner, Didier M. Roche, Joy Singarayer, and Didier Swingedouw

A comparison of the climate response to fresh water discharges under glacial conditions

XY195 EGU2011-3638

Jung-Hyun Kim, Oscar E. Romero, Gerrit Lohmann, Barbara Donner, Thomas Laepple, and Jaap S. Sinninghe Damsté

Dansgaard-Oeschger-type subsurface temperature oscillations in the tropical NE Atlantic during the last glacial

- XY196 EGU2011-1774
Julia Gottschalk, Michael Schulz, Ute Merkel, Lars Max, and Ralf Tiedemann
 Teleconnections between North Pacific and North Atlantic climate variations during the last deglaciation from laminated sediments
- XY197 EGU2011-2203
Reinhard Calov, Alex Robinson, and Andrey Ganopolski
 Simulated Greenland evolution during the Eemian and MIS 11 interglacials
- XY198 EGU2011-10444
Dominik Hofer, Christoph Cornelius Raible, and Joachim Kuhlemann
 The impacts of the continental ice sheets and the external forcing for the last glacial maximum and 65kyr BP on atmospheric dynamics and precipitation in Europe
- XY199 EGU2011-12994
Cedric Van Meerbeeck and Hans Renssen
 Simulating the Southern Hemisphere high-latitude climate impact of West-Antarctic Ice Sheet melt during the early-Holocene
- XY200 EGU2011-5580
 Nabila Bounceur and **Michel Crucifix**
 Statistical emulation of the rapid response of a climate model to astronomical forcing variations
- XY201 EGU2011-11335
Hans Renssen
 Modelling spatial and temporal variation in the Holocene thermal maximum at a global scale
- XY202 EGU2011-11169
Marie Dury, Dörte Lehsten, Stefan Dullinger, Anneli Polska, Karl Hülber, Rachid Cheddadi, Henri Laborde, Martin T. Sykes, Thomas Hickler, Joy Syngarayyer and the Unité de Modélisation du Climat et des Cycles Biogéochimiques (Louis François and Pierre Warnant) Team
 Simulating the Holocene re-colonization of Europe by tree species using dynamic vegetation models
- XY203 EGU2011-12138
Jean-Yves Peterschmitt, Sébastien Denvil, Mark Morgan, Ashish Bhardwaj and the PMIP 3 Participants Team
 The PMIP 3 Database

CL1.4 – Climate response to orbital forcing – Orals

Convener: Erin McClymont | Co-Conveners: Alan Haywood

Room: 15

Chairperson: Erin McClymont, Alan Haywood

- 08:30–08:45 EGU2011-12333
Gideon Henderson and Alex L. Thomas
 Termination timing: Testing deglacial mechanism
- 08:45–09:00 EGU2011-11433
Sébastien Joannin, Franck Bassinot, Nathalie Combourieu Nebout, Odile Peyron, and Célia Beaudouin
 Vegetation response to obliquity and precession forcing during the Mid Pleistocene Transition in Western Mediterranean region (ODP Site 976)
- 09:00–09:15 EGU2011-436
Aisling Dolan, Alan Haywood, Daniel Hill, Harry Dowsett, Stephen Hunter, Daniel Lunt, and Steven Pickering
 Sensitivity of Pliocene Ice Sheets to Orbital Forcing
- 09:15–09:30 EGU2011-12701
Martin Ziegler, Ian Hall, and Paula Diz
 Subantarctic dust-driven nutrient utilization on millennial to orbital timescales
- 09:30–09:45 EGU2011-14137
Victor Brovkin, Andrey Ganopolski, David Archer, and Guy Munhoven
 Glacial CO₂ cycle as a succession of key physical and biogeochemical processes
- 09:45–10:00 EGU2011-9808
Paul Valdes, Lauren Gregoire, Ron Kahana, and Julia Tindall
 Modelling the Last Deglaciation

CL1.4 – Climate response to orbital forcing – Posters

Convener: Erin McClymont | Co-Conveners: Alan Haywood

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Erin McClymont, Alan Haywood

- XY204 EGU2011-3008
Bernard De Saedeleer and Michel Crucifix
Is the astronomical forcing a reliable and unique pacemaker for Climate?
- XY205 EGU2011-12204
Christophe Dumas, **Gilles Ramstein**, Yannick Donnadieu, Catherine Ritz, Stefano Bonelli, and Robin Waldman
Thresholds on atmospheric carbon dioxide for Antarctica and Greenland inception derived from Climate/cryosphere models
- XY206 EGU2011-11837
David Bell, Simon Jung, Dick Kroon, David Hodell, and Lucas Lourens
The Onset of the Icehouse World
- XY207 EGU2011-12510
Sev Kender, Julia Becker, Ian Hall, Taoufik Radi, Zuzanna Stroynowski, Ivano Aiello, Melanie Leng, Michael Kaminski, and Christina Ravelo
Millennial scale ice rafting and productivity changes in the Bering Sea during Marine Isotope Stage 22 (~900 ka), Mid-Pleistocene Transition
- XY208 EGU2011-630
Thibaut Caley, Jung-Hyun Kim, Bruno Malaizé, Jacques Giraudeau, Thomas Laepple, Nicolas Caillon, Karine Charlier, Hélène Rebaubier, Linda Rossignol, and Isla Castañeda
Obliquity-driven Agulhas leakage affects Atlantic Meridional Overturning Circulation over the last 800 kyrs
- XY209 EGU2011-863
Fabienne Regoli, Thibault de Garidel-Thoron, Kazuyo Tachikawa, Nöelle Buchet, Zhiming Jian, Liming Ye, and Luc Beaufort
Glacial / Interglacial sea temperatures changes at the southern edge of the West Pacific Warm Pool over the last 800 ka
- XY210 EGU2011-2419
Tom Russon, Mary Elliot, Aleksey Sadekov, Guy Cabioch, and Thierry Corrège
A subtropical Pacific view of the Mid-Pleistocene Transition
- XY211 EGU2011-7550
Sheng Pu Chang and Chuan-Chou Shen
Thermal variations at the Southern Margin of the Western Pacific Warm Pool over the past 340 kyrs
- XY212 EGU2011-3142
Mathias Harzhauser, Andrea K. Kern, Werner E. Piller, Ali Soliman, and Oleg Mandic
Decadal- to centennial-scale climate cycles in Upper Miocene lacustrine deposits of Lake Pannon
- XY213 EGU2011-8812
Kevin Lewis and Adam Maloof
Testing the Orbital Hypothesis for Climate Variability in the Lacustrine Green River Formation
- XY214 EGU2011-10597
Liya Jin, Birgit Schneider, and Wonsun Park
The evolutionary response of the South and East Asian summer monsoon climate to orbital forcing in transient simulation of the Holocene with a coupled climate model
- XY215 EGU2011-10551
Vyacheslav Khon, Liya Jin, Birgit Schneider, Wonsun Park, Mojib Latif, and Igor Mokhov
The Hadley, Walker and monsoon circulations and their implications for the hydrological cycle during warm climates from transient coupled simulations
- XY216 EGU2011-5154
Xian Yao Chen, Norden Huang, and Zhaohua Wu
Interpretations of the EPICA Dome C Ice Core data using Hilbert-Huang Transform
- XY217 EGU2011-10309
Pietro Armienti
A simple thermodynamic model for Earth's hydrosphere.
- XY218 EGU2011-8199
Qiuzhen Yin and Andre Berger
Does MIS-13 originate from Northern Hemisphere or from Southern Hemisphere summer at perihelion?
- XY219 EGU2011-3629
Michel Crucifix, Lenoir Guillaume, and De Saedeleer Bernard
The mid-Pleistocene transition and slow fast dynamics
- XY220 EGU2011-14121
Peter Ditlevsen
Bifurcation structure and noise-assisted transitions in the Pleistocene glacial cycles

CL1.10/SSP4.7 – Quaternary palaeoenvironments of Africa (co-organized) – Orals

Convener: Brian Chase | Co-Conveners: Stephanie Mills

Room: 25

Chairperson: Brian Chase, Stephanie Mills

- 10:30–10:45 EGU2011-9063
Rik Tjallingii, Jeroen van der Lubbe, Isla S. Castañeda, Stefan Schouten, Yiming Wang, Ralph R. Schneider, and Geert-Jan Brummer
 Sedimentary evolution and climate history of SE Africa (Zambezi River region) since Marine Isotope Stage 3
- 10:45–11:00 EGU2011-7253
Aline Govin, Ulrike Holzwarth, David Heslop, Lara Ford Keeling, Matthias Zabel, Stefan Mulitza, James A. Collins, and Cristiano M. Chiessi
 Tracing African and South American terrigenous input from the modern distribution of major elements in Atlantic surface sediments (35°N–50°S)
- 11:00–11:15 EGU2011-8674
Josephine Joordens, Hubert Vonhof, Craig Feibel, Lucas Lourens, Jeroen van der Lubbe, Guillaume Dupont-Nivet, Mark Sier, Gareth Davies, and Dick Kroon
 An astronomically-tuned climate framework for hominins in the Turkana Basin
- 11:15–11:30 EGU2011-188
Martin Trauth, Mark Maslin, Alan Deino, Annett Junginger, Moses Lesoloyia, Eric Odada, Daniel Olago, Lydia Olaka, Manfred Strecker, and Ralph Tiedemann
 Human evolution in a variable environment: the amplifier lakes of Eastern Africa
- 11:30–11:45 EGU2011-9144
Ulrike Holzwarth, Lydie Dupont, Jürgen Möbius, Karin A. F. Zonneveld, and Michael Schulz
 Western Sahel hydrology and land use over the last three millennia: natural versus anthropogenic influences
- 11:45–12:00 EGU2011-8080
Kerstin Prömmel and Ulrich Cubasch
 Past changes in African climate and vegetation based on regional climate simulations

CL1.10/SSP4.7 – Quaternary palaeoenvironments of Africa (co-organized) – Posters

Convener: Brian Chase | Co-Conveners: Stephanie Mills

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Stephanie Mills, Brian Chase

- XY221 EGU2011-5870
Nina Boesche and Martin Trauth
 Geological Mapping via Remote Sensing in the Chew Bahir Rift, Southern Ethiopia
- XY222 EGU2011-13641
Brian Chase, Michael Meadows, Louis Scott, Paula Reimer, Arnoud Boom, Andrew Carr, Lynne Quick, Verushka Valsecchi, and Loic Truc
 Developments in the use of rock hyrax middens as southern African palaeoenvironmental archives
- XY223 EGU2011-12005
Paula G. C. do Amaral, Annie Vincens, Joel Guiot, Guillaume Buchet, Pierre Deschamps, and Florence Sylvestre
 Vegetation reconstruction to the mid-Holocene transition in Sahel and Sahara: first palynological results of a lacustrine record from the Mega-Lake Chad
- XY224 EGU2011-11094
Kerstin Hürkamp, Jörg Völkel, Klaus Heine, Oliver Bens, Matthias Leopold, and Jennifer Winkelbauer
 Late Quaternary Environmental Changes from Aeolian and Fluvial Geoarchives in the Southwestern Kalahari, South Africa: Implications for African Intertropical Convergence Zone (ITCZ) and Southern Hemisphere Westerly Wind (SWW) Dynamics
- XY225 EGU2011-1278
Henning Kuhnert and Stefan Mulitza
 Multidecadal variability in eastern tropical Atlantic sea surface temperatures over the past 1700 years
- XY226 EGU2011-820
Willemijn Quaijtaal, Francesca Sangiorgi, Timme Donders, Henk Brinkhuis, and The INATEX group
 Late Quaternary environmental and oceanographical change in the Mozambique Channel (east Africa): a palynological approach
- XY227 EGU2011-8855
Jeroen van der Lubbe, Rik Tjallingii, Isla Castañeda, Geert-Jan Brummer, Dick Kroon, Simon Jung, and Ralph Schneider
 Major reorganization in the transport pathway of Zambezi River sediments along and across the Mozambique Shelf during the last glacial-interglacial transition
- XY228 EGU2011-9252
Hubert Vonhof, Josephine Joordens, Marlijn Noback, Jeroen van der Lubbe, and Craig Feibel
 Paleo-environmental reconstruction in the East African Rift: how to interpret stable isotope ratios of Early Pleistocene carbonate fossils from the Turkana Basin?

XY229 EGU2011-3521

Marius Walter and Martin Trauth

High concentrations of Acheulean handaxes from the Kariandusi, Gadeb and Olorgesailie prehistoric sites: reworked artifacts or in situ tool factories?

CL1.19 – Ocean climate viewed through deep-sea corals – Orals

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

Room: 13

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

15:30–15:45 EGU2011-5852

Armin Form and Ulf Riebesell

Coping with ocean acidification during long-term exposure in the cold-water coral *Lophelia pertusa*

15:45–16:00 EGU2011-9518

Nancy Grumet Prouty, Brendan Roark, and Alan Koenig

Sub-decadal records of surface water properties recorded in deep-sea corals spanning the last millennium from the Gulf of Mexico

16:00–16:15 EGU2011-7375

Marcus Gutjahr, Derek Vance, Claus-Dieter Hillenbrand, and Gerhard Kuhn

Modern Amundsen Sea Circumpolar Deep Water Nd isotope composition and its evolution since the Antarctic Cold Reversal

16:15–16:30 EGU2011-8370

Eric Douville, Pascale Louvat, Jerome Gaillardet, Cecile Gonzalez, Norbert Frank, and Marion Gehlen

Boron isotopes in deep sea corals over the last 10,000 years: evidence of ocean acidification at 750m of depth?

16:30–16:45 EGU2011-9132

Eleni Anagnostou, Robert Sherrell, and Jess Adkins

Nutrient and carbonate ion change at intermediate depth North West Atlantic: a record from a 15.4ky D. dianthus fossil coral

16:45–17:00 EGU2011-11813

Jacek Raddatz, Volker Liebetrau, Anton Eisenhauer, Andres Rüggeberg, Ed Hathorne, Dirk Nürnberg, and Wolf-Christian Dullo

Temperature reconstructions on carbonate mounds (IODP Site 1317) using elemental ratios (Mg/Ca, Mg/Li, Sr/Ca) as well as non-traditional isotope techniques

CL1.19 – Ocean climate viewed through deep-sea corals – Posters

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

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

XY230 EGU2011-5486

Norbert Frank, Freiwald André, Wienberg Claudia, Van Rooij David, Colin Christophe, de Haas Henk, Buhl-Mortensen Pal, Roberts J. Murray, De Mol Ben and the HERMIONE partners Team

Northeastern Atlantic cold-water coral reefs and climate

XY231 EGU2011-10346

Andres Rüggeberg, Paolo Montagna, Matthias López Correa, Jan-Rainer Riethdorf, Jacek Raddatz,

Wolf-Christian Dullo, Malcolm McCulloch, Marco Taviani, and André Freiwald

Problems and possibilities of Sr/Ca as a temperature proxy in cold-water coral *Lophelia pertusa*

XY232 EGU2011-13385

Morten Bjerager, Bodil Wesenberg Lauridsen, Finn Surlyk, Lars Stemmerik, Holger Lykke-Andersen, Nicolas Thibault, Caterina Morigi, and Christoph Korte

Development of cold-water coral reefs in the Early Paleocene of southern Scandinavia

XY233 EGU2011-13946

Markus Eisele, Norbert Frank, Claudia Wienberg, Dierk Hebbeln, Matthias López Correa, Eric Douville, and André Freiwald

Growth of a cold-water coral mound - coral framework accumulation versus the deposition of hemipelagic sediments

XY234 EGU2011-13511

Bodil Wesenberg Lauridsen, Morten Bjerager, and Finn Surlyk

Danien cold-water coral reefs from Faxe, Denmark - A unique preservation of aragonite faunas

XY235 EGU2011-9222

Wolf-Christian Dullo, Sascha Flögel, Andres Rüggeberg, and Furu Mienis

Ocean Chemistry reflected in Cold Water Coral Reef Occurrences

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

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

Convener: Monika Rhein | Co-Conveners: Richard Greatbatch

Room: D

Chairperson: Rhein

- 08:30–08:45 EGU2011-4373
Sergey Gulev, Mojib Latif, and Noel Keenlyside
 Role of air-sea fluxes in the North Atlantic climate variability on interdecadal and interannual time scales
- 08:45–09:00 EGU2011-3787
Sydney Levitus
 Multidecadal variability of the subpolar gyre of the North Atlantic
- 09:00–09:15 EGU2011-1658
Katja Lohmann, Johann Jungclauss, Michael Botzet, Helmuth Haak, Stephan Lorenz, and Daniela Matei
 Response of the (multi)decadal variability of the Atlantic meridional overturning circulation to suppressed variability in subpolar deep water formation (and overflows)
- 09:15–09:30 EGU2011-2779
Shane Elipot, Chris Hughes, Eleanor Frajka-Williams, and Miguel Angel Morales Maqueda
 Observed latitudinal coherence of the North Atlantic Meridional Overturning Circulation
- 09:30–09:45 EGU2011-10199
Paul Halloran, Ian Totterdell, Matthew Mennary, Ben Booth, and Nick Dunstone
 The Rise and Fall of the North Atlantic CO₂ Sink
- 09:45–10:00 EGU2011-11566
Daniela Matei, Johanna Baehr, Johann Jungclauss, Helmuth Haak, Wolfgang Müller, and Jochem Marotzke
 Interannual predictions of the Atlantic Meridional Overturning Circulation at 26.5°N

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

Convener: Monika Rhein | Co-Conveners: Richard Greatbatch

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Steinfeldt

- XY677 EGU2011-3595
Dmitry Sein, Uwe Mikolajewicz, Ernst Maier-Reimer, and Matthias Groeger
 Downscaling of climate change A1B scenario projection on North Atlantic - European shelves ocean - atmosphere system
- XY678 EGU2011-9138
Dorotea Iovino, Christophe Herbaut, and Marie-Noelle Houssais
 High-resolution modelling of sea-ice and ocean dynamics in the Nordic Seas

- XY679 EGU2011-1482
George Vanyushin, Anatoly Troshkov, Michail Kruzhalov, and Tatiana Bulatova
The Norwegian and Barents Seas: current temperature conditions (based on satellite data).
- XY680 EGU2011-2239
Steingrímur Jonsson and Hedinn Valdimarsson
Variability of volume and heat transport of water masses on the north Icelandic shelf
- XY681 EGU2011-3703
Eric de Boisseson, Virginie Thierry, **Herle Mercier**, and Guy Caniaux
Origin, formation and variability of the Subpolar Mode Water observed over the Reykjanes Ridge
- XY682 EGU2011-2354
John 'Paul' Spence, Oleg Saenko, Willem Sijp, and Mathew England
The role of bottom pressure torques on the interior pathways of North Atlantic Deep Water
- XY683 EGU2011-1262
Monika Rhein, Dagmar Kieke, and Reiner Steinfeldt
The Deep Western Boundary Current and its role for the propagation of newly formed deep water in the North Atlantic
- XY684 EGU2011-3019
Claudia Denker, Dagmar Kieke, Birgit Klein, Holger Klein, and Monika Rhein
Transport over the Mid-Atlantic-Ridge through the Faraday Fracture Zone
- XY685 EGU2011-2895
Damien Desbruyeres, Virginie Thierry, and Herlé Mercier
Long-term variability of the North Atlantic Current system in a realistic simulation
- XY686 EGU2011-2594
Linn Schneider, **Dagmar Kieke**, Monika Rhein, and Birgit Klein
Mixed layer evolution in the subpolar North Atlantic measured by Argo floats
- XY687 EGU2011-3217
Christian Uhe, Achim Roessler, and Monika Rhein
Transport variability in the North Atlantic Current inferred from satellite altimetry
- XY688 EGU2011-3428
Sandrine Mulet, Stéphanie Guinehut, Marie-Hélène Rio, Anne-Lise Dhomps, Laurent Bessieres, Gaël Nicolas, and Gilles Larnicol
Combination of in-situ and satellite observations to monitor the Ocean State: Application to the North Atlantic Ocean
- XY689 EGU2011-3666
Vassil Roussenov, Richard G. Williams, M. Susan Lozier, and Doug M. Smith
The effect of gyre-scale property changes on the North Atlantic overturning over the last 50 years
- XY690 EGU2011-3682
David Brayshaw, Brian Hoskins, and Michael Blackburn
North Atlantic sea surface temperatures and the structure of the atmospheric storm track
- XY691 EGU2011-3481
Mingming Li, Christian Mertens, Maren Walter, and Monika Rhein
Estimate of Diapycnal Mixing from eight Hydrographic Surveys in the Subpolar North Atlantic
- XY692 EGU2011-3788
Christopher Piecuch and Rui Ponte
Attributing Climate-Scale Variability in Atlantic Ocean Heat Storage
- XY693 EGU2011-14188
Matthias Koeller
Decadal Subpolar Gyre variability and relation to heat exchange in the Nordic Seas
- XY694 EGU2011-12600
Francisco Alvarez-Garcia, Maria J. OrtizBevia, and William CabosNarvaez
North Atlantic decadal variability: deconstructing the SST tripole
- XY695 EGU2011-11358
ben booth, **paul halloran**, and nick dunstone
Role of external drivers in historical Atlantic Temperature changes
- XY696 EGU2011-13366
Rita Lecci, Simona Masina, Annalisa Cherchi, and Marcelo Barreiro
Sensitivity of the Atlantic Thermohaline Circulation to extreme CO2 forcing
- XY697 EGU2011-10105
Christian Rodehacke, Steffen Olsen, Gao Yongqi, Didier Swingedouw, Matthew Menary, Erik Behrens, Arne Biastoch, and Uwe Mikolajewicz
First glance on simulated fresh water releases around Greenland's coast and its impacts on the ocean circulation
- XY698 EGU2011-5182
Florian Sévellec and Alexey Fedorov
An Interdecadal Oscillatory Eigenmode of the Atlantic Meridional Overturning Circulation in a realistic Ocean GCM

- XY699 EGU2011-5155
Shoshiro Minobe, Masato Miyashita, Akira Kuwano-Yoshida, Hiroki Tokinaga, and Shang-Ping Xie
Atmospheric response to the Gulf Stream: Shallow & Deep Heating Modes
- XY700 EGU2011-5098
Joseph Holden and Tim Burt
Long-term change in temperature and rainfall with altitude in Britain
- XY701 EGU2011-6339
Charles Troupin and Francisco Machín
Wind-induced temperature anomalies in the tropical and subtropical North Atlantic Ocean in 2010
- XY702 EGU2011-885
Anastase Alexandre Charantonis, Sylvie Thiria, Cyril Moulin, and Julien Brajard
Inversion of sea surface data to retrieve the vertical distribution of phytoplankton using a statistical methodology
- XY703 EGU2011-2757
Ursula Quillmann, Anne E. Jennings, Tom M. Marchitto, Vivian Underhill, and John T. Andrews
Holocene Evolution of the Irminger Current: a Perspective from the Southwest Iceland Shelf
- XY704 EGU2011-2822
Mi-Kyung Sung, Yoo-Geun Ham, Soon-Il An, and Jong-Seong Kug
Intraseasonal Phase Transition of the NAO-Like Response to El Nino and Its Alteration by the Tropical North Atlantic SST
- XY705 EGU2011-3552
Willem Sijp
Precise calculations of the existence of multiple AMOC equilibria in coupled climate models
- XY706 EGU2011-3869
Aixue Hu, Gerald Meehl, and Weiqing Han
Impact of the background conditions on the climate response to external forcings
- XY707 EGU2011-3887
Holly Dail and Carl Wunsch
Synthesizing Benthic and Planktonic Proxy Records: State Estimation of the Last Glacial Maximum North Atlantic Circulation
- XY708 EGU2011-4142
Jacek Piskozub and Dorota Gutowska
Constraining the MOC influence on the 20th century global temperature trends
- XY709 EGU2011-4408
Patrick Scholz and Gerrit Lohmann
Decadal variability in a new high-resolution model of the North Atlantic ocean
- XY710 EGU2011-4442
Grant Buffett, Ramon Carbonell, Valenti Sallarès, and Jose Lluís Pelegrí
Seismic oceanography as a tool to monitor climate change
- XY711 EGU2011-5515
Vasiliy Melnikov, Lidija Moskalenko, and Natalija Kuzevanova
North-East Black Sea climate system decadal variability
- XY712 EGU2011-5867
Fritz Richard Karbe, Monika Rhein, Christian Mertens, Dagmar Kieke, and Maren Walter
Deep Western Boundary Current observations off Flemish Cap during 2009/2010
- XY713 EGU2011-6687
Fran Santos, Moncho Gómez-Gesteira, Maite deCastro, and **Isabel Iglesias**
Coastal and Oceanic SST variability along the western Iberian Peninsula.
- XY714 EGU2011-7259
Takasumi Kurahashi-Nakamura, Martin Losch, André Paul, Stefan Mulitza, and Michael Schulz
Reconstruction of the LGM ocean circulation from data with the adjoint method
- XY715 EGU2011-7994
Harald Bartenstein, Ben Marzeion, and Helen Johnson
Stratification-dependent Mixing in Box Model of a Wind-Driven Atlantic Overturning under Thermohaline Forcing
- XY716 EGU2011-8357
Kristin Richter and Sönke Maus
Interannual variability in the hydrography of the Norwegian Atlantic Current: local forcing versus advection
- XY717 EGU2011-8691
Sarah Taws, Robert Marsh, and Neil Wells
Decadal Changes in the Re-emergence of Sea Surface Temperature Anomalies in the Northeast Atlantic
- XY718 EGU2011-8900
Yves Tanguy, Sylvie Thiria, and Sabine Arnault
Inversion of temperature profiles from satellite data in the tropical Atlantic based on Self Organizing Map

- XY719 EGU2011-9215
Laure Zanna
Variability and Predictability of observed Atlantic sea surface temperatures
- XY720 EGU2011-9444
Christopher W. Hughes, Shane Elipot, Miguel Angel Morales Maqueda, and Rory Bingham
A window on the deep ocean: Demonstration that the steep western Atlantic continental slope acts to filter out mesoscale noise and provides a quiet window into the deep circulation.
- XY721 EGU2011-9490
Paulo Oliveira and Álvaro Peliz
Azores Current Winter Pathways
- XY722 EGU2011-9574
Maureen Conte and John C Weber
Seasonal, interannual and decadal patterns in deep ocean particle flux in the Sargasso Sea and linkage with upper ocean physics and biology
- XY723 EGU2011-10610
Ilker Fer, Elin Darelius, and Detlef Quadfasel
Mesoscale variability of the Faroe Bank Channel Overflow
- XY724 EGU2011-13059
Bente Tiedje, Armin Köhl, and Johanna Baehr
Potential predictability of the North Atlantic heat transport based on an oceanic state estimate

CL2.10 – Tropical Climate Variability and Teleconnections: past, present and future – Orals

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

Room: 17

Chairperson: n.n.

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

COFFEE BREAK

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

- 10:30–10:45 EGU2011-11453
Craig Grove, Jens Zinke, Frank Peeters, Tim Scheufen, Sebastian Kasper, Malcolm McCulloch, and Geert-Jan Brummer
Is African rainfall forced from the Pacific on multidecadal timescales?
- 10:45–11:00 EGU2011-8923
Teresa Losada, Belén Rodríguez-Fonseca, Elsa Mohino, Serge Janicot, and Juerген Bader
Impact of the Atlantic-Pacific Niños connection over Sahelian rainfall
- 11:00–11:15 EGU2011-4880
Alice Grimm and Christopher Reason
Teleconnections between South American monsoon, Benguela Niño and southern Africa rainfall

- 11:15–11:30 EGU2011-10234
Thomas Toniazzo
 The role of tropical-extratropical teleconnections in the seasonal march of the southern Spring circulation.
- 11:30–11:45 EGU2011-3359
Reindert Haarsma and Frank Selten
 Anthropogenic changes in the Walker Circulation and the impact on extra-tropical planetary wave structure
- 11:45–12:00 EGU2011-619
Isabel Iglesias, Nieves Lorenzo, Belén Rodríguez-Fonseca, Juan Taboada, and Moncho Gómez-Gesteira
 The ENSO signal over Southwestern Europe and its impact on spring rainfall

CL2.10 – Tropical Climate Variability and Teleconnections: past, present and future – Posters

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY242 EGU2011-5880
Polina Afonina and Dariya Gushchina
 Simulation of El Nino Modoki in the INM_CM5 model.
- XY243 EGU2011-627
Marta Martin-Rey, Irene Polo, Belén Rodríguez-Fonseca, Javier García-Serrano, Teresa Losada, Elsa Mohino, Carlos Roberto Mechoso, and Fred Kucharski
 Analysis of El Niño events from the Atlantic remote influence
- XY244 EGU2011-13607
Tony Lee and Michael McPhaden
 Increasing intensity of El Niño in the central equatorial Pacific
- XY245 EGU2011-3394
 Regina Rodrigues, **Reindert Haarsma**, Edmo Campos, and Tercio Ambrizzi
 The impacts of inter-El Nino variability on the Tropical Atlantic and Northeast Brazil climate
- XY246 EGU2011-10330
Irene Polo, Buwen W. Dong, and Rowan T. Sutton
 Effects of Atlantic Meridional Overturning Circulation Change on Interannual Variability in the Tropical Atlantic and Pacific
- XY247 EGU2011-8240
Deepthi Marathayil, Len Shaffrey, Andrew Turner, and Julia Slingo
 Seasonal evolution of IOD and its sensitivity to the mean state in the HiGEM High Resolution Coupled Climate Model
- XY248 EGU2011-7679
Giovanni Dalu and Marina Baldi
 Nonlinear dynamics in the tropics in the shallow water approximation
- XY249 EGU2011-12882
Christopher Dancel
 A Simple Mechanism to explain the Zonal Dipole Pattern of Surface Salinity across the Atlantic and Pacific Tropics within a Global Warming Scenario
- XY250 EGU2011-4733
Rondrotiana Barimalala, Annalisa Bracco, and Fred Kucharski
 The representation of the South Tropical Atlantic teleconnection to the Indian Ocean in the AR4 coupled models
- XY251 EGU2011-4593
Fred Kucharski, In-Sik Kang, Riccardo Farneti, and Laura Feudale
 Tropical Pacific response to 20th century Atlantic warming
- XY252 EGU2011-6487
 Laura Feudale and **Fred Kucharski**
 Mechanism Connecting African and Indian Monsoon Megadroughts
- XY253 EGU2011-7109
 Cristina Peña-Ortiz, David Gallego, Pedro Ribera, **Maria del Carmen Álvarez**, and Paulina Ordonez
 Decreasing trend of the Tropical Easterly Jet over Africa
- XY254 EGU2011-4604
 Sara A. Rauscher, **Fred Kucharski**, and David B. Enfield
 The role of regional SST warming variations in the drying of Meso-America in future climate projections

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

CL2.13 – Seasons and phenology: Evidence from observations, reconstructions, measurements and models (co-sponsored by USA-NPN, PAGES & ILEAPS) – Orals

Convener: This Rutishauser | Co-Conveners: Annette Menzel, Jake Weltzin, Alison Donnelly

Room: 25

Chairperson: n.n.

- 13:30–13:45 EGU2011-9075
Ellen Denny, Jake Weltzin, Theresa Crimmins, Carolyn Enquist, and Alyssa Rosemartin
National and international organization of phenology as a tool for science, management and education in a changing environment
- 13:45–14:00 EGU2011-3986
Mirco Migliavacca, Andrew D. Richardson, and John O'Keefe
Analysis of the uncertainty of phenological responses to climate change
- 14:00–14:15 EGU2011-1399
Helfried Scheifinger, Christoph Matulla, Maja Zuvela-Aloise, and Thomas Schöngäßner
Direct Attribution of the Anthropogenic climate signal to PHENological observations - DATAPHEN
- 14:15–14:30 EGU2011-9231
Daniel Doktor and Maximilian Lange
Evaluation of methods to derive green-up trends based on NDVI satellite observations
- 14:30–14:45 EGU2011-6815
Stein Rune Karlsen, Anne Tolvanen, Kjell Arild Høgda, Lars Eklundh, Natalia Polikarpova, Olga Makarova, and Birger Ulf Hansen
Use of MODIS satellite data to map the growing season in northern Fennoscandia
- 14:45–15:00 EGU2011-12226
Koen Hufkens, Andrew D. Richardson, and Mark Friedl
Monitoring species specific phenology with conventional RGB cameras

Chairperson: n.n.

- 15:30–15:45 EGU2011-11979
Amelia Caffarra and Alison Donnelly
Do phenological responses to environmental conditions reflect the ecological role of plant species?
Effects of light and temperature on budburst
- 15:45–16:00 EGU2011-10159
David Basler and Christian Körner
Temperature and photoperiodic control of spring bud burst in temperate forest trees at rising spring temperatures
- 16:00–16:15 EGU2011-10036
Chiara Ziello, **Annette Menzel** and the 23 European providers of pollen data Team
Changes to airborne pollen across Europe
- 16:15–16:30 EGU2011-7974
Lenka Bartosova, Miroslav Trnka, Zdeněk Bauer, Petr Štěpánek, Martin Možný, and Zdeněk Žalud
Phenological response of three bird populations from Czech Republic to changing climate during 1961-2008
- 16:30–16:45 EGU2011-7637
Susanne Jochner, Chiara Ziello, Andreas Böck, Nicole Estrella, Jeroen Buters, Ingrid Weichenmeier, Heidrun Behrendt, and Annette Menzel
Spatio-temporal investigations of flowering dates and pollen counts in the topographically complex Zugspitze area
- 16:45–17:00 EGU2011-13466
Patricia Morellato and Maria Gabriela G. Camargo
Seasonality of wood species fruit production among seed dispersal modes in a cerrado-savanna: habitat responses and implications for climate change

CL2.13 – Seasons and phenology: Evidence from observations, reconstructions, measurements and models (co-sponsored by USA-NPN, PAGES & ILEAPS) – Posters

Convener: This Rutishauser | Co-Conveners: Annette Menzel, Jake Weltzin, Alison Donnelly

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY266 EGU2011-11279
Elisabeth Koch, Markus Ungersböck, Wolfgang Lipa, and Silke Adler
PEP725 Pan European Phenological Database
- XY267 EGU2011-11780
Giovanni Dal Monte, Roberta Alilla, and Chiara Epifani
The Italian phenological database
- XY268 EGU2011-5051
Juliette Vogel, Ruedi Gygli, Thomas Herren, and **This Rutishauser**
«Hazel campaign 2011» - Developing a web-based plant phenological database, data collection and visualisation tool in Switzerland
- XY269 EGU2011-6368
Cheng Qian, Congbin Fu, Zhaohua Wu, and Zhongwei Yan
Earlier onset of spring: quantifying from temperature series in Stockholm and northern China
- XY270 EGU2011-9299
Adam Choryński and Dariusz Graczyk
Are folk sayings a good instrument to forecast weather? Analysis of a set of traditional Polish sayings from the point of view of climate research.
- XY271 EGU2011-10993
Raimund Henneken, Christoph Schleip, Volker Dose, and Annette Menzel
Bayesian Multiple Change Point Analysis: A new approach to handle phenological data derived from webcam photography
- XY272 EGU2011-6852
Yann Vitasse, Christophe François, Nicolas Delpierre, Eric Dufrêne, Antoine Kremer, Isabelle Chuine, and Sylvain Delzon
Assessing the effects of climate change on the phenology of European temperate trees
- XY273 EGU2011-11034
Christina Schuster, Andreas Gröger, Markus Breier, and Annette Menzel
High elevation phenology in mountain forests and alpine botanical gardens
- XY274 EGU2011-7154
Anna Bock, Annette Menzel, and Tim Sparks
Climate Change and its effect on Franconian wine

- XY275 EGU2011-1156
Bridget O'Neill and Alison Donnelly
Effect of climatic warming on the emergence date and flight period of Irish moth species
- XY276 EGU2011-11208
Hazel Proctor, Paul Dowding, and Alison Donnelly
Potential impacts of climate variables on the pollen season of birch (*Betula* spp.) in Ireland
- XY277 EGU2011-13728
Annelies Pletsers, Amelia Caffarra, and Alison Donnelly
Bud burst response to changing climatic conditions in birch (*Betula pubescens*) and aspen (*Populus tremula*) for use in a phenological model
- XY278 EGU2011-13652
Gizelda Maia Rego and Osmir José Lavoranti
Reproductive Phenology: Lauraceae family in the Brazilian Atlantic Forest
- XY279 EGU2011-13653
Gizelda Maia Rego and Osmir José Lavoranti
Monitoring of reproductive phenological events of species of Myrtaceae in the Brazilian Atlantic Forest
- XY280 EGU2011-13517
Annette Menzel, Raimund Henneken, Christian Hertel, Michael Leuchner, and Nicole Estrella
Phenology through lenses and sensors - techniques and variation with aspect and vegetation density
- XY281 EGU2011-3583
Mirco Migliavacca and the Working Group Team
Using webcam images for monitoring and modeling phenological and functional dynamics of a subalpine grassland
- XY282 EGU2011-11013
Zoltan Dunkel, Leonidas Toullos, and Marta Hunkar
The Possible Goals of Phenological Network in Classical Form and Utilization of Remote Sensing Technique, mainly the Results of COST Action 734
- XY283 EGU2011-13803
Brian O' Connor, Scarrott Rory, Ned Dwyer, and Fiona Cawkwell
Land Cover and Vegetation Seasonality - Lessons from time-series satellite data analysis
- XY284 EGU2011-7188
Nicole Estrella, Monika Konnert, and Annette Menzel
Growing season changes under climate warming - adaptive (genetic) traits of understory, natural beech regeneration and canopy
- XY285 EGU2011-9820
Christine Cornelius, Nicole Estrella, and Annette Menzel
Short term shifts in phenology due to experimental warming?
- XY286 EGU2011-13786
Amelia Caffarra, Monica Rinaldi, Emanuele Eccel, Vittorio Rossi, and Ilaria Pertot
Impacts of climate change on the interactions between grapevine and two of its key pests: the European grapevine moth and powdery mildew
- XY287 EGU2011-12307
Fabio Zotte, Amelia Caffarra, Alison Donnelly, and Emily Gleeson
Mapping future phenology of birch in Ireland

CL2.14 – Climate Change and Forest Health, Growth, and Dynamics – Orals

Convener: Fabrizio D'Aprile | Co-Conveners: David Dunkerley

Room: 25

Chairperson: Fabrizio D'Aprile

- 08:30–08:45 EGU2011-1175
David Bowman and Lynda Prior
Can analyses of continental-scale variation in tree growth reveal effects of climate change on forest productivity?
- 08:45–09:00 EGU2011-9278
Olga Khabarova, Igor Savin, and Maria Medvedeva
Environmental changes' influence on North Eurasia forests' vegetation (global and local effects)
- 09:00–09:15 EGU2011-218
Neil Pederson, Edward Cook, Gordon Jacoby, and Myvonwynn Hopton
The Influence of Age and Geography on the Climatic Sensitivity and Growth Rates of Southern Temperate Tree Species
- 09:15–09:30 EGU2011-12387
Nikée Groot, Oliver Phillips, Simon Lewis, Manuel Gloor, and Drew Purves
Spatial variation in tree mortality

- 09:30–09:45 EGU2011-302
Niels Brouwers, Thomas Lyons, and Giles Hardy
 Forest health in the drying climate of southwest Western Australia
- 09:45–10:00 EGU2011-13034
Matthias Dobbertin, Britta Eilmann, Che Elkin, Arnaud Giuggiola, Beat Wermelinger, Thomas Wohlgemuth, Andreas Zingg, Roman Zweifel, and Andreas Rigling
 The impact of climate change on Scots pine and oak forests in dry inner-alpine valleys of Switzerland

CL2.14 – Climate Change and Forest Health, Growth, and Dynamics – Posters

Convener: Fabrizio D'Aprile | Co-Conveners: David Dunkerley

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Fabrizio D'Aprile

- XY288 EGU2011-6974
Chris Kollas, Christophe Randin, Yann Vitasse, Günter Hoch, and Christian Körner
 Dispersal of European broadleaf forest trees is not constrained by quality of seeds at the high elevation range limit
- XY289 EGU2011-6805
Yann Vitasse, Günter Hoch, Armando Lenz, Chris Kollas, Christophe Randin, and Christian Körner
 Tree recruitment of deciduous tree species at their elevational limits in Swiss Alps
- XY290 EGU2011-6821
Armando Lenz, Günter Hoch, and Christian Körner
 Low temperature limits cambial activity and determines secondary growth at the alpine treeline
- XY291 EGU2011-8554
Rafael Poyatos, Jordi Martínez-Vilalta, David Aguadé, Maurizio Mencuccini, Mónica Mejía-Chang, Pablo García-Estrígana, and Pilar Llorens
 Scots pine water relations in response to drought-induced defoliation and competition by Holm oak trees
- XY292 EGU2011-8117
Marco Hümann, Raimund Schneider, Gebhard Schüller, and Christoph Müller
 Sustainability of soil deep loosening as an amelioration measure preceding site afforestation
- XY293 EGU2011-396
Niels Brouwers, Susan Moore, Thomas Lyons, and Giles Hardy
 Forest health in a changing climate: How to advance our knowledge and management
- XY294 EGU2011-12942
Masa Zorana Ostrogovic, Hrvoje Marjanovic, Giorgio Alberti, Ivan Balenovic, and Alessandro Peressotti
 Using chronosequence method for assessing change in forest growth conditions
- XY295 EGU2011-1132
Seog-Gu Son, Hyo-Jeong Kim, Chan-Jin Oh, Young Je Kang, and Kwang-Ok Byun
 Environmental changes and forest ecosystem
- XY296 EGU2011-2886
Hyungsoon Choi, Young-Je Kang, Seog-Gu Son, Hyo-Jeong Kim, and Kwang-Ok Byun
 Growth and Survival of Warm-Temperate Trees in Korea
- XY297 EGU2011-2888
Hyungsoon Choi, Seog-Gu Son, Young-Je Kang, Hyo-jeong Kim, and Kwang-Ok Byun
 The effect of climate changes on the growth of *Pinus radiata*

CL2.15 – Land-climate interactions from models and observations: Implications from past to future climate – Orals

Convener: Bart van den Hurk | Co-Conveners: Sonia Seneviratne, Philippe Ciais

Room: 16

Chairperson: n.n.

- 08:30–08:45 EGU2011-1828
Yongkang Xue, Zhengqiu Zhang, Peter Cox, Guoqiong Song, and Glen Macdonald
 Vegetation dynamics and climate variability in North America and West Africa at seasonal- decadal scales - a study using the SSiB4/TRIFFID biophysical/dynamic vegetation model
- 08:45–09:00 EGU2011-13623
Julia Pongratz and Ken Caldeira
 Relevance of Preindustrial Land Cover Change for Attribution of Excess Atmospheric Carbon Dioxide
- 09:00–09:15 EGU2011-13250
Juan-Pablo Boisier, Nathalie De-Noblet, Andy Pitman and the LUCID participants Team
 Attributing the biophysical impacts of Land-use Induced land-Cover Changes (LULCC) to various sources. Results from the first LUCID set of simulations.

- 09:15–09:30 EGU2011-2703
David Kicklighter, Yongxia Cai, John Reilly, Jerry Melillo, Angelo Gurgel, Sergey Paltsev, Timothy Cronin, Andrei Sokolov, and Adam Schlosser
 Tradeoffs Associated with Land-use Options to Mitigate Climate Change
- 09:30–09:45 EGU2011-13580
Robert DeConto, Simone Galeotti, Mark Pagani, David Pollard, David Tracy, and David Beerling
 Eocene hyperthermals and orbitally paced biosphere, permafrost, and soil organic carbon dynamics
- 09:45–10:00 EGU2011-4366
Xuezhen Zhang
 Variations in vegetation activity across the Northeast China during 1982–2006

COFFEE BREAK

Chairperson: Sonia Seneviratne

- 10:30–10:45 EGU2011-324
 Craig Ferguson and **Eric Wood**
 Observed land-atmosphere coupling from satellite remote sensing and re-analysis
- 10:45–11:00 EGU2011-9004
Cor Jacobs, Michael Ek, Jan Elbers, Ronald Hutjes, Joseph Santanello, and Obbe Tuinenburg
 Identification of global hotspots of land-surface - precipitation interaction from reanalysis fields
- 11:00–11:15 EGU2011-10006
Christopher Taylor and Richard de Jeu
 Regions of strong coupling between soil moisture and precipitation - as viewed from space
- 11:15–11:30 EGU2011-11113
Thierry Pellarin, Arona Diedhiou, Luc Descroix, Theo Vischel, Claire Gruhier, and Mireille Tomasini
 A statistical analysis of soil moisture influence on convective systems in West Africa
- 11:30–11:45 EGU2011-9948
 Martin Jung and **Markus Reichstein**
 Recent decline in global land evapotranspiration trend due to limited moisture supply
- 11:45–12:00 EGU2011-12224
Brigitte Mueller, Sonia I. Seneviratne, Carlos Jimenez and the LandFlux-EVAL Team
 Analyses of global evapotranspiration datasets

CL2.15 – Land-climate interactions from models and observations: Implications from past to future climate – Posters

Convener: Bart van den Hurk | Co-Conveners: Sonia Seneviratne, Philippe Ciais

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Sonia Seneviratne

- XY298 EGU2011-1952
Stefan Hagemann and Andreas Haensler
 Identifying soil moisture memory effects using MPI-M climate models
- XY299 EGU2011-8217
Rene Orth and Sonia I. Seneviratne
 Analysis of Soil Moisture Memory in Europe
- XY300 EGU2011-11622
Heidi Mittelbach, Adriaan J. Teuling, Irene Lehner, and Sonia I. Seneviratne
 Spatial variability of soil moisture in Switzerland during summer 2010
- XY301 EGU2011-9835
 Bart van den Hurk, Fransico Doblas-Reyes, Randy Koster, Gianpaolo Balsamo, Sonia Seneviratne, and **Helio Camargo**
 Results of the GLACE2 experiment for Europe
- XY302 EGU2011-10068
Martina Weiß and Bart van den Hurk
 Does potential predictability improve with seasonal vegetation?
- XY303 EGU2011-11994
Tanja Stanelle, Sonia I. Seneviratne, Randal D. Koster, and Veronika Gayler
 Does realistic land surface initialization improve the subseasonal precipitation and air temperature forecast?
- XY304 EGU2011-5401
 Akbar Esfahani and **Michael Friedel**
 A Fractional Climate Forecast for Southern and Southwestern United States

- XY305 EGU2011-11424
Pier-Luigi Vidale, **Marie-Estelle Demory**, Malcolm Roberts, Anne Verhoef, and Leonard Shaffrey
Centennial-scale soil moisture dynamics as a fingerprint of climate variability and change
- XY306 EGU2011-11282
Boris Orlowsky and Sonia I. Seneviratne
CARTs for the investigation of extreme events in relation to circulation and land-climate interactions
- XY307 EGU2011-9414
Helio Camargo, van den Hurk Bart, and van Delden Aarnout
Applying Era-Interim forcings to a conceptual model of hydrological processes: Calibration and evaluation for Europe
- XY308 EGU2011-11321
Helge Goessling and Christian Reick
What do moisture recycling estimates tell? Lessons from an extreme global land-cover change model experiment
- XY309 EGU2011-12337
Benoît Guillod, Sonia I. Seneviratne, Boris Orlowsky, Markus Reichstein, Philippe Ciais, Adriaan J. Teuling, and Nina Buchmann
The influence of evaporation on afternoon convective rainfall events
- XY310 EGU2011-12814
Gonzalo Miguez Macho and Ying Fan
The Role of Groundwater in the Amazon Water Cycle
- XY311 EGU2011-5470
Ali Ershadi, **Matthew McCabe**, and Jason Evans
Estimating surface heat fluxes from remote sensing, process models and regional climate simulations
- XY312 EGU2011-6227
Martin Hirschi, Sonia I. Seneviratne, Vesselin Alexandrov, Fredrik Boberg, Constanta Boroneant, Ole B. Christensen, Herbert Formayer, Boris Orlowsky, and Petr Stepanek
Observational evidence for soil-moisture impact on hot extremes in Southeastern Europe
- XY313 EGU2011-12407
Alina-Mihaela Luchian, Mónica Alexandra Rodrigues, Ana Monteiro, Dorina Luchian, and Neculai Luchian
Climate Change Impact in the North-East Romania
- XY314 EGU2011-10707
Jesus Fidel Gonzalez-Rouco, Laura Fernández-Donado, Jason Smerdon, Volker Rath, Eduardo Zorita, Juan Pedro Montávez, and Juan José Gómez-Navarro
Quality control of air and ground surface temperatures in the Iberian Peninsula.
- XY315 EGU2011-9014
Ryan Teuling, Chiel van Heerwaarden, and Sonia Seneviratne
Environmental impact of forest versus grassland in a coupled land-atmosphere system
- XY316 EGU2011-4074
Adam Jones, **Alvaro Montenegro**, Hugo Beltrami, and Qiaozhen Mu
Deforestation effects on local temperature change inferred from MODIS satellite observations
- XY317 EGU2011-7032
Charles Williams and Dominic Kniveton
Influence of vegetation cover on extreme rainfall over southern Africa. Part 1: Idealised experiments using a global and regional climate model.
- XY318 EGU2011-5749
Emanuel Dutra, Christoph Schär, Pedro Viterbo, and Pedro M. A. Miranda
Land-atmosphere coupling associated with snow cover
- XY319 EGU2011-1410
Heidrun Matthes, Annette Rinke, Paul A. Miller, Peter Kuhry, and Klaus Dethloff
Sensitivity of high-resolution Arctic regional climate model projections to changed land surface conditions
- XY320 EGU2011-599
Juliane Otto, Thomas Raddatz, and Martin Claussen
Strength of forest-albedo feedback in mid-Holocene climate simulations
- XY321 EGU2011-2731
Mikhail Amosov, Igor Moskalenko, and Margarita Syromyatina
Climatic boundaries of modern vegetation zones as a key for paleozonation reconstructions
- XY322 EGU2011-11314
Thomas Schneider von Deimling, Malte Meinshausen, Anders Levermann, Veronika Huber, and Katja Frieler
Elevated atmospheric temperatures through permafrost feedbacks
- XY323 EGU2011-5651
Tim Bruecher, Victor Brovkin, Nils Fischer, and Thomas Raddatz
Interglacial vegetation dynamics within the MPI-ESM

- XY324 EGU2011-6743
Marin Tomasic, Timo Vesala, Sampo Smolander, Maarit Raivonen, Teemu Hölttä, Robert Getzieh, Victor Brovkin, and Thomas Kleinen
 Assessing Methane Emissions with the Global Land Model JSBACH
- XY325 EGU2011-9462
Cristiana Arcidiacono-Barsony, Philippe Ciais, Nicolas Viovy, and Nicolas Vuichard
 A Review for REDD Mitigation Mechanism
- XY326 EGU2011-9802
Tobias Stacke and Stefan Hagemann
 Simulation of dynamical wetland extent using a global hydrological model
- XY327 EGU2011-10643
 Vasili Bogomolov, **Victor Stepanenko**, Igor Okladnikov, Alla Yurova, Eugeni Gordov, and Vasilii Lykosov
 The monitoring and modeling framework for assessment of methane and carbon dioxide sinks and sources in the regional climate system of Western Siberia
- XY328 EGU2011-11823
Robert J. Getzieh, Victor Brovkin, Thomas Kleinen, Egor Dyukarev, and Eugenia A. Golovatskaya
 Northern hemisphere peatland carbon cycle dynamics over the Holocene - modelled with the MPI-Earth System Model
- XY329 EGU2011-11811
Emanuel Gloor, Jorge Sarmiento, and Nicolas Gruber
 What can be learned about carbon cycle climate feedbacks from the CO₂ airborne fraction?

HS7.4/AS4.9/CL3.4 – Hydrological change versus climate change (co-organized) – Orals

Convener: Tim Cohn | Co-Conveners: Harry Lins, Manfred Mudelsee, Demetris Koutsoyiannis

Room: 33

Chairperson: Tim Cohn

- 10:30–10:45 EGU2011-56
Robin Thomas Clarke
 Is The Significance of Hydroclimate Trends Over-Estimated? A Case Study from the Brazilian Amazon.
- 10:45–11:00 EGU2011-5634
Giuliano Di Baldassarre, Alberto Montanari, Harry Lins, Demetris Koutsoyiannis, Luigia Brandimarte, and Günter Blöschl
 Increasing flood risk in Africa: a climate signal?
- 11:00–11:15 EGU2011-9577
Christopher de Freitas, Manuel Helbig, and Andreas Matzarakis
 Methods for assessing the sensitivity of water resources of atolls in the greater tropical Pacific region to climate change
- 11:15–11:30 EGU2011-6299
Yunfei Fu, Tianyi Li, and Peng Liu
 Climatology of storm top in summer Asia observed by TRMM PR and VIRS
- 11:30–11:45 EGU2011-868
Josefina Arraut, Carlos Nobre, Henrique Barbosa, and Jose Marengo
 Aerial Rivers, Subtropical Rainfall and soil Evaporation
- 11:45–12:00 EGU2011-7440
Antonis Christofides and Demetris Koutsoyiannis
 Causality in climate and hydrology

LUNCH BREAK

Chairperson: Manfred Mudelsee

- 13:30–13:45 EGU2011-537
Claudia Deutschbein and Jan Seibert
 Evaluation of Bias-Correction Procedures for Adjusting RCM Simulations for Hydrological Impact Studies at the Catchment Scale
- 13:45–14:00 EGU2011-9214
Rasmussen Roy and the NCAR Team
 High-resolution simulation of seasonal snowfall over the Colorado Headwaters region and some impacts of climate change
- 14:00–14:15 EGU2011-9434
Taotao Qian, Aiguo Dai, Kevin E. Trenberth, and Jialin Lin
 Hydroclimatic Trends in the Mississippi River Basin from 1948 to 2004

- 14:15–14:30 EGU2011-5379
Jung-Eun Kim and Song-You Hong
 Changes in the precipitation mechanism under global warming - global hotspots
- 14:30–14:45 EGU2011-6160
Reinhard Schiemann, Rebekka Erdin, Marco Willi, Christoph Frei, Marc Berenguer, and Daniel Sempere-Torres
 Geostatistical radar-raingauge combination with nonparametric correlograms: methodological considerations and application in Switzerland
- 14:45–15:00 EGU2011-10492
Heike Huebener
 Tripwires between climatological and hydrological research

HS7.4/AS4.9/CL3.4 – Hydrological change versus climate change (co-organized) – Posters

Convener: Tim Cohn | Co-Conveners: Harry Lins, Manfred Mudelsee, Demetris Koutsoyiannis

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Harry Lins

- A399 EGU2011-1336
Marco Antonellini, Eric Masson, Pauline Nella Mollema, and Abdel Khattabi
 Water Budget Changes under the A1b Climate Change Scenario for the Tahadart Watershed, Tangiers, Morocco.
- A400 EGU2011-1561
Maddalen Mendizabal, Roberto Moncho, and Peter Torp
 Assessing the impact of Climate Change on flood events in the north of Iberian Peninsula (Basque Country Region)
- A401 EGU2011-2176
adeline bichet, martin wild, doris folini, and christoph schär
 Global precipitation response to changing climate forcings since 1870
- A402 EGU2011-4800
YuWen Chen, ChihChao Ho, and LiangCheng Chang
 Applying Conditional Weather Generation Downscaling Model on Long-Term Rainfall Synthesis on a Basin Scale
- A403 EGU2011-5560
Pao-Shan Yu, Jau-Ming Chen, Tao-Chang Yang, Cheng-Chin Liu, and Yu-Chen Lin
 Estimating Probable Maximum Precipitation by Considering Co-movement of Typhoon and Southwesterly Flow
- A404 EGU2011-7510
Dunia Gonzalez Zeas, Luis Garrote, and Ana Iglesias
 Comparison of methods for downscaling runoff from regional climate models in Spanish basins
- A405 EGU2011-11940
Rita Nogherotto, Vanda Grubišić and the NCAR Team
 Drying Ratio of the Colorado Mountains under Climate Change Conditions
- A406 EGU2011-12954
Pierre-Antoine Versini, Marc Berenguer, Romeo Ballinas-González, and Daniel Sempere-Torres
 Hydrological validation of historical precipitation reconstruction
- A407 EGU2011-1444
Simon-Michael Papalexiou, Haris Adraktas-Rentis, Athina Drosou, Eva Kallitsi, Ioannis Kyprianou, Vasilis Mathios, Eva Steirou, Maria-Anna Vasilaki, Menelaos Xirouchakis, and Demetris Koutsoyiannis
 Long-term properties of annual maximum daily rainfall worldwide
- A408 EGU2011-13700
Yannis Markonis and Demetris Koutsoyiannis
 Hurst-Kolmogorov dynamics in long climatic proxy records
- A409 EGU2011-1439
Dimitris Bouziotas, Georgios Deskos, Nikos Mastrantonas, Dimosthenis Tsaknias, Grigoris Vangelidis, Simon-Michael Papalexiou, and Demetris Koutsoyiannis
 Long-term properties of annual maximum daily river discharge worldwide
- A410 EGU2011-1235
Richard Phillips, Salima Baraka-Lokmane, Martin Smith, David Pope, Jon Caplin, Niall Burnside, Gary Bilota, and David Nash
 The Impact of Climate Change on Aquifer Recharge and Groundwater Quality in the Patcham Catchment, England
- A411 EGU2011-8600
Chih-Chao Ho, Yu-Wen Chen, and Liang-Cheng Chang
 Statistical Downscaling Based on Conditional Weather Generation for Storm Hyetograph

- A412 EGU2011-1902
Renji Remesan, Tim Bellerby, and Lynne Frostick
Effects of GCM uncertainty on climate change impacts on regional hydrology of the river Derwent catchment
- A413 EGU2011-1949
Hannes Müller Schmied, Heike Hoffmann-Dobrev, and Petra Döll
Effect of precipitation downscaling for modeled discharge using a global hydrological model
- A414 EGU2011-2325
Ileana Mares, Constantin Mares, Antoaneta Stanciu, and Mihaela Mihailescu
On the climate models performances to simulate the main predictors that influence the discharges in the Danube middle and lower basin
- A415 EGU2011-3272
Stephan Thober and Luis Samaniego
Weather Generators: Reviewing the State of the Art
- A416 EGU2011-3777
Thomas Schönthaler, Ben Marzeion, Martin Großhauser, and Georg Kaser
Estimating the Impact of Precipitation and Temperature Variability on the Contribution Potential of Glaciers to Water Availability: A Budget Approach
- A417 EGU2011-5220
Yu-Chi Wang and Po-Shan Yu
Impact of climate change on water resources over a basin scale in northern Taiwan
- A418 EGU2011-7147
Morten Andreas Dahl Larsen, Karsten Høgh Jensen, Jens Christian Refsgaard, Jens Hesselbjerg Christensen, and Michael Butts
Preparing for a coupled climate-hydrological model: The influence of domain characteristics on the HIRHAM regional climate model
- A419 EGU2011-7781
Maik Renner and **Christian Bernhofer**
Variability of the annual cycle of streamflow records throughout Central Europe
- A420 EGU2011-9851
Bjorn H. Samset, Maria M. Kvalevåg, and Gunnar Myhre
Hydrological sensitivity to radiative forcing and global temperature change in the CESM model
- A421 EGU2011-12216
Miguel Lagos and Ximena Vargas Mesa
Variation of statistical PMP under climate Change Projections: A first approach using ECHAM 5 GCM model results in two Chilean Regions
- A422 EGU2011-14147
Jorge J. Castro, Luis G Escandon-Alcazar, and Alin A. Carsteanu
Temporal climate-scale changes: global versus local artificially-induced perturbations - the interplay between atmospheric pollution and precipitation in Mexico City

CL4.1/NP8.2 – Stochasticity and Statistical Physics in Climate Dynamics (co-organized) – Orals

Convener: Michael Ghil | Co-Conveners: Mickael David Chekroun, Valerio Lucarini

Room: 13

Chairperson: Ghil, Lucarini, Chekroun

- 08:30–08:45 EGU2011-14167
Catherine Nicolis
Stochastic resonance in multistable systems
- 08:45–09:00 EGU2011-3757
Grant Branstator
Using the fluctuation-dissipation theorem to examine the atmospheric response to moving tropical heat sources
- 09:00–09:15 EGU2011-12296
Henk Dijkstra, Taylan Sengul, and **Shouhong Wang**
Dynamic Transitions and Hexagonal Patterns in Surface Tension Driven Convection
- 09:15–09:30 EGU2011-9930
Georg Gottwald and David Lewis
Stochastic model reduction on manifolds
- 09:30–09:45 EGU2011-12459
Paul Williams
Stochastic parameterizations in comprehensive climate models (solicited)
- 09:45–10:00 EGU2011-12182
Freddy Bouchet, Marianne Corvellec, and Eric Simonnet
Non-equilibrium statistical mechanics of geophysical flows

CL4.1/NP8.2 – Stochasticity and Statistical Physics in Climate Dynamics (co-organized) – Posters

Convener: Michael Ghil | Co-Conveners: Mickael David Chekroun, Valerio Lucarini

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ghil, Lucarini, Chekroun

- XY330 EGU2011-803
Salvatore Pascale, Jonathan M. Gregory, Maarten Ambaum, and Remi Tailleux
MEP climate, horizontal and vertical material entropy production in a simple two-dimensional model
- XY331 EGU2011-951
Dmitry Mukhin, Andrew Gavrilov, Evgeny Loskutov, and Alexander Feigin
Reconstruction of a dynamical system underlying an observed time series by optimal stochastic models
- XY332 EGU2011-1473
Valerie N. Livina, Timothy M. Lenton, Vasilis Dakos, Egbert H. van Nes, and Marten Scheffer
Early warning of climate tipping points: comparing methods to limit false alarms
- XY333 EGU2011-1768
Stefano Pierini
On the low-order character of coherence resonance in the midlatitude wind-driven ocean circulation
- XY334 EGU2011-4055
Alexander Feigin, Dmitry Mukhin, Andrey Gavrilov, and Eugeny Loskutov
Stochastic modeling of ENSO phenomena: low-dimensional prognostic model from time series
- XY335 EGU2011-4115
Mojib Latif and Wonsun Park
Atlantic Meridional Overturning Circulation response to idealized solar forcing
- XY336 EGU2011-4798
Christina Karamperidou, Francesco Cioffi, and Upmanu Lall
Surface Temperature Gradients and their relation to Mid-latitude Circulation Dynamics and inter-annual Precipitation variability: Trends and links to ENSO in Observations and Low-order Climate models.
- XY337 EGU2011-5825
William I. Newman, **Bruce D. Malamud**, and Donald L. Turcotte
Statistical properties of record-breaking temperatures
- XY338 EGU2011-6326
Sebastian Bathiany, Martin Claussen, and Klaus Fraedrich
On the mechanism of the vegetation collapse in the Sahara/Sahel at the end of the African Humid Period
- XY339 EGU2011-10692
Valerio Lucarini, Klaus Fraedrich, and Francesco Ragone
Thermodynamical properties of planetary fluid envelopes
- XY340 EGU2011-11192
Hannah Arnold, Tim Palmer, and Irene Moroz
Stochastic Parametrisation and Model Uncertainty in the Lorenz '96 System
- XY341 EGU2011-11351
Salvatore Pascale, Valerio Lucarini, and Robert Boschi
Snowball Earth hysteresis experiment with the FAMOUS coupled atmospheric-ocean general circulation model: thermodynamic and climatological analysis
- XY342 EGU2011-11805
Valerio Lucarini and Stefania Sarno
A Statistical Mechanical Approach for the Computation of the Climatic Response to General Forcings
- XY343 EGU2011-11880
Valerio Lucarini and Francesco Ragone
Energetics of climate models: Net energy balance and meridional enthalpy transport
- XY344 EGU2011-12318
Francesco Ragone, Hartmut Borth, and Klaus Fraedrich
Stochastic parameterization of atmospheric convection in a GCM (Planet Simulator)
- XY345 EGU2011-13292
Florian Sévellec and Alexey Fedorov
On the stability asymmetry of the glacial-interglacial cycle
- XY346 EGU2011-13319
Themistoklis P. Sapsis, **Pierre P.F.J. Lermusiaux**, and Mattheus P. Ueckermann
Stochastic Analysis of Double Gyre and Thermohaline Flows
- XY347 EGU2011-14060
Robert Niven and Hisashi Ozawa
Conditional Derivation of the Maximum Entropy Production Principle and its Application to Planetary Climate Systems

CL4.2 – Climate Data Homogenization and Climate Trend/Variability Assessment – Orals

Convener: Xiaolan L. Wang | Co-Conveners: Petr Stepanek, Enric Aguilar

Room: 16

Chairperson: Xiaolan L. Wang and Petre Stepanek

- 13:30–13:45 EGU2011-6040
Leopold Haimberger, Lorenzo Ramella-Pralungo, Jasmina Hadzimustafic, and Christina Tavalato
Homogenization of the global radiosonde temperature and wind data set
- 13:45–14:00 EGU2011-14152
Zhen Li and **Zhongwei Yan**
Detecting and adjusting the inhomogeneity in daily temperature series using wavelet analysis
- 14:00–14:15 EGU2011-12923
Petr Stepanek and Pavel Zahradnicek
Comparison of correction methods for inhomogeneities in daily time series of air temperature
- 14:15–14:30 EGU2011-8502
José Gama
Quality control and homogenization of streamflow data
- 14:30–14:45 EGU2011-10867
Tamara Salameh and the ANR CHEDAR Team
Reconstruction of the atmospheric column from surface pressure: application to regional climate modelling of the volcano eruptions of Laki (1783)
- 14:45–15:00 EGU2011-112
q. h. Wen, **x. l. Wang**, and a. Wong
A hybrid-domain approach to modelling climate data time series
- Chairperson: Xiaolan L. Wang and Manfred Mudelsee
- 15:30–15:45 EGU2011-2020
Martin Tingley
Bayesian ANOVA for the calculation of climate anomalies.
- 15:45–16:15 EGU2011-2018
Martin Tingley
Reconstructing pre-historic temperatures from natural proxies: statistical methods in paleoclimate research
- 16:15–16:45 EGU2011-9636
Masa Kageyama, Claire Waelbroeck, Norbert Frank, and Didier M. Roche
The Atlantic Meridional Overturning Circulation's impact on surface climate and subsurface ocean temperatures under the Last Glacial Maximum conditions: a model-data comparison
- 16:45–17:00 EGU2011-3239
Nadine Schütz, Martin Trauth, and Matthias Holschneider
Detection of trend changes in the Plio-Pleistocene climate of Northern Africa using linear mixed modeling

CL4.2 – Climate Data Homogenization and Climate Trend/Variability Assessment – Posters

Convener: Xiaolan L. Wang | Co-Conveners: Petr Stepanek, Enric Aguilar

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Xiaolan L. Wang, Petre Stepanek, Manfred Mudelsee

- XY348 EGU2011-7003
Alexander Stickler, Harry Hofstetter, and Stefan Brönnimann
Historical upper-air data rescue for a new 20th century atmospheric reanalysis
- XY349 EGU2011-13812
Aiguo Dai, Junhong Wang, Peter W Thorne, David E Parker, **Leopold Haimberger**, and Xiaolan L Wang
A New Approach to Homogenize Daily Radiosonde Humidity Data
- XY350 EGU2011-13814
Katharine Willett, Peter Thorne, Lisa Alexander, and Robin Chadwick
Robust benchmarking of homogenisation algorithms for the Surface Temperature Initiative
- XY351 EGU2011-8344
Maria Meirelles, João Corte-Real, and Solange Leite
Homogenization of Monthly Temperature Series in the Area of the Azores - Winter Anomalies during the 20th Century
- XY352 EGU2011-14051
Luís Freitas, **Mário Pereira**, Liliana Caramelo, Petr Stepanek, Manuel Mendes, Lúgia Amorim, and Luís Nunes
Portuguese temperature datasets: homogeneity and exploratory analysis

- XY353 EGU2011-7495
Renate Kocen and Stefan Brönnimann
Application of a physics based correction method on inhomogeneities in the subdaily temperature series of Basel, Switzerland
- XY354 EGU2011-2145
Johanna Nemec, Christine Gruber, Ingeborg Auer, Barbara Chimani, and Konrad Tuerk
Trends in extreme temperature indices in Austria based on a new homogenized dataset of daily minimum and maximum temperature series
- XY355 EGU2011-7355
Alexander Stickler, Andreas M. Fischer, and Stefan Brönnimann
Vertical structure of 20th century temperature trends in an ensemble of all-forcing transient GCM runs
- XY356 EGU2011-14047
Luís Freitas, Petr Stepanek, **Mário Pereira**, and Liliana Caramelo
Comparison of the correction methods for daily air temperature and precipitation datasets
- XY357 EGU2011-1525
Gianmarco Tardivo and Antonio Berti
A Dynamic Method for Gap Filling in Long Term Temperature Series
- XY358 EGU2011-12398
Marco Turco, Raúl Marcos, Maria-Carmen Llasat, and Pere Quintana Seguí
Is statistical downscaling able to detect inhomogeneities in a time series?
- XY359 EGU2011-12653
Elke Rustemeier, Alice Kapala, Hermann Mächel, Victor Venema, and Clemens Simmer
Detection and correction of inhomogeneities of long-term precipitation series in Germany
- XY360 EGU2011-12957
Petr Stepanek, Pavel Zahradnicek, and José Carlos González Hidalgo
Software for quality control and homogenization of climatological time series (AnClim and ProClimDB)
- XY361 EGU2011-14020
Oleg Panferov, **Manfred Mudelsee**, Claus Döring, Christopher Moseley, Daniela Jacob, and Gerrit Lohmann
Climate change projections for Lower Saxony, Germany, in the 21st century
- XY362 EGU2011-10382
Benno Thoma, Vera Klinger, and Andreas Hense
Spatial Aggregation of Paleoclimate Temperature Reconstructions using Variational Analysis
- XY363 EGU2011-8264
Johannes Werner and Juerg Luterbacher
A pseudoproxy evaluation of a BHM based method for European temperature field reconstructions
- XY364 EGU2011-14031
Kristin Olafsdottir, Manfred Mudelsee, and Michael Schulz
Correlation estimation of paleoclimate time series of unequal timescales

G3.2/AS4.19/CL4.9/GD1.6/NH4.8/SM5.7 – Geodesy and natural and induced hazards: Progress during 30 years of the WEGENER initiative (co-organized) – Orals

Convener: Susanna Zerbini | Co-Conveners: Robert Reilinger, Mustapha Meghraoui

Room: 18

Chairperson: M. Meghraoui and P. Briole

- 08:30–08:45 EGU2011-12696
Andrew Hooper, David Bekaert, and Mahmut Arikan
Radar interferometry for measuring regional-scale processes
- 08:45–09:00 EGU2011-12096
Ziyadin Cakir, Mustapha Meghraoui, Esra Cetin, Ahmet Akoglu, and Samir Belabbes
Postseismic Hanging-wall Subsidence of the 2003 Zemmouri (Mw=6.9, Algeria) Thrust Earthquake From InSAR Time Series
- 09:00–09:15 EGU2011-11725
Jean-Mathieu Nocquet, Andrea Walpersdorf, François Jouanne, Frédéric Masson, Jean Chéry, and Philippe Vernant
Slow deformation in the Western Alps from a decade of Continuous GPS measurements
- 09:15–09:30 EGU2011-13090
Pierre Briole
Ground deformation monitoring in the Corinth rift laboratory, Greece
- 09:30–09:45 EGU2011-4840
Athanassios Ganas, Kostas Chousianitis, George Drakatos, Marios Papanikolaou, Panagiotis Argyrakakis, Maria Kolligri, Panagiota Petrou, Evagelia Batsi, and Christina Tsimi
NOANET: High-rate GPS Network for Seismology and Geodynamics In Greece

- 09:45–10:00 EGU2011-2324
Ugur Dogan, Semih Ergintav, Baki Karaboce, Gokhan Arslan, Ayse Selendi (1), Deniz Oz, Cuneyt Aydin (1), Azer Ilgar, Rahsan Cakmak (2), Alpay Belgen, Enver Sadikoglu, Eyup Bilgic, and Ahmet Direnc
 Long-term Crustal Deformations Based on Gravity and GPS Measurements (2006 - 2010) in Marmara Region, Turkey

COFFEE BREAK

Chairperson: R. Reilinger and A. Hooper

- 10:30–10:45 EGU2011-11359
Philippe Vernant
 Interseismic strain across strike slip faults, what can we learn from ~20 years of GPS measurements ?
- 10:45–11:00 EGU2011-11222
Cecilia Sciarretta, Vincenza Luceri, Roberto Lanotte, Rosa Pacione, Brigida Pace, and Giuseppe Bianco
 Velocity field in Mediterranean area from ASI-CGS GPS, SLR and VLBI solutions: the ASIMed solution
- 11:00–11:15 EGU2011-3512
Roberto Sabadini, Gabriele Cambiotti, and Yanick Ricard
 New insights on Mantle Convection and Ice Age True Polar Wander
- 11:15–11:30 EGU2011-8013
Johannes Boehm, Peter Steigenberger, Robert Heinkelmann, and Harald Schuh
 Troposphere delay modeling in VLBI and GNSS analysis
- 11:30–11:45 EGU2011-6503
Luce Fleitout, Jean-Didier Garaud, Georges Cailletaud, Christophe Vigny, Wim Simons, Boujewin Ambrosius, Itthi Trisiratayawong, and Chalermchon Satirapod
 Modeling the post-seismic deformations of the Aceh, Nias and Benkulu earthquakes
- 11:45–12:00 EGU2011-9723
Tonie van Dam, Xavier Collilieux, Zuheir Altamimi, and James Ray
 A review of GPS and GRACE estimates of surface mass loading effects

G3.2/AS4.19/CL4.9/GD1.6/NH4.8/SM5.7 – Geodesy and natural and induced hazards: Progress during 30 years of the WEGENER initiative (co-organized) – Posters

Convener: Susanna Zerbini | Co-Conveners: Robert Reilinger, Mustapha Meghraoui

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: M. Becker, L. Bastos, M.E. Aksoi and R. Fernandes

- XL184 EGU2011-1743
Hiromi Fujimoto, Motoyuki Kido, and Yukihito Osada
 Some improvements in the GPS/Acoustic seafloor positioning
- XL185 EGU2011-2283
Simone Dellagnello and the SCF (INFN-LNF) Team
 SCF-Test of LAGEOS and the GNSS for geodesy and navigation applications
- XL186 EGU2011-2540
Vadim Milyukov, Vladimir Zharov, Alexey Mironov, Mark Kaufman, and Dmitry Duev
 Development of the Northern Caucasus GPS/GLONASS network: progress during 18 years (observations and results)
- XL187 EGU2011-2818
Yusaku Ohta, Tatsuya Kobayashi, and Satoshi Miura
 Long term stabilities and its noise properties of the middle to long baseline RTK-GPS time series for the earthquake size rapid determination
- XL188 EGU2011-3180
 Tim Wright, Hua Wang, **Carolina Pagli**, and Matthew Garthwaite
 Mapping Tectonic Strain on a Global Scale with InSAR
- XL189 EGU2011-8862
M Meghan Miller
 UNAVCO Event response capabilities: Four 2010 earthquakes that advanced hazards science
- XL190 EGU2011-11370
Graham Appleby, Georg Kirchner, Jan McGarry, Carey Noll, Erricos Pavlis, and Michael Pearlman
 High Quality Products from Satellite Laser Ranging

- XL191 EGU2011-11708
Luisa Bastos, Machiel Bos, and Rui M.S Fernandes
An investigation of monument stability of GPS stations in Iberia
- XL192 EGU2011-13026
Machiel Bos, Odair Tavares, **Luisa Bastos**, and Rui Fernandes
An online GPS time-series analysis provider at GEODAC
- XL193 EGU2011-227
Haluk Ozener, Asli Dogru, and Bulent Turgut
Contemporary Results of GPS Observations in Ismetpasa Creeping Region of North Anatolian Fault Zone (NAFZ), Turkey
- XL194 EGU2011-365
Radia Mir, Salem Kahlouche, and Said Touam
Crustal deformations using GPS data and the Kalman filter: preliminary results
- XL195 EGU2011-1378
Susanna Zerbinì, Claudio Prati, Giovanni Cappello, Maddalena Errico, Fabrizio Novali, and Silvia Scirpoli
Combination of INSAR and GPS to measure ground motions and atmospheric signals
- XL196 EGU2011-2707
M. Ersen Aksoy, Mustapha Meghraoui, Matthieu Ferry, Ziyadin Çakır, and Gülsen Uçarku
Short-term and long-term slip rate estimations along the Ganos Fault using stream offsets and paleo-climatic changes (North Anatolian Fault, Turkey)
- XL197 EGU2011-3962
Stathis C. Stiros, Fanis Moschas, Lujia Feng, and Andrew V. Newman
Constraints to the 2008 Patras (Greece) seismic fault: Evidence from historical triangulation and morphotectonic data.
- XL198 EGU2011-4785
Stefano Tinti, Alberto Armigliato, and Gianluca Pagnoni
The role of GPS observations in a Tsunami Early Warning System suitable for near-shore tsunami detection and forecast.
- XL199 EGU2011-5439
Kamil Eren, Turgut Uzel, Engin Gulal, Ibrahim Tiryakioglu, Ahmet Anil Dindar, and Haluk Yilmaz
Tectonic Studies in Turkey Using CORS-TR Observations
- XL200 EGU2011-5777
Marc-Andre Gutscher
Tectonics of the Gibraltar subduction and its relation to recent kinematics
- XL201 EGU2011-6742
Matthias Becker, **Mohamed Saleh**, Mohamed Rashwan, Sayed Mohamed Abd el-Monem, Salah Mahmoud, Hassan Khalil, Awad Omran, and Mostafa Yousef
Regional and local deformation analysis results from the Nile River Valley and its relation to seismicity
- XL202 EGU2011-7357
Mohamed Chlieh, Hernando Tavera, Jean-Mathieu Nocquet, Juan-Carlos Villegas, Hugo Perfettini, and Jean-Philippe Avouac
Interseismic Coupling maps in South America subduction zone as indicator of future large Megathrust Earthquakes
- XL203 EGU2011-8062
Joaquim Sousa, Luisa Bastos, Antonio Ruiz, Ramon Hanssen, and Andy Hooper
Terrain Deformation Monitoring in Granada Basin Area Using Persistent Scatterers Interferometry (PSI)
- XL204 EGU2011-9179
Yasser Mahmoud, Frederic Masson, Mustapha Meghraoui, Ziyadin Cakir, Abd elmotaleb Alchalbi, Hakan Yavasoglu, Onder Yönlü, Mohamed Daoud, Semih Ergintav, and Sedat Inan
GPS velocity field in SE Turkey and NW Syria derived from 2009 and 2010 measurements
- XL205 EGU2011-9721
Yüksel Altiner
Another view on the study of Earth's crust deformations applied in Adriatic plate
- XL206 EGU2011-12464
Aggeliki Marinou, Xanthos Papanikolaou, Dimitris Paradissis, Dimitris Anastasiou, Vangelis Zacharis, Panayiotis Tzavaras, Kalliopi Papazissi, and Christiana Mitsakaki
Estimating of tectonic velocities in the Ionian region.
- XL207 EGU2011-11998
Rui Fernandes, José Quembo, Jorge Miranda, and Damien Delvaux
Present-Day Kinematics of Mozambique derived from Episodic GPS data
- XL208 EGU2011-12149
Robert King, Simon McClusky, Philippe Vernant, Semih Ergintav, Galaktion Hahubia, Fakhraddin Kadirov, Samir Mammadov, Ruben Stepanyan, Tamara Guseva, and Vadim Milyukov
New GPS velocity field for the Arabian-Eurasian collision zone

- XL209 EGU2011-12720
Demitris Anastasiou, Aggeliki Marinou, Xanthos Papanikolaou, Vangelis Zacharis, Demitris Paradissis, Kalliopi Papazissi, and Christiana Mitsakaki
 Deformation studies using GPS data for South Peloponnisos
- XL210 EGU2011-12775
Juan Carlos Villegas Lanza, Jean-Mathieu Nocquet, Hernando Tavera, Mohamed Chlieh, and Francis Bondoux
 A new GPS velocity field from Central Peru to northern Ecuador
- XL211 EGU2011-8122
Oliver Boyd, Yuehua Zeng, and Leonardo Ramirez-Guzman
 Modeling surface deformation in the New Madrid seismic zone
- XL212 EGU2011-9330
Tilo Schöne, Julia Illigner, Cornelia Zech, Cecep Subarya, Pak Khafid, Wahyu Pandoe, Imam Mudita, and Roman Galas
 GNSS in Support of Sea Level Monitoring: Early Warning to Long-Term Corrections
- XL213 EGU2011-13129
David Mencin, Selwyn Sacks, Alan Linde, and Michael Gladwin
 Borehole Strainmeters and Natural Hazards

CL4.12 – Advances in Quaternary Geochronology – Orals

Convener: Geoff Duller | Co-Conveners: Irka Hajdas, Thorsten Kiefer, Andreas Lang

Room: 13

Chairperson: Thosten Kiefer

- 13:30–14:00 EGU2011-13982
Dirk Hoffmann
 MC-ICPMS U-Th isotope measurements for precise speleothem chronologies in Quaternary climate research
- 14:00–14:15 EGU2011-3735
Dominique Raynaud, Vladimir Lipenkov, and Marie-France Loutre
 Dating ice cores by local insolation tuning
- 14:15–14:30 EGU2011-12006
Esther Ruth Gudmundsdóttir, Guðrún Larsen, and Jón Eiríksson
 Tephrochronology as a tool for precise dating and correlation of Quaternary records
- 14:30–14:45 EGU2011-13468
Mark Sier, Wil Roebroeks, Mark Dekkers, Corrie Bakels, and Sabine Gaudzinski-Windheuser
 Mismatch between MIS 5e and the Last Interglacial (Eemian) of Central Europe
- 14:45–15:00 EGU2011-6793
Silke Schmidt, Ralf Hetzel, Sumiko Tsukamoto, and Manfred Frechen
 10Be, 10C and OSL dating of alluvial sediments from the eastern Andes

CL4.12 – Advances in Quaternary Geochronology – Posters

Convener: Geoff Duller | Co-Conveners: Irka Hajdas, Thorsten Kiefer, Andreas Lang

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Thosten Kiefer

- XY365 EGU2011-594
Baolin Pan, Chaolu Yi, and Zhongping Lai
 Environment change records of delta and sand wedge of lakeshore at LingGo Co of Qiangtang plateau
- XY366 EGU2011-1870
Lovisa Zillén, Conny Lenz, and Tom Jilbert
 Stable lead (Pb) isotopes and concentrations - a useful independent dating tool for Baltic Sea sediments
- XY367 EGU2011-3409
Rienk H. Smittenberg, Maximilian P.W. Schneider, Irka Hajdas, Wacker Lukas, Stefano. M. Bernasconi, and Michael W.I. Schmidt
 Molecular-scale radiocarbon dating of charcoal and black carbon
- XY368 EGU2011-3712
 Marie-France Loutre, Vladimir Lipenkov, **Dominique Raynaud**, and Amaelle Landais
 Dating ice cores by local insolation tuning: A comparison between wavelet analysis and peak-to-peak matching techniques

- XY369 EGU2011-4906
Merle Gierga, Axel Birkholz, Rienk Smittenberg, Irka Hajdas, Lukas Wacker, Nao Ohkouchi, and Stefano M. Bernasconi
 Compound-specific radiocarbon analyses of individual fatty acids isolated with high performance liquid chromatography
- XY370 EGU2011-5074
Octavian G. Dulu, Constantin Costea, Ana Danis, and Stefan A. Szobotka
 Th-230 - excess and Pa - 231 excess geochronology of manganese nodules
- XY371 EGU2011-8248
Romain Delunel, Didier Bourlès, Peter van der Beek, and Emmanuel Paquet
 Cosmic-ray attenuation by seasonal snow cover revealed by neutron-detector monitoring: implications for cosmic-ray exposure studies in mountainous areas
- XY372 EGU2011-8747
Pierre Sabatier, Jean Louis Reyss, Jason M. Hall-Spencer, Christophe Colin, Norbert Frank, Louise Bordier, and Eric Douville
 Growth rate of deep-sea Scleractinian corals (*Madrepora oculata*, *Lophelia pertusa*) inferred from ²¹⁰Pb-²²⁶Ra chronology
- XY373 EGU2011-8820
David Domínguez-Villar, Jane Willenbring, Rosa Carrasco, and Javier Pedraza
 Sub-aerial granite and gneiss weathering rates in Spanish Central System and their implications for terrestrial cosmogenic nuclide dating
- XY374 EGU2011-10418
Koen Beerten, Koen Deforce, and Dirk Mallants
 Age constraints for pedological and hydrological processes in natural analogues of earth covers for waste disposal: case study from a sediment-soil sequence in Dessel, Northern Belgium
- XY375 EGU2011-11485
 Véronique Michel, **Chrystèle Véрати**, Guanjun Shen, Chuan-Chou Shen, and Sylvain Gallet
²³⁰Th/²³⁴U and ⁴⁰Ar/³⁹Ar dating of Orgnac 3, a Quaternary Prehistoric Site in Ardèche, France
- XY376 EGU2011-12412
Agnes Novothny, Zsófia Ruzsáiczay-Rüdiger, Manfred Frechen, Gabor Csillag, and Edit Thamone Bozso
 Dating Danube terraces with IRSL and cosmogenic ¹⁰Be exposure ages
- XY377 EGU2011-12461
Adam Michczyński and Irka Hajdas
 Complex statistical model of the Lake Soppensee chronology
- XY378 EGU2011-13986
Irka Hajdas, Georges Bonani, Wallace S. Broecker, Elizabeth Clark, Michael Molnar, Carla Taricco, Gulianna Vivaldo, and Lukas Wacker
 Radiocarbon dating of carbonate samples—different treatment methods compared

CL4.17/SSP1.5 – Major achievements and perspectives in scientific ocean and continental drilling (co-organized) –

Orals

Convener: Ruediger Stein | Co-Conveners: Ulrich Harms, Ursula Röhl, Thomas Wiersberg

Room: 19

Chairperson: R. Stein, U. Harms

- 08:30–08:45 EGU2011-13674
Thomas Felis, Ute Merkel, Ryuji Asami, Pierre Deschamps, Ed C. Hathorne, Martin Kölling, Edouard Bard, Guy Cabioch, Nicolas Durand, Matthias Prange and the coral & modelling Team
 Pronounced interannual variability in tropical South Pacific temperatures during Heinrich stadial 1
- 08:45–09:00 EGU2011-1764
Peter Clift
 Scientific Ocean Drilling and the Evolution of the Asian Monsoon
- 09:00–09:15 EGU2011-9279
Joanna Morgan
 Proposed IODP/ICDP drilling of the Chicxulub impact crater
- 09:15–09:30 EGU2011-9523
Catalina Gebhardt, Maaret Kukkonen, Volker Wennrich, Tim Cook, Olaf Juschus, Frank Niessen, Martin Melles, and El'gygytgyn Scientific Party
 Distribution and frequency of mass transport deposits in Lake El'gygytgyn, Chukotka, NE Siberia, and their inferred triggering mechanisms
- 09:30–09:45 EGU2011-10929
Thomas Litt, Flavio Anselmetti, Namik Cagatay, Rolf Kipfer, Sebastian Krastel-Gudegast, and Sefer Örcen
 Lake Van Drilling Project 'PaleoVan' (ICDP): A long continental sedimentary record in Eastern Anatolia of the last ca 400.000 years. Scientific drilling operation in 2010 and first results

09:45–10:00 EGU2011-3650

Tim Freudenthal, Dierk Hebbeln, Mahyar Mohtadi, Gema Martínez-Méndez, and **Gerold Wefer**
70 m double hole drillings for paleoceanographic research with the sea floor drill rig MeBo

CL4.17/SSP1.5 – Major achievements and perspectives in scientific ocean and continental drilling (co-organized) –

Posters

Convener: Ruediger Stein | Co-Conveners: Ulrich Harms, Ursula Röhl, Thomas Wiersberg

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: R. Stein, U. Harms, U. Roehl, T. Wiersberg

XY379 EGU2011-11209

Maaret Kukkonen, **Catalina Gebhardt**, Volker Wennrich, Olaf Juschus, Tim Cook, Martin Melles, and El'gygytgyn Scientific Party
Classification and characteristics of mass movement deposits in the 3.6 Ma sediment record of Lake El'gygytgyn, Chukotka, NE Siberia

XY380 EGU2011-12194

Volker Wennrich, **Catalina Gebhardt**, Maaret Kukkonen, Carsten Meyer-Jacob, Pavel Minyuk, Peter Rosén, Julie Brigham-Grette, Martin Melles, and El'gygytgyn Scientific Party
Initial geochemistry and FTIRS data of deep-drilling cores from Lake El'gygytgyn, NE Siberia, and their implications for the Pliocene and Quaternary climate history of the Siberian Arctic

XY381 EGU2011-10046

Catalina Gebhardt, Ohlendorf Christian, Hahn Annette, Kliem Pierre, Zolitschka Bernd, and PASADO Science Team
Dynamic history of sediment deposition in Laguna Potrok Aike, Argentina

XY382 EGU2011-8807

Markus Oehlerich, Christoph Mayr, Andreas Lücke, Wolfgang W. Schmahl, Christian Ohlendorf, Bernd Zolitschka, and Pasado Science Team
Isotopic composition ($\delta^{13}C$, $\delta^{18}O$) of carbonates from the ICDP-site Laguna Potrok Aike: origin, methodology and potential for environmental reconstruction

XY383 EGU2011-1847

Deniz Cukur, Sebastian Krastel, Daniel Winkelmann, Thomas Wonik, and Thomas Litt
Sedimentary Processes in Lake Van: First results from a joint interpretation of seismic and drilling data

XY384 EGU2011-4440

Ulrich Kotthoff, Francine McCarthy, Miriam Katz, Ross Williams, and Ryan Zanatta
Palynological results from the New Jersey shallow shelf: vegetation development on the Atlantic Coastal Plain and estimation of water depth and site-shoreline distance

XY385 EGU2011-13714

Thomas Westerhold and **Ursula Röhl**
Pacing of middle Eocene climate during the Middle Eocene Climate Optimum and the Chron C19r event - new results from the expanded ODP Site 1260 in the tropical western Atlantic.

XY386 EGU2011-13694

Nabil Khélifi and Michael Sarnthein
Late Pliocene age control and composite depth at ODP Site 982, revisited

XY387 EGU2011-13664

Jens Hefter, B. David. A. Naafs, Jaap S. Sinninghe-Damsté, and **Ruediger Stein**
The Biomarker Inventory, Trace, and Source of Heinrich Events and Heinrich-type Layers (MIS 8-16) in the North Atlantic

XY388 EGU2011-13666

Michael Schreck, Jens Matthiessen, and **Ruediger Stein**
Towards a Neogene Palynostratigraphy of the High Northern Latitudes: A Magnetostratigraphic Calibration of Dinoflagellate Cyst Datums in ODP Hole 907A from the Iceland Sea

XY389 EGU2011-5502

Ruediger Stein
The Great Challenges in Arctic Ocean Paleoceanography and Scientific Drilling

XY390 EGU2011-9957

Achim Kopf, Eiichiro Araki, Sean Toczko and the Exp 332 science party Team
Advanced observatory installations in the Nankai Trough Seismogenic Zone Experiment - Results from IODP Exp332

XY391 EGU2011-13719

Hans-Joachim Wallrabe-Adams, Michael Diepenbroek, Hannes Grobe, Robert Huber, Uwe Schindler, and Jamus Collier
IODP Information Service

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

Convener: Reinhard Budich | Co-Conveners: Dan Lunt

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL159 EGU2011-3358
Sven Kralisch, Peter Krause, and Christian Fischer
JAMS - a Software Framework for Integrated Environmental Modelling
- XL160 EGU2011-5803
Paolo Mazzetti, Stefano Nativi, Mattia Santoro, and Gary Geller
The GEO Model Web Initiative for Environmental Model Access Interoperability
- XL161 EGU2011-9753
Oliver Schmitz, Derek Karssenbergh, Kor de Jong, and Jean-Luc de Kok
Constructing integrated models: a scheduler to execute coupled components
- XL162 EGU2011-8459
Sarah Callaghan, Mark Morgan, Eric Guilyardi, Sophie Valcke, Charlotte Pascoe, Bryan Lawrence and the METAFOR Project Team
Supporting the climate community by providing common metadata for climate modelling digital repositories: the METAFOR project.
- XL163 EGU2011-10324
Alessandro Spinuso, Luca Trani, Malcolm Atkinson, and Michelle Galea
Infrastructure for Data-Intensive Seismology: Cross-correlation of distributed seismic traces through the ADMIRE framework
- XL164 EGU2011-11152
Raffaele Guarino and Mirko Albani
LTDP/FIRST Earth Science User Requirements
- XL165 EGU2011-8307
Lars Hoffmann, Paul Gibbon, Ole Kirner, and Stefan Versick
Simulation Laboratories for Climate Sciences and Environmental Research
- XL166 EGU2011-9128
Arnaud Caubel, Yann Meurdesoif, Alexis Canevet, Marie-Alice Foujols, Olivier Marti, Sebastien Masson, and Sophie Valcke
Parallel optimization of IPSL climate model
- XL167 EGU2011-12320
Claudio Schifani, Rudy Rossetto, and Iacopo Borsi
Open Source GIS tools for Water Resources Management
- XL168 EGU2011-6341
Thomas Jung, Sergey Danilov, Kerstin Fieg, Wolfgang Hiller, Jens Schroeter, Dmitry Sidorenko, and Qiang Wang
Towards a coupled climate model with a finite-element sea ice-ocean representation
- XL169 EGU2011-7726
Jon Hill and the Applied Modelling and Computation Group Team
Fluidity - an open-source, next-generation, fluid dynamics framework

GM9.2 – Glacial landforms and palaeoclimatic interpretation (co-listed) – Orals

Convener: Stefan Winkler | Co-Conveners: Tim Davies, Lasafam Iturrizaga, Martin Kirkbride

Room: 21

Chairperson: Stefan Winkler

- 10:30–10:45 EGU2011-9961
Philip Deline
Influences of rock avalanches on glacier behaviour and moraine formation in the Western European Alps
- 10:45–11:00 EGU2011-1808
Rosa M. Carrasco, Javier de Pedraza, and David Dominguez-Villar
The supraglacial debris supply in Cuerpo de Hombre paleoglacier (Spanish Central System).
Reconstruction and interpretation of a rock avalanche event
- 11:00–11:15 EGU2011-202
Natalya V. Reznichenko
A criterion for recognising rock avalanche sediments in glacial moraines
- 11:15–11:30 EGU2011-8669
Lasafam Iturrizaga
End moraine systems in the context of catastrophic and gradual processes in the Central Andes (33°–34°S)

11:30–11:45 EGU2011-5327

Martin Brook, Vince Neall, Bob Stewart, Rob Dykes, and Derek Birks

Recognition and paleoclimatic implications of Late Holocene glaciation on Mt Taranaki, North Island, New Zealand

11:45–12:00 EGU2011-4084

Anna Agatova, Andrei Nazarov, Roman Nepop, and Ljubov' Orlova

The late Holocene climatic variations in Russian Altai (Central Asia) on the basis of glaciations radiocarbon chronology

GM9.2 – Glacial landforms and palaeoclimatic interpretation (co-listed) – Posters

Convener: Stefan Winkler | Co-Conveners: Tim Davies, Lasafam Iturrizaga, Martin Kirkbride

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Lasafam Iturrizaga

A156 EGU2011-13828

Stuart Dunning, John Woodward, Andrew Turner, and Tim Davies

Landslides onto glaciers - absence of evidence is not evidence of absence

A157 EGU2011-13830

James Shulmeister, Daniel Santamaria-Tovar, Natalya Reznichenko, and **Tim Davies**

Classical Moraine, Non-classical Cause: The Waiho Loop, New Zealand

A158 EGU2011-2770

Samuel McColl and **Timothy Davies**

Rock avalanche demolishes paleoclimatic evidence in New Zealand: 'The Hillocks'

A159 EGU2011-13833

Martin Brook and Stefan Winkler

Moraine formation at advancing temperate maritime glaciers: Fox and Franz Josef Glaciers, Southern Alps, New Zealand

A160 EGU2011-13831

John A. Matthews and **Stefan Winkler**

Recent terminal moraine formation at Jostedalsgreen, South Norway, and its palaeoclimatic implication

A161 EGU2011-13832

Daniel Jäger and **Stefan Winkler**

The potential of lateral moraines on alpine glacier forelands for reconstructing Holocene glacier chronologies - some examples

A162 EGU2011-13852

Jianwei Lin, Shihjieng Chyi, Lide Ho, Shanshan Chang, Chen Chu, Huayu Lu, and Shuangwen Yi

Late Pleistocene to early Holocene glacial landforms of Yushan area, Taiwan

A163 EGU2011-9340

Regina Reber, Naki Akçar, Susan Ivy-Ochs, Peter W. Kubik, and Christian Schlüchter

New exposure ages from Erratic-boulders in the lower Reuss-valley (Switzerland)

A164 EGU2011-10853

Martin Kirkbride and Andrew Dugmore

Tephrochronology and the status of the Little Ice Age glacial maximum in Iceland.

A165 EGU2011-1106

Stefan Winkler

Application of Schmidt-hammer exposure-age dating (SHD) to improve numerical age dating of Holocene moraines

A166 EGU2011-13829

Martin Brook and Jacob Williams

Recognition of a pronival ("protalus") rampart in the Tararua Range, North Island, New Zealand

HS2.9 – Hydrological change: Regional hydrological behaviour under transient climate and land use conditions (co-listed) – Orals

Convener: Harald Kunstmann | Co-Conveners: Stefan Hagemann, Axel Bronstert, Alexander Georgiadi, Mohsin Hafeez

Room: 36

Chairperson: Harald Kunstmann, Alexander Georgiadi

08:30–08:45 EGU2011-13370

Ralf Merz, Juraj Parajka, Jose Luis Salinas, and Günter Blöschl

A complementary approach to estimate future runoff changes in Austria

- 08:45–09:00 EGU2011-6667
Pere Quintana Seguí, Florence Habets, and Eric Martin
 Comparison of past and future, high and low extremes of precipitation and river flow for the Mediterranean as projected using different statistical downscaling methods
- 09:00–09:15 EGU2011-9715
Alexander Georgiadi, Irina Milyukova, and Ekaterina Kashutina
 Response of Lena basin river runoff to recent and projected global climate warming
- 09:15–09:30 EGU2011-11375
Kerstin Stahl, Lena M. Tallaksen, Jamie Hannaford, and Henny A.J. van Lanen
 Observed runoff trends across Europe - a benchmark for land surface and global hydrological model simulations
- 09:30–09:45 EGU2011-6994
Luke Omondi Olang
 Effects of land cover change scenarios on storm runoff generation in the Nyando River Basin, Kenya
- 09:45–10:00 EGU2011-1068
Lu Wang, Paolo Reggiani, Pieter Van Gelder, and Han Vrijling
 GCMs simulative ability on climatic and extreme hydrologic conditions over Chinese Huai River Basin

COFFEE BREAK

Chairperson: Stefan Hagemann, Mohsin Hafeez

- 10:30–10:45 EGU2011-10665
Joshua Larsen, Grégoire Mariethoz, Martin Andersen, and Bryce Kelly
 Long term water quality trends in Australia's largest river basin
- 10:45–11:00 EGU2011-11072
Deniz Bozkurt and Omer Lutfi Sen
 Hydrological response of past and future climate changes in the Euphrates-Tigris Basin
- 11:00–11:15 EGU2011-8008
Borbala Galos, Csaba Matyas, and Daniela Jacob
 Can afforestation help to reduce the drought severity?
- 11:15–11:30 EGU2011-12329
Abubakr Salih and Heiner Körnich
 Climatic consequences of water harvesting in southern Sudan
- 11:30–11:45 EGU2011-5858
Jef Dams, Juliette Dujardin, and Okke Batelaan
 Assessing the impact of historical land cover changes on the water balance, comparing a pixel and sub-pixel approach
- 11:45–12:00 EGU2011-14138
Nicola Gedney and Graham Weedon
 Understanding the principle drivers of hydrological change in the 20th Century

HS2.9 – Hydrological change: Regional hydrological behaviour under transient climate and land use conditions (co-listed) – Posters

Convener: Harald Kunstmann | Co-Conveners: Stefan Hagemann, Axel Bronstert, Alexander Georgiadi, Mohsin Hafeez

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Axel Bronstert, Harald Kunstmann

- A184 EGU2011-694
Carla Ferreira, Daniel Soares, Tammo Steenhuis, António Ferreira, Rory Walsh, and Celeste Coelho
 Urban impact on hydrological processes: methodology and first results of a small Mediterranean catchment
- A185 EGU2011-2010
Ate Visser, Joop Kroes, Michelle Van Vliet, Stephen Blenkinsop, and Hans Peter Broers
 Climate change impacts on the hydrology of a small lowland catchment and the leaching of a heavy metal contamination
- A186 EGU2011-2370
Sangdan Kim and Doo Kee Kang
 Effects of Climate Change on Indicators of Eco-hydrologic Alternation in Nakdong River Basin
- A187 EGU2011-3161
Bertrand Leterme and Dirk Mallants
 Long-term groundwater recharge: sensitivity to climate and land use changes

- A188 EGU2011-3780
Luis Gustavo de Goncalves and Joao Gerd Zell de Mattos
A South America Land Surface Hydrological Reanalysis
- A189 EGU2011-6228
Aslan Belli and Haberlandt Uwe
A stochastic precipitation model conditioned on circulation patterns
- A190 EGU2011-6700
Pere Quintana Seguí, Marco Turco, and María del Carmen Llasat
Implementation of a distributed model for the simulation of the past, present and future water balance of the NE Iberian Peninsula
- A191 EGU2011-6712
Malgorzata Kepinska-Kasprzak, Piotr Struzik, Danuta Limanowka, and Przemyslaw Mager
Conventional and remote sensing techniques for determination of conditions for vegetation development - Climatic Water Balance vs. satellite derived vegetation status
- A192 EGU2011-6904
Vaclav Sipek and Sona Nemeckova
The assessment of the influence of different natural conditions on the particular processes of the hydrological cycle within a river basin
- A193 EGU2011-10592
Harald Kling, Martin Fuchs, and Maria Paulin
Ensemble modelling of runoff conditions in the upper Danube basin under climate scenarios
- A194 EGU2011-9966
Monica Piras, Giuseppe Mascaro, Roberto Deidda, and Enrique Vivoni
Sensitivity of the hydrological response in a Mediterranean catchment to different climate
- A195 EGU2011-12271
Simone Fatichi, Enrica Caporali, and Valeriy Ivanov
Using a weather generator and GCM realizations to produce an ensemble of hourly future climate time series
- A196 EGU2011-12086
Cui Chen, Fulco Ludwig, and Stefan Hagemann
Assessment of the impact of climate change on the global water cycle using multiple climate and hydrological models
- A197 EGU2011-11628
Utia Suarma, Johann Stötter, and Junun Sartohadi
Land Use Change Impact on the Hydrological Response in Code Catchment, Yogyakarta Province, Indonesia
- A198 EGU2011-11486
Petra Souvent, Barbara Cencur Curk, and Branka Bracic Zeleznik
Groundwater Quality as a Variable in Time and Space
- A199 EGU2011-10650
Munira Mohammad and **András Bárdossy**
A Water Balances Study of Klang River Valley for hydrological applications
- A200 EGU2011-11323
Bano Mehdi, Ralf Ludwig, and Bernhard Lehner
Future agricultural land use scenarios in the Altmühl watershed
- A201 EGU2011-10858
Sven Wagner, Peter Berg, Doris Duthmann, Joachim Liebert, Irena Ott, and **Harald Kunstmann**
High resolution regional climate simulations for hydrological impact studies in Germany
- A202 EGU2011-10615
Petra Souvent, Miso Andjelov, Tina Zajc, and Barbara Cencur Curk
Groundwater availability in the alluvial aquifer of Mura valley, Slovenia
- A203 EGU2011-2912
Hua Chen, Shen Tian, Chong-Yu Xu, and Shenglian Guo
Comparison of statistical downscaling methods and their performance in driving hydrological models in climate change study
- A204 EGU2011-8666
Maxime Souvignet, Hartmut Gaese, and Jürgen Heinrich
Future Water Availability in the Central Andes under the Climate Change Hypothesis
- A205 EGU2011-7055
Junting Guo, Zhiqiang Zhang, Shengping Wang, Peter Strauss, Alexander Eder, and Yin Tang
Response of streamflow to climate variability and land use/cover changes in a watershed in Northern China
- A206 EGU2011-7290
Shengping Wang, Zhiqiang Zhang, Peter Strauss, Junting Guo, Alexander Eder, and Yin Tang
Watershed hydrological impacts of climate variability and land use change by using an eco-hydrological approach combined with differential elasticity-based analysis
- A207 EGU2011-5958
Pavel Ondr, **Jakub Brom**, Jana Moravcova, Monika Koupilova, Tomas Pavlicek, and Renata Duffkova
The impact of selected meteorological components on discharge in the small agricultural catchment

- A208 EGU2011-5663
Jean-Philippe Vidal, Birgitte von Christerson, and Steven D. Wade
Using probabilistic climate information for UK water resource planning
- A209 EGU2011-9287
Huu Hoang Tran and Konrad Miegel
Operation of Dautieng reservoir for adaption on climate change - a case study in Vietnam
- A210 EGU2011-9106
Saskia van Pelt, Bart van den Hurk, Adri Buishand, and Jules Beersma
Improving the probability distribution of the change in extreme river flows due to climate change
- A211 EGU2011-10349
Anders Wörman
Change of runoff time scales during 20th Century due to landuse
- A212 EGU2011-14148
Richard Silberstein
Projected change in streamflow in southern Western Australia and changes in hydrologic regime under projected climate change - is this non-stationarity?
- A213 EGU2011-7068
Peteris Bethers, Juris Sennikovs, and Andrejs Timuhins
Skill assessment of regional climate models: T/P correlations impacts on hydrological modeling
- A214 EGU2011-10160
Gerald Corzo P, M.H.J. van Huijgevoort, and H.A.J. van Lanen
Analysis of 21st century droughts from multiple global hydrological and land surface models
- A215 EGU2011-10406
Andrea Soncini, Daniele Bocchiola, Andrea Castelletti, and Enrico Weber
Lake reservoir management under transient climate change in the Italian Alps
- A216 EGU2011-14139
Richard Turcotte, Simon Ricard, Dominic Roussel, Rémy Bourdillon, Blaise Gauvin-St-Denis, Diane Chaumont, and Jean-François Cyr
Hydrological impact of climate change on tributaries of the St. Lawrence River including uncertainty analysis
- A217 EGU2011-1137
Johanna Trümper and Jochen Schanze
Model concept for the projection of water related land-use parameters
- A218 EGU2011-266
Laura Kruitbos, Doerthe Tetzlaff, Chris Soulsby, Jim Buttle, Sean Carey, Rick Cunjak, Hjalmar Laudon, Jeff McDonnell, Kevin McGuire, Jan Seibert, and Jamie Shanley
Hydrological functioning and ecological response across northern catchments within the North-Watch program
- A219 EGU2011-6542
Alice Aubert, Philippe Mérot, Chantal Gascuel-Oudou, and Gérard Gruau
Climatic factors controlling the variations of chloride and nitrate concentrations in agricultural headwater catchments: preliminary results

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

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

Room: 11

Chairperson: Baris Salihoglu, Emilie Breviere, Christoph Garbe

- 08:30–08:45 EGU2011-1564
Jean-Pierre Gattuso, Jelle Bijma, Gehlen Marion, Riebesell Ulf, and Turley Carol
Ocean acidification: knowns, unknowns and perspectives
- 08:45–09:00 EGU2011-5462
Karen Marie Hilligsøe, **Katherine Richardson**, Jørgen Bendtsen, Jens Tang Christensen, Lise Lotte Sørensen, Torkel Gissel Nielsen, and Maren Molke Lyngsgaard
Changing ocean temperature and phytoplankton community size structure
- 09:00–09:15 EGU2011-1445
Diana Zuniga, Carmen G. Castro, Fernando Alonso, Eleonora Anfuso, Belen Arbones, Maria Frojan, and Francisco G. Figueiras
Vertical export of particulate organic carbon in the Ría de Vigo (NW Atlantic upwelling system): the role of physical forcing and phytoplankton community structure
- 09:15–09:30 EGU2011-10225
James Harle, Jason Holt, Robert Holmes, Icarus Allen, and Manuel Barange
The sensitivity of the coastal and shelf seas and their primary production to changes in the climate.

- 09:30–09:45 EGU2011-6248
Bronwyn Cahill, Katja Fennel, and John Wilkin
 Interannual Variability of Primary Production and Carbon Fluxes on Northeast North American Shelf: Sensitivity to Climate Change?
- 09:45–10:00 EGU2011-9810
Johan van der Molen, John Aldridge, Clare Coughlan, and Piet Ruardij
 Modelling marine ecosystem response to climate change and trawling in the North Sea

COFFEE BREAK

Chairperson: Christoph Garbe, Baris Salihoglu, Emilie Breviere

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

- 15:30–15:45 EGU2011-3700
John Plane, Ravi Kumar, Samantha MacDonald, Russell Saunders, Benjamin Murray, Anoop Mahajan, Juan Carlos Gomez Martin, and Alfonso Saiz-Lopez
 Halogen Chemistry in the Marine Boundary Layer
- 15:45–16:00 EGU2011-5207
David Ho, Rik Wanninkhof, Peter Schlosser, David S. Ullman, and David Hebert
 Towards a universal relationship between wind speed and gas exchange: Gas transfer velocities measured with $^3\text{He}/\text{SF}_6$ during the Southern Ocean Gas Exchange Experiment
- 16:00–16:15 EGU2011-6809
Anna Rutgersson, Maria Norman, and Anders Omstedt
 Oceanic convective mixing and the improved air-sea gas transfer velocity applied to the Baltic Sea biogeochemical cycle
- 16:15–16:30 EGU2011-6012
Séférián Roland, Iudicone Daniele, and Bopp Laurent
 Water mass analysis of effect of climate change on air-sea CO_2 fluxes. The Southern Ocean.
- 16:30–16:45 EGU2011-1957
Matthew Woodhouse, Graham Mann, Ken Carslaw, and Olivier Boucher
 Weak response of CCN to changes in DMS flux: implications for the CLAW feedback in current climate assessments
- 16:45–17:00 EGU2011-2019
Masanori Ito, Yutaka Watanabe, Shinichi Tanaka, Tsuneo Ono, Jun Nishioka, and Takeshi Nakatsuka
 The estimate of the denitrification using nitrogen gas excess in the Sea of Okhotsk

Wednesday, 06 April

CL1.15/EG5 – Multi-proxy investigations of climates of the last millennium (co-organized) – Orals

Convener: Mary Gagen | Co-Conveners: Philip Jones, Neil J. Loader, Michael Mann, Danny McCarroll, Iain Robertson, Eduardo Zorita

Room: 16

Chairperson: Mary Gagen

- 08:30–08:45 EGU2011-1998
Etienne Boucher, Joel Guiot, Emmanuel Chapron, and Myriam Khodri
 A millennial multi-proxy reconstruction of summer PDSI for Southern South America
- 08:45–09:00 EGU2011-2637
Thomas Felis, Norel Rimbu, Martin Kölling, Gerrit Lohmann, Jürgen Pätzold, Henning Kuhnert, Atsushi Suzuki, Mihai Dima, and Hodaka Kawahata
 Subtropical coral records of Northern Hemisphere climate variability - evidence for abrupt surface ocean salinity changes during the last centuries
- 09:00–09:15 EGU2011-12601
Kerstin Treydte, Millennium partners, and Isonet partners
 Winter Arctic Oscillation signal in a European tree-ring $\delta^{18}O$ network
- 09:15–09:30 EGU2011-7213
Mathias Trachsel, Christian Kamenik, Martin Grosjean and the Millennium (Southern Sites) Team
 Multi-archive summer temperature reconstruction for the European Alps, AD 1053 - 1996
- 09:30–09:45 EGU2011-6682
Bo Christiansen and Fredrik Charpentier Ljungqvist
 Reconstruction of the extra-tropical NH mean temperature over the last millennium with a method that preserves low-frequency variability
- 09:45–10:00 EGU2011-8738
Robert F. Spielhagen, Kirstin Werner, Steffen Aagaard-Sørensen, Katarzyna Zamelczyk, Evguenia Kandiano, Gereon Budeus, Katrine Husum, Thomas M. Marchitto, and Morten Hald
 Oceanic heat advection to the Arctic in the last Millennium

COFFEE BREAK

Chairperson: Eduardo Zorita

- 10:30–10:45 EGU2011-1897
Hugues Goosse, Elisabeth Crespin, Svetlana Dubinkina, Marie-France Loutre, Michael E. Mann, Hans Renssen, Yoann Sallaz-Damaz, and Drew Shindell
 The Medieval Climate Anomaly: mechanisms beyond a direct radiative forcing
- 10:45–11:00 EGU2011-3766
Hugo Beltrami, Jason Smerdon, Gurpreet Matharoo, and Nick Nickerson
 Quantifying the effects of the maximum borehole depth on ground surface temperature histories inferred from borehole temperature profiles
- 11:00–11:15 EGU2011-6402
 Jonas Bhend and **Stefan Brönnimann**
 Global Climate Reconstructions of the Past 400 years Using Ensemble Kalman Filtering
- 11:15–11:30 EGU2011-6975
Alistair Hind, Anders Moberg, Rolf Sundberg, Hiro Yamazaki, Dan Rowlands, Myles Allen, and Danny McCarroll
 Developing model-data comparison methods for the Millennium Project
- 11:30–11:45 EGU2011-8089
Jason Smerdon, Alexey Kaplan, Eduardo Zorita, Michael Evans, and J. Fidel Gonzalez-Rouco
 Testing the spatial performance of four late-Holocene climate field reconstruction methods using pseudoproxy experiments
- 11:45–12:00 EGU2011-11601
Martin Juckes
 Spread versus uncertainty: untangling climate reconstructions

CL1.15/EG5 – Multi-proxy investigations of climates of the last millennium (co-organized) – Posters

Convener: Mary Gagen | Co-Conveners: Philip Jones, Neil J. Loader, Michael Mann, Danny McCarroll, Iain Robertson, Eduardo Zorita

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Iain Robertson, Phil Jones and Mary Gagen

- XL17 EGU2011-1048
Heidi Kjennbakken, Hafliði Hafliðason, Hans Petter Sejrup, and Scott J. Lehman
Sub-decadal Norwegian Coastal Current variability expressed in XRF Ca/Fe content in the SE Norwegian Sea
- XL18 EGU2011-1107
Stefan Winkler
Late Holocene glacier chronology of the Southern Alps/New Zealand - a methodological challenge?!
- XL19 EGU2011-1241
Manfred Mudelsee
A proxy record of winter temperatures since 1836 from ice freeze-up/breakup in lake Näsijärvi, Finland
- XL20 EGU2011-1354
Fernando S. Rodrigo
Early meteorological data in southern Spain, 1790-1830
- XL21 EGU2011-1896
Hugues Goosse, Joel Guiot, Michael E. Mann, Svetlana Dubinkina, and Yoann Sallaz-Damaz
The medieval climate anomaly in Europe: comparison of the summer and annual mean signals in two reconstructions and in simulations with data assimilation
- XL22 EGU2011-1951
Wenmin Man, Tianjun Zhou, and Jie Zhang
Surface Air Temperature Changes during the Last Millennium Simulated by a Climate System Model
- XL23 EGU2011-2931
Nathalie Fagel, Meriem El Ouahabi, Gilles Lepoint, Sebastien Bertrand, Sabine Schmidt, Denisse Alvarez, Alberto Araneda, Fernando Torrejon, and Roberto Urrutia
The last millenium sedimentary record in Chilean Patagonian lakes
- XL24 EGU2011-3021
Dan Zhang, Richard Blender, and Klaus Fraedrich
Volcanic and ENSO effects on the climate in China in simulations and reconstructions
- XL25 EGU2011-3758
Gurpreet Matharoo, **Hugo Beltrami**, and Jason Smerdon
Ground surface temperature history uncertainties from the determination of the quasi steady state in borehole climatology
- XL26 EGU2011-3837
Rosanne D'Arrigo, Richard Seager, Jason Smerdon, Allegra LeGrande, and Edward Cook
The Anomalous Winter of 1783-4: Was the Laki eruption really to blame?
- XL27 EGU2011-4508
Volker Rath and J. Fidel Gonzalez Rouco
Correcting Borehole Temperature Profiles for the Effects of Postglacial Warming: Field Studies in North America and Eurasia
- XL28 EGU2011-5094
Juan Carlos Herguera and Daniela Rabiela
Seasonality and ENSO in high resolution cores in the NE Pacific
- XL29 EGU2011-5140
Eduardo Zorita and Sebastian Wagner
Transient climate simulations of the Mid-Holocene to present: temperature trends and meridional moisture transport
- XL30 EGU2011-5488
Bård Støve, Fredrik Charpentier Ljungqvist, and **Peter Thejll**
Climate reconstruction fundamentals: Testing proxies for linearity.
- XL31 EGU2011-5613
Kateřina Chromá, Rudolf Brázdil, Hubert Valášek, and Lukáš Dolák
Hydrometeorological extremes around the River Morava in the 18th-19th centuries derived from documentary sources of economic character
- XL32 EGU2011-7269
Zoltán Kern, Mónika Patkó, László Magyar, József Fekete, Sándor Kele, Zoltán Pályi, and Miklós Kázmér
Multiple tree-ring proxies (earlywood width, latewood width and $\delta^{13}C$) from a secular pendunculate oak (*Quercus robur* L.) stand, Nyírség, NE Hungary
- XL33 EGU2011-8294
Juan José Gomez-Navarro, Juan Pedro Montáñez, Sonia Jerez-Rodríguez, Pedro Jiménez-Guerrero, Raquel Lorente-Plazas, J. Fidel González-Rouco, Eduardo Zorita, and Juan Andrés García-Valero
Assessing the role of internal variability in Regional Climate Paleosimulations

- XL34 EGU2011-8437
Thomas Opel, Diedrich Fritzsche, and Hanno Meyer
Eurasian Arctic climate over the past millennium as recorded in the Akademii Nauk ice core (Severnaya Zemlya)
- XL35 EGU2011-8560
Louise Sime, Nicola Lang, Elizabeth Thomas, Ailsa Benton, Nerilie Abram, and Rob Mulvaney
A New Method for Testing Depth-Age Models and the Impact of Sampling Strategies
- XL36 EGU2011-8751
Bill Buhay
Recent Climate Change in the Red River Basin, Manitoba, Canada
- XL37 EGU2011-8925
Maria del Carmen Alvarez-Castro, David Gallego, Pedro Ribera, Cristina Peña-Ortiz, and Paulina Ordoñez
A New Historical Meteorological Database Over the Mediterranean Sea.
- XL38 EGU2011-9868
Polona Hafner, Iain Robertson, Danny McCarroll, Neil J. Loader, Mary Gagen, Roderick J. Bale, Högne Jungner, Eloni Sonninen, Emmi Hiltavuori, and Tom Levani?
Climate signal in $\delta^{18}\text{O}$, $\delta^2\text{H}$, $\delta^{13}\text{C}$ and tree-ring widths of *Larix decidua* growing at SE European Alps (Slovenia)
- XL39 EGU2011-9883
Dmitry Divine, Elisabeth Isaksson, Tonu Martma, Vejio Pohjola, Harro A. J. Meijer, Roderik S.W. van de Wal, John Moore, and Fred Godtliebsen
Updated chronology of the Lomonosovfonna ice core, Svalbard: implications for paleotemperature reconstruction
- XL40 EGU2011-9932
Roel Brien, Gerd Helle, Thijs Pons, and Emmanuel Gloor
Are oxygen isotopes in Amazon tree rings a good proxy for Amazon rainfall?
- XL41 EGU2011-10419
Laura Fernández-Donado, Fidel González-Rouco and the Millennium Multimodel Comparison Team
Last millennium climate simulations and reconstructions. A state-of-the-art comparison.
- XL42 EGU2011-10963
Anne-Sophie Fanget and the RHOSOS Group Team
Historical shifts of the Rhone River and catastrophic flood events revealed by multi-proxy analysis of the Rhone prodeltaic sediments (Gulf of Lions, NW Mediterranean)
- XL43 EGU2011-10965
Frederik Schenk and Eduardo Zorita
Reconstructing storminess and storm surge conditions for Northern Europe since 1850 using the Analog method as nonlinear statistical upscaling tool
- XL44 EGU2011-11405
Sebastien Joannin, Boris Vannière, Didier Galop, Michel Magny, Adrian Gilli, Emmanuel Chapron, Stefanie Wirth, Flavio Anselmetti, and Marc Desmet
Holocene vegetation response to human and climate impacts in the Central Mediterranean at Lake Ledro (Southern Alps, Italy)
- XL45 EGU2011-12534
Hans Linderholm, Tinghai Ou, Jee-Hoon Jeong, Chris Folland, and Yu Liu
An assessment of the stability of the teleconnection between the summer North Atlantic Oscillation and climate in East Asia during the last millennium
- XL46 EGU2011-12569
Y. Hiro Yamazaki, Alistair Hind, Anders Moberg, Kuniko Yamazaki, Tolu Aina, Milo Thurston, Nicolas Bellouin, Peter Hanappe, Myles Allen, and Danny McCarroll
Can we constrain future climate predictions with European paleoclimate data of the last millennium?
- XL47 EGU2011-12857
Ingo Heinrich, Ramzi Touchan, and Gerd Helle
Long-term climate and streamflow variations in Turkey derived from stable isotopes of *Juniperus excelsa*
- XL48 EGU2011-14103
Mary Gagen, Danny McCarroll, Eduardo Zorita, Giles Young, Risto Jalkanen, Neil Loader, Iain Robertson, Hakan Grudd, and Andreas Kirchhefer
Millennial length summer sunshine reconstructions from stable carbon isotope ratios in tree rings from across Fennoscandia.
- XL49 EGU2011-2861
James Annan and Julia Hargreaves
Millennial climate reconstructions through data assimilation: what can the proxies tell us about past climates?

CL1.16 – The role of (sub)polar regions: modern dynamics, long-term trends and natural variability – Orals
Convener: Marit-Solveig Seidenkrantz | Co-Conveners: Marie-Alexandrine Sicre, Antoon Kuijpers, Guillaume Masse, Kirsty Crocket, Peter Wadhams, Steve A. Piacsek

Room: 16

Chairperson: n.n.

- 13:30–13:45 EGU2011-8711
John Nissen
Arctic sea ice thermostatic control of global temperature
- 13:45–14:00 EGU2011-2050
Genrikh Alekseev
Climate change in the marine Arctic in the beginning of 21st century
- 14:00–14:15 EGU2011-6376
Richard Bintanja and Wilco Hazeleger
Arctic warming amplified by infrared radiation feedbacks
- 14:15–14:30 EGU2011-4198
Sidney Hemming, Camille Li, and Camille Li
Glaciers, sea ice, fresh water, and climate variability in the North Atlantic during the last glacial cycle
- 14:30–14:45 EGU2011-4681
Fiona Hibbert, Clare Peters, Ian Millar, William Austin, Melanie Leng, and Robert Gatliff
Ocean-Climate Interactions and the Early Glacial History of the Last British Ice Sheet: A multi-proxy study of a marine sediment core from the Rockall Trough, N.E. Atlantic
- 14:45–15:00 EGU2011-6753
William Roberts, Paul Valdes, and Tony Payne
Constraining the size of Heinrich Events using an iceberg/sediment model.
- Chairperson: n.n.
- 15:30–15:45 EGU2011-10743
Pablo Ortega, Marisa Montoya, Fidel González-Rouco, Juliette Mignot, and Stephanie Legutke
Variability of the Atlantic meridional overturning circulation in the last millennium and two IPCC scenarios
- 15:45–16:00 EGU2011-407
Juliane Müller, Ruediger Stein, Kirstin Werner, and Robert Spielhagen
Neoglacial cooling culminates in rapid sea ice oscillations in eastern Fram Strait
- 16:00–16:15 EGU2011-9777
Tor Lien Mjell, Ulysses Silas Ninnemann, Helga Flesche Kleiven, and Ian Hall
Variability in ISOW Vigor Over the Last two Millennia and its Relationship to Climate
- 16:15–16:30 EGU2011-3173
Heiko Moossen, Ursula Quillmann, John Andrews, and James Benda
A high resolution, multi-proxy approach to the reconstruction of the Holocene palaeoclimate of northwest Iceland.
- 16:30–16:45 EGU2011-10003
Dmitry Divine, Kari S. Berner, Nalan Koç, and Fred Godtliessen
Late Holocene abrupt climate variations of the Norwegian Atlantic current in response to changing solar insolation.
- 16:45–17:00 EGU2011-9123
Gianluca Marino, Rainer Zahn, Patrizia Ziveri, Jung-Hyun Kim, Ian R. Hall, Laura Rodríguez-Sanz, and P. Graham Mortyn
Potential impacts of the Agulhas Leakage on the Atlantic Meridional Overturning Circulation during glacial, deglacial, and interglacial times

CL1.16 – The role of (sub)polar regions: modern dynamics, long-term trends and natural variability – Posters

Convener: Marit-Solveig Seidenkrantz | Co-Conveners: Marie-Alexandrine Sicre, Antoon Kuijpers, Guillaume Masse, Kirsty Crocket, Peter Wadhams, Steve A. Piacsek

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XL50 EGU2011-10498
J. Scott Hosking, John Turner, and Andrew Orr
Factors that influence near surface temperatures over West Antarctica
- XL51 EGU2011-11891
Thomas Bracegirdle
Climatology and recent change of westerly winds over the Amundsen Sea Embayment derived from six re-analyses
- XL52 EGU2011-4272
Niklaus Merz, Sophie B. Wilmes, Jan Sedláček, Christoph C. Raible, and Reto Knutti
Regional links between atmospheric variability and the sea-ice-ocean system in the Southern Ocean

- XL53 EGU2011-2086
Elisabeth Schlosser, Stefanie Gillmeier, and **Andrea Fischer**
Amplification of Rossby waves in the circumpolar trough - implications for Antarctic weather and climate
- XL54 EGU2011-6519
Peter Wadhams and Joao Rodrigues
Recent Changes in the Thickness Distributions of Arctic Sea Ice
- XL55 EGU2011-3231
Denisa Witoszová and Kamil Láská
Climate conditions of the coastal zone of Petuniabukta, Billefjorden (Spitsbergen) in the period 2008 - 2010
- XL56 EGU2011-8074
Steve A. Piacsek, Pamela G. Posey, Julie L. McClean, David Hebert, Alan Wallcraft, Joseph Metzger, and Lucy F. Smedstad
Arctic ocean models intercomparison using a water mass census
- XL57 EGU2011-10388
Frazer Davies and Hans Renssen
Modelling the Freshwater Budget of the Arctic Ocean using the LOVECLIM global climate model
- XL58 EGU2011-9303
Andreas Born and Juliette Mignot
The Atlantic Subpolar Gyre as a stochastically forced oscillator
- XL59 EGU2011-9416
Valery Tsepelev and Eugeni Panidi
Analysis of climate changes of Arctic tundra zone with help of Virtual Globe
- XL60 EGU2011-8099
Marie Méheust, Kirsten Fahl, and Ruediger Stein
Reconstruction of the variability of surface water characteristics and terrigenous input in the north Pacific and Bering Sea: A biomarker approach.
- XL61 EGU2011-7947
Jerome Kaiser, David Ledu, Guillaume Massé, Sabine Schmidt, Germain Bayon, Ioanna Bouloubassi, and Marcel Babin
Multidecadal to interannual fluctuations in first year sea ice cover and river discharge on the Mackenzie Shelf (southern Beaufort Sea) during the last century
- XL62 EGU2011-10477
Mads Faurschou Knudsen, **Marit-Solveig Seidenkrantz**, Bo Holm Jacobsen, and Antoon Kuijpers
Tracking the Atlantic Multidecadal Oscillation through the last 8,000 years
- XL63 EGU2011-12965
Marie-Alexandrine Sicre, Juliette Mignot, Myriam Khodri, Ivia Closset, Perrine Nogues, Guillaume Massé, Ullah Ezat, Jon Eiriksson, and Karen-Luise Knudsen
Sea ice variability off North Iceland over the last millennium
- XL64 EGU2011-14140
Antoon Kuijpers, Marit-Solveig Seidenkrantz, Mads F. Knudsen, Bo H. Jacobsen, and Björn A. Malmgren
North Atlantic SST anomaly patterns and NW European winter climate in the past 2000 years - colder in the coming 2-3 decades?
- XL65 EGU2011-4669
Kerstin Perner, Matthias Moros, Jeremy M. Lloyd, Antoon Kuijpers, Richard Telford, and Jan Harff
Decadal scale benthic foraminiferal record of late-Holocene oceanographic variability from Disko Bugt, West Greenland
- XL66 EGU2011-2455
Kirstin Werner and Robert F. Spielhagen
Holocene episodes of warm conditions in the eastern Fram Strait - a multiproxy perspective on the variability of Atlantic Water inflow
- XL67 EGU2011-444
Christof Pearce, Catherine Jessen, Sandrine Solignac, Njáll F. Reynisson, Antoon Kuijpers, and Marit-Solveig Seidenkrantz
Multi-proxy reconstruction of mid to late Holocene sea-surface conditions offshore Newfoundland
- XL68 EGU2011-922
Andrea Fischel, Antoon Kuijpers, and Marit-Solveig Seidenkrantz
Multicentennial to millennial scale climate variability in the tropics - a 40,000 year record from the Caribbean Sea obtained from the Galathea 3 Expedition
- XL69 EGU2011-14223
Katharina Pahnke, Chandranath Basak, Ellen E. Martin, and Rainer Gersonde
Neodymium Isotope Ratios in Seawater and Sediments from the Pacific Sector of the Southern Ocean

CL2.3 – Mediterranean Climate: from past to future – Orals

Convener: Piero Lionello | Co-Conveners: Clare Goodess, Michael Tsimplis, Fatima Abrantes

Room: 15

Chairperson: F.Abrantes

- 08:30–08:45 EGU2011-8717
Piero Lionello and Annalisa Tanzarella
 A review of the main results of the MedCLIVAR project in promoting the research on the Mediterranean Climate
- 08:45–09:00 EGU2011-1105
Armineh Barkhordarian and Hans von Storch
 Consistency of observed sea level pressure trends with climate change projections over the Mediterranean area
- 09:00–09:15 EGU2011-5971
Michael Tsimplis, Marta Marcos, and Francesco Calafat
 Mass addition in the Mediterranean Sea 1993-2010
- 09:15–09:30 EGU2011-5785
Elke Hertig, Andreas Paxian, Gernot Vogt, Stefanie Seubert, Heiko Paeth, and Jucundus Jacobeit
 Downscaling of precipitation extremes in the Mediterranean area
- 09:30–09:45 EGU2011-9013
Barbara Mauz, Roberto Barbieri, and Jan Bloemendal
 Episodes of last interglacial aridity of Mediterranean coastal sites: a contrast to freshwater discharge hypothesis?
- 09:45–10:00 EGU2011-9757
Gianmaria Sannino, Adriana Carillo, Clotilde Dubois, Alberto Elizalde, Blandine Lheveder, and Paolo Oddo
 Mediterranean Coupled Models comparison: response of the thermohaline circulation to climate change

COFFEE BREAK

Chairperson: M.Tsimplis

- 10:30–10:45 EGU2011-7531
Lorenzo Tomassini and Alberto Elizalde
 Does the Mediterranean Sea influence the atmospheric dynamics of the European summer climate? The anomalous summer 2003 as a testbed
- 10:45–11:00 EGU2011-11340
Samuel Somot, Clotilde Dubois, Florence Sevault, Antoinette Alias, Bertrand Decharme, Isabelle Beau, Sophie Belamari, and Anastasia Romanou
 The Mediterranean Sea surface Heat Budget: from the observed estimates to the atmosphere-land surface-river-ocean regional modelling
- 11:00–11:15 EGU2011-12693
Maria Hatzaki, Christos Giannakopoulos, Mark McCarthy, Clare Goodess, and Deborah Hemming
 The cumulative impact of climate change and urban heat island on Mediterranean cities' temperatures
- 11:15–11:30 EGU2011-10084
Laurent Li, Blandine L'Heveder, and Alberto Casado
 Air-sea flux and deep water formation in the Western Mediterranean
- 11:30–11:45 EGU2011-1899
Baruch Ziv, Yochanan Kushnir, Jennifer Nakamura, Naomi H. Naik, and Tzvi Harpaz
 Reconstruction of Mediterranean Winter Cyclones by Climate Models
- 11:45–12:00 EGU2011-4444
Lirer Fabrizio, Sprovieri Mario, Ferraro Luciana, Vallefucio Mattia, Cascella Antonio, Petrosino Paola, Insinga Donatella Domenica, Pelosi Nicola, Tamburrino Stella, and Capotondi Lucilla
 Shallow water marine sediments from the Eastern Tyrrhenian Sea (Salerno Gulf): evidences of high resolution climatic variability during the late Quaternary

LUNCH BREAK

Chairperson: P.Lionello

- 13:30–13:45 EGU2011-12103
Rosina Grimm, Fanny Adloff, Ernst Maier-Reimer, and Uwe Mikolajewicz
 Ocean biogeochemical modeling of scenarios leading to eastern Mediterranean sapropel formation during the early Holocene

- 13:45–14:00 EGU2011-8267
Christoph C. Raible and Joachim Kuhlemann
 Mediterranean cyclone characteristics during the past millennium - implications for the hydrological cycle
- 14:00–14:15 EGU2011-4057
Matteo Zampieri, Rachid Abida, and Georgiy Stenchikov
 ITCZ migration effects in the Middle East, Northern Africa and Eastern Mediterranean
- 14:15–14:30 EGU2011-12249
Maria J. OrtizBevia, Francisco J. Alvarez-Garcia, Jesus Hernandez-Carretero, and Antonio RuizdeElvira
 The Mediterranean variability in summer in an ensemble of regional simulations under present and future conditions.
- 14:30–14:45 EGU2011-13222
Nico Becker, Gregor C. Leckebusch, Uwe Ulbrich, and Andreas Will
 Extreme wind events in the Mediterranean in regional simulations with different resolutions
- 14:45–15:00 EGU2011-13336
 Damià Gomis, **Gabriel Jordà**, Marta Marcos, Samuel Somot, and Enrique Álvarez-Fanjul
 Atmospheric contribution to Mediterranean sea level variability under different climate change scenarios

CL2.3 – Mediterranean Climate: from past to future – Posters

Convener: Piero Lionello | Co-Conveners: Clare Goodess, Michael Tsimplis, Fatima Abrantes

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P.Lionello

- XL70 EGU2011-901
Dario Redolat and Roberto Moncho
 Study of the frequency of heavy snowfall on the coast of Catalonia (Western Mediterranean) using an exponential model
- XL71 EGU2011-1258
Fernando S. Rodrigo and Sonia Fernández-Montes
 Frost days and tropical nights in the Iberian Peninsula, 1929-2005
- XL72 EGU2011-1502
 Tzvi Harpaz, **Hadas Saaroni**, and Baruch Ziv
 Events of extreme summer temperatures in the Eastern Mediterranean - classification according to air trajectories
- XL73 EGU2011-2766
Boussetta Soumaya, Kallel Nejib, Bassinot Franck, Labeyrie Laurent, Duplessy Jean-Claude, Caillon Nicolas, and Rebaubier Hélène
 Mg/Ca-paleothermometry in the western Mediterranean Sea on *G.bulloides* using paleoclimatic record
- XL74 EGU2011-3816
Aleix Cortina, Francisco Javier Sierro, Gabriel Filippelli, and José-Abel Flores
 Changes of surface productivity and ventilation of intermediate waters in the Gulf of Lions (Western Mediterranean Sea) from 133 to 400 Kyr
- XL75 EGU2011-4180
Jose Carlos Gonzalez-Hidalgo, Petr Stepanek, Michele Brunetti, Nicola Cortesi, and Martin de Luis
 Distance optimization between neighborhoods for reference series. A case study of Spanish conterminous land
- XL76 EGU2011-4182
Jose Carlos Gonzalez-Hidalgo, Nicola Cortesi, and Michele Brunetti
 Monthly contribution of largest daily events of precipitation (1956-2005) across mediterranean basin
- XL77 EGU2011-6291
Alessio Bellucci, Silvio Gualdi, Enrico Scoccimarro, Antonella Sanna, Paolo Oddo, and Antonio Navarra
 The role of Mediterranean mesoscale eddies on the climate of the Euro-Mediterranean region
- XL78 EGU2011-7339
Deniz Ural, Nuzhet Dalfes, and Omer Lutfi Sen
 Analysis of Regional Climate of Turkey with WRF-ARW Model
- XL79 EGU2011-7708
Christos Lolis and Aristides Bartzokas
 Spatial and temporal variability of the contribution of convection to winter precipitation in southeastern Europe
- XL80 EGU2011-7713
Patricia Zunino, Mikis Tsimplis, Manuel Vargas-Yáñez, Mari Carmen García-Martínez, and Francina Moya
 Correction factors for bathythermograph temperature in the Western Mediterranean. Detection of differences between bottle and CTD temperature
- XL81 EGU2011-7813
 Andrew Shaw, **Michael Tsimplis**, and Ioannis Andrianakis
 Sea Level Reconstruction using Altimetry and Tide Gauges within the Mediterranean Basin

- XL82 EGU2011-8352
Zaida Hernández, Juan Pedro Montávez, Juan José Gómez-Navarro, Sonia Jerez, Raquel Lorente-Plazas, and Pedro Jiménez-Guerrero
 An assessment of present climatological droughts in the western Mediterranean (Iberian Peninsula) by using high-resolution regional climate simulations
- XL83 EGU2011-8766
Letizia Congedi and Piero Lionello
 Assessing improvement of RCM with respect to GCM climate simulations over the Mediterranean region: mean monthly fields
- XL84 EGU2011-8850
Ruža Ivanović, Rachel Flecker, Marcus Gutjahr, and Paul Valdes
 Reconstructing Mediterranean-Atlantic exchange: Can Nd isotopes tell us about the Messinian Salinity Crisis?
- XL85 EGU2011-8920
Claudia Pizzigalli, Ghada AL-Naber, Letizia Congedi, Piero Lionello, Ahmed Hassan Fahmi, Muhammad Shatanawi, and Zohra Lili Chabaane
 Climate data analysis in the WASSERMed project
- XL86 EGU2011-8940
Annalisa Tanzarella, Letizia Congedi, Piero Lionello, Cosimo Pino, and Marco Reale
 A case study of climate change over a south-eastern Mediterranean region
- XL87 EGU2011-10131
Emmanouil Flaounas, Philippe Drobinski, Mathieu Vrac, Sophie Bastin, Jean-Christophe Calvet, Guy Delrieu, Cindy Lebeaupin, Efrat Morin, and Hiba Omrani
 Dynamical and Statistical downscaling of Mediterranean climate: comparison and uncertainty assessment in the MED-CORDEX and HYMEX context
- XL88 EGU2011-10506
Katrin Nissen, Andy Richling, Gregor C. Leckebusch, and Uwe Ulbrich
 Factors for the development of explosive cyclones in the Mediterranean region
- XL89 EGU2011-11411
Carlos Ribeiro, Pedro Terrinha, Antje Voelker, António Candeias, M. Rosário Azevedo, Sara Ribeiro, and Lucia Rosado
 Climate change towards more arid conditions in SW Iberia during the Holocene
- XL90 EGU2011-12136
Francesc M. Calafat, Marta Marcos, Damià Gomis, and Gabriel Jordà
 Comparison of satellite altimetry sea level anomalies and hydrographic observations in the Mediterranean Sea
- XL91 EGU2011-12205
William Cabos and Giovanni Liguori
 A coupled atmosphere-ocean regional climate model for the Mediterranean area
- XL92 EGU2011-12286
Maria J. OrtizBevia, Guiomar Sánchez-López, Francisco J. Alvarez-García, and Antonio RuizdeElvira
 Trends and interannual variability of heating and cooling degree-days in Spain under present and future climate conditions.
- XL93 EGU2011-12893
Javier Herrero, Cristina Aguilar, Agustín Millares, Antonio Moñino, María José Polo, and Miguel Ángel Losada
 Mediterranean high mountain meteorology from continuous data obtained by a permanent meteorological station at Sierra Nevada, Spain
- XL94 EGU2011-8234
khalid elfadli
 Trends of the Rainfall in North Libya over period of (1960-2009)
- XL95 EGU2011-12849
Fernando J. Mendez, Melisa Menendez, Cristina Izaguirre, Paula Camus, and Inigo J. Losada
 High resolution coastal wave climate in the Western Mediterranean
- XL96 EGU2011-5812
Marco Gaetani, Marina Baldi, Virginia Ciardini, Giovanni Dalu, and Gianpiero Maracchi
 The role of the jetstream on the extreme precipitation in the Euro-Mediterranean region: the 2009-2010 case study.
- XL97 EGU2011-13140
Jorge Lopez Parages and Belén Rodríguez-Fonseca
 The ENSO influence on the mediterranean rainfall. A multidecadal modulated relationship?
- XL98 EGU2011-7725
Victor Homar Santaner, Arnau Amengual Pou, Romualdo Romero March, Sergio Alonso Oroza, and Climent Ramis Noguera
 A quantile-quantile approach for the adjustment of RCM outputs to local scales: application to Platja de Palma, Spain

- XL99 EGU2011-5739
Annarita Mariotti and **Alessandro Dell'Aquila**
Decadal climate variability in the Mediterranean region: role of large-scale forcing and regional processes
- XL100 EGU2011-3520
Nabil Khélifi, Michael Sarnthein, Nils Andersen, Martin Frank, and Dieter Garbe-Schönberg
A major change in Pliocene Mediterranean hydrology, 3.55 - 3.35 Ma
- XL102 EGU2011-7575
Evangelos Tyrlis, Jos Lelieveld, and Benedikt Steil
The summer Etesian circulation in the eastern Mediterranean : influence of the South Asian Monsoon and midlatitude dynamics.
- XL103 EGU2011-4819
Mario Sprovieri, Enrico Di Stefano, Alessandro Incarbona, Nicola Pelosi, Maurizio Ribera d'Alcalà, Daniela Salvagio Manta, and Rodolfo Sprovieri
Climate oscillations and changes in the freshwater budget of the central-eastern Mediterranean between 20,000 and 70,000 years ago
- XL104 EGU2011-7420
Tobias Moller, Hartmut Schulz, Yvonne Hamann, Niels Andersen, and Michal Kucera
Abrupt changes in the sedimentation rate and evidence for submillennial periodicities in an annually laminated S5 sapropel from the Eastern Mediterranean.
- XL105 EGU2011-11229
Michal Kucera, Lea Numberger, Hartmut Schulz, Ursula Röhl, and Andreas Mackensen
Freshwater forcing of eastern Mediterranean circulation and sapropel formation during Marine Isotopic Stage 11

NP2.3/AS4.20/CL4.6/GM2.7/HS12.9 – Modelling and Understanding Geophysical Systems as Complex Networks (co-organized) – Orals

Convener: Reik Donner | Co-Conveners: Jürgen Kurths, Wolfgang Schwanghart, Tobias Heckmann

Room: 13

Chairperson: n.n.

- 13:30–14:00 EGU2011-5364
Efi Foufoula, Ilya Zaliapin, Stefano Zanardo, Michael Ghil, Mary Power, and Bill Dietrich
Dynamic River Networks (DRNs): a new conceptual framework for modeling spatially explicit and temporally dynamic fluxes connecting channels and landscapes
- 14:00–14:15 EGU2011-13541
A. Surjalal Sharma, Julia Cline, Aram Vartanyan, and Samuel Wascher
The magnetosphere as a multiscale complex network
- 14:15–14:30 EGU2011-2459
Norbert Marwan, Jonathan F. Donges, Friedrich-Wilhelm Gerstengarbe, Peter C. Werner, and Jürgen Kurths
Graph-theoretical analysis of regional climate variability
- 14:30–14:45 EGU2011-12674
Cristina Masoller, Marcelo Barreiro, and Arturo Marti
Inferring long memory processes in the climate network via nonlinear time series analysis
- 14:45–15:00 EGU2011-9579
Milan Palus, David Hartman, Martin Vejmelka, and Dagmar Novotna
(Tele)Connectivity in climate variability at different spatial/temporal scales in relation to solar and geomagnetic activity

NP2.3/AS4.20/CL4.6/GM2.7/HS12.9 – Modelling and Understanding Geophysical Systems as Complex Networks (co-organized) – Posters

Convener: Reik Donner | Co-Conveners: Jürgen Kurths, Wolfgang Schwanghart, Tobias Heckmann

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY435 EGU2011-12579
Tobias Heckmann and Wolfgang Schwanghart
Graph theory as a tool for the analysis of cascading systems in geomorphology
- XY436 EGU2011-11986
Wolfgang Schwanghart
Assessing the potential of time-slicing in numerical models of landscape evolution

- XY437 EGU2011-13884
Jobst Heitzig, Jonathan F. Donges, and Jürgen Kurths
Agglomerative clustering of climate networks by representation optimization
- XY438 EGU2011-11598
Jakob Runge, Jonathan Donges, and Jürgen Kurths
Climate Networks with Conditioned Links
- XY439 EGU2011-2105
Jonathan Donges, Hanna C.H. Schultz, Norbert Marwan, Yong Zou, and Jürgen Kurths
Coupled climate networks for analysing the terrestrial atmosphere's vertical dynamical structure
- XY440 EGU2011-4528
Kira Rehfeld, Norbert Marwan, Jonathan F. Donges, and Jürgen Kurths
Linear and nonlinear similarity measures for networks from irregularly sampled data
- XY441 EGU2011-12883
Reik Donner, Jonathan F. Donges, Martin H. Trauth, Norbert Marwan, and Jürgen Kurths
Large-scale transitions in Plio-Pleistocene African dust flux dynamics identified by recurrence network analysis
- XY442 EGU2011-11852
Reik Donner, Jobst Heitzig, Jonathan F. Donges, Yong Zou, Norbert Marwan, and Jürgen Kurths
The Geometry of Chaotic Dynamics - A Complex Network Perspective
- XY443 EGU2011-1749
Naoya Fujiwara and Jürgen Kurths
Parameter estimation of nonlinear dynamical systems using synchronization
- XY444 EGU2011-9725
ham ghaffari, Farzine Nasseri, and Robert Paul Young
Topological Spatio-Temporal Complexity Analysis of an Evolvable Rough Fracture
- XY445 EGU2011-4661
Florin Caldararu
How Does Earth Maintain the Stability of its Rotation Motion?: An Irreversible Thermodynamics Approach
- XY446 EGU2011-5501
Ye Pu
Parallel Applications Infrastructure for the ESM

ESSI/AS4.17/CL4.8 – International Collaboration and Integration Strategies for Climate and other Geosciences Informatics (co-organized) – Orals

Convener: David Arctur | Co-Conveners: Monique Petitdidier, Bryan Lawrence, Sandro Fiore, Mohan Ramamurthy

Room: 2

Chairperson: n.n.

- 15:30–15:45 EGU2011-1218
Aryan van Engelen, Albert Klein Tank, Gerard van der Schrier, **Else van den Besselaar**, Conny Schiks, and Tanya Prozny
What's new in the European Climate Assessment & Dataset (ECA&D)?
- 15:45–16:00 EGU2011-13744
Glenn Rutledge, Dean Williams, Gilbert Compo, Suruanjana Saha, Cecelia Deluca, Jay Hnilo, and **Estanislao Gonzalez**
NOAA's National Climate Model Portal and the Reanalysis.org Project
- 16:00–16:15 EGU2011-8985
Misha Krassovski, Tom Boden, Bai Yang, and Barbara Jackson
AmeriFlux Site and Data Exploration System
- 16:15–16:30 EGU2011-2095
Konstantinos Kourtidis, Aristeidis Georgoulas, Evangelos Kosmidis, Fanis Despotakis, and Panayiotis Symeonidis
AMFIC - a web data base for hosting and easy retrieval of atmospheric data from satellites
- 16:30–16:45 EGU2011-2213
Raymond Sluiter
Spatial interpolation and dissemination of climate variables using GIS and OGC web services
- 16:45–17:00 EGU2011-3096
Andrew Riddick and Holger Kessler
The Open Environmental Modelling Platform concept - an approach to information fusion in geoscience and environmental modelling

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

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

Room: D

Chairperson: Richard Alard and Michel Rixen

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

COFFEE BREAK

Chairperson: Eric Dombrowsky and Emanuel Coelho

- 10:30–10:45 EGU2011-3897
Alexander Kurapov, Peng Yu, Gary Egbert, and John Allen
 Data assimilation in a real-time coastal ocean forecast model off Oregon (US west coast)
- 10:45–11:00 EGU2011-8645
James While and Mathew Martin
 SST data assimilation in the 7km Atlantic Margin Model: initial results
- 11:00–11:15 EGU2011-8878
Richard Allard, Tomothy Campbell, Travis Smith, John Cook, Sue Chen, Frank Bub, Mark Swenson, and Daniel Geiszler
 The Coupled Ocean /Atmosphere Mesoscale Prediction System (COAMPS): Plans for Operational Implementation at Navy Production Centers
- 11:15–11:30 EGU2011-5481
Alexander Barth, Jacopo Chiggiato, Aida Alvera-Azcarate, Baptiste Mourre, Jean-Marie Beckers, Jochen Horstmann, and Michel Rixen
 Assimilation of high-frequency radar currents in the Ligurian Sea
- 11:30–11:45 EGU2011-8892
Charlie N. Barron, Tamara L. Townsend, Robert W. Helber, and Jan M. Dastugue
 Improved synthetic ocean profiles for assimilation into operational ocean models
- 11:45–12:00 EGU2011-6670
Andrea Storto, Simona Masina, and Srdjan Dobricic
 Evaluating the impact of different observing networks in the global ocean through ensemble simulations

IG5/BG1.11/CL4.13/GMPV40/SSP4.5 – Stable isotopes as tool in (paleo-)climate studies (co-organized) – Orals

Convener: Rolf Siegwolf | Co-Conveners: Martin Werner, Attila Demény, Mathieu Daëron, Erik Kerstel, Danny McCarroll, Alain Veron, Claude Hillaire-Marcel, Martin Frank

Room: 41

Chairperson: Attila Demeny & Martin Werner

- 08:30–08:45 EGU2011-672
Per-Olov Persson, Per S. Andersson, Don Porcelli, and Igor Semiletov
 The influence of Lena River water inflow and shelf sediment-sea water exchange for the Nd isotopic composition in the Laptev Sea and Arctic Ocean.
- 08:45–09:00 EGU2011-2577
Claude Hillaire-Marcel, Christelle Not, Bassam Ghaleb, and Anne de Vernal
 Setting chronostratigraphies in low sedimentation rate sequences from the Arctic Ocean: isotopic approaches with focus on U-series

- 09:00–09:15 EGU2011-3514
Claudia Teschner, **Martin Frank**, and Brian Alexander Haley
Plio-Pleistocene evolution of water mass exchange and erosional input in the Fram Strait
- 09:15–09:30 EGU2011-4654
Christine Hatté, Caroline Gauthier, Denis-Didier Rousseau, Pierre Antoine, Markus Fuchs, Slobodan Markovic, Olivier Moine, and Adriana Sima
Geochemical evidence of a specific atmospheric circulation on Balkan during last glaciation
- 09:30–09:45 EGU2011-5742
Claudia Ehlert, Patricia Grasse, and Martin Frank
Changes in silicate utilization and upwelling intensity off Peru since the LGM - insights from silicon isotopes
- 09:45–10:00 EGU2011-8042
Thomas Launois, Philippe Peylin, Valérie Daux, Valérie Masson-Delmotte, Thomas Eglin, Valentin Bellassen, and Camille Risi
Interannual variations in tree-rings' width and isotopic signatures (^{18}O and ^{13}C) combined to optimize ORCHIDEE land surface model

COFFEE BREAK

Chairperson: Rolf Siegwolf & Mathieu Daeron

- 10:30–10:45 EGU2011-2564
Arthur Gessler, Brandes Elke, Offermann Christine, and Ferrio Juan Pedro
The long way down - How tightly are carbon and oxygen isotope signals in the tree ring coupled to canopy physiological processes?
- 10:45–11:00 EGU2011-3086
Juan Pedro Ferrio, David Carulla, Jesús Julio Camarero, Mónica Aguilera, and Jordi Voltas
Retrospective approach to dieback in *Pinus sylvestris* through the analysis of carbon and oxygen stable isotope composition in tree ring cellulose
- 11:00–11:15 EGU2011-8596
Dr. Dimitrios Sarris, Dr. Rolf Siegwolf, and Prof. Christian Körner
Stable C and O isotope signals of drought in Mediterranean pines
- 11:15–11:30 EGU2011-2291
Shikma Zaarur, Hagit P. Affek, and Moti Stein
Clumped isotopes thermometry in *Melanopsis* shells and its paleoclimate implications
- 11:30–11:45 EGU2011-4734
Anna-Lena Grauel, Thomas W. Schmid, Stefano M. Bernasconi, and Gert J. De Lange
Calibration and application of clumped isotopes of *G. ruber* for high-resolution climate reconstructions of the last 2500 years from the Gulf of Taranto, Mediterranean Sea
- 11:45–12:00 EGU2011-663
Prasanna Kannan and Prosenjit Ghosh
Revisiting calibration of CO_2 based Clumped isotope thermometry - equilibration approach.

IG5/BG1.11/CL4.13/GMPV40/SSP4.5 – Stable isotopes as tool in (paleo-)climate studies (co-organized) – Posters
Convener: Rolf Siegwolf | Co-Conveners: Martin Werner, Attila Demény, Mathieu Daëron, Erik Kerstel, Danny McCarroll, Alain Veron, Claude Hillaire-Marcel, Martin Frank

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Erik Kerstel & Kerstyn Treydte

- A446 EGU2011-13555
Rolf Siegwolf
Stable isotopes, the link between tree physiology tree ring width data as climate proxies
- A447 EGU2011-1313
Hans Oerter, Frank Wilhelms, Margarete Hansson, Per Holmlund, Susanne Ingvander, Torbjörn Karlin, and Shuji Fujita
Stable isotope content and snow accumulation between 1957/58 and 2007/08 along the ice divide from Kohnen-Station towards Dome Fuji, East Antarctica
- A448 EGU2011-5169
Thejna Tharammal, André Paul, Ute Merkel, and David Noone
Influence of LGM boundary conditions on the global water isotope distribution in an atmospheric general circulation model

- A449 EGU2011-5430
Attila Demény, Gabriella Schöll-Barna, Zoltán Siklósy, Gábor Serlegi, Pál Sümegi, and Mária Bondár
 A warming-cooling cycle between 3.8 and 3.2 ky BP: correlations of speleothem and bivalve compositions with ice core records
- A450 EGU2011-5856
David Morris and Stephen Macko
 Estimation of marine, sea ice and terrestrial contributions to the Western Arctic carbon cycle using Bayesian mixing models and GC-IRMS
- A451 EGU2011-6354
Andres Diez-Herrero, Juan Antonio Ballesteros, Jose Maria Bodoque, and Virginia Ruiz-Villanueva
 Can tree-ring isotopes be used for improving the flood frequency analysis?
- A452 EGU2011-6400
Joseph Erbland, Joël Savarino, Samuel Morin, and Markus M. Frey
 Empirical sensitivity of $\delta^{15}\text{N}$ in nitrate to current snow accumulation rates in Antarctica : implications for the interpretation of the deep Vostok ice core
- A453 EGU2011-6928
Grzegorz Skrzypek, Zbynek Engel, Tomas Chuman, and Ludek Sefrna
 Stable carbon isotope composition of Distichia peat: calibration of a new paleotemperature proxy for high altitudes in the Andes
- A454 EGU2011-7398
Mathieu Daëron, Franck Bassinot, Eva Moreno, Benjamin Passey, Gülay Isgüder, Hélène Rebaubier, and Dominique Blamart
 Clumped-isotope studies of foraminifer records: inter-species differences, analytical bias and precision limits
- A455 EGU2011-8353
Christian Horn, Anton Eisenhauer, and Dirk Nürnberg
 Employing $\delta^{44}\text{Ca}$ ratios in foraminifera to simultaneously track sea surface regional temperatures (SST) and salinities (SSS) variations across Termination I
- A456 EGU2011-8934
Rein Vaikmäe
 The ice-core stable isotope records from small Arctic ice caps as proxies of climatic and environmental changes
- A457 EGU2011-9809
 Matthias Saurer, Anne Kress, Olga Sidorova, and **Rolf Siegwolf**
 On the precipitation signal in stable isotope ratios of tree-rings
- A458 EGU2011-11690
 Bastian Ullrich, **Kerstin Treydte**, Sonia Simard, Sonja Boda, Matthias Saurer, Rolf Siegwolf, Patrick Fonti, and Arthur Gessler
 Oxygen isotope pathway from the soil to the tree-ring at alpine sites in Switzerland
- A459 EGU2011-12240
 Tamás Mikes, Ilaria Mazzini, Andreas Mulch, Marianna Kovács, Peter Joniak, Natalia Hudáková, and **Bora Rojay**
 Paleoenvironmental significance of the Serravallian-Tortonian Tuğlu section, Çankiri Basin, Central Anatolia
- A460 EGU2011-13544
Arnoud Boom and Tina Godfrey
 Isotope records from Neotropical trees and stem rosettes
- A461 EGU2011-13897
Ashish Sarkar
 8.2 Ka climatic cooling event deciphered from equatorial Arabian Sea
- A462 EGU2011-2003
Christelle Not and Claude Hillaire-Marcel
 Marine evidence from Lomonosov Ridge for an Arctic trigger event of the Younger Dryas
- A463 EGU2011-2709
Peter Hülse and Samuel J. Bentley
 A ^{210}Pb sediment budget and granulometric proxy record of discharge variations for a sub-Arctic deltaic system: the Great Whale River in Hudson Bay, Canada
- A464 EGU2011-2954
Nathalie Fagel, Jonathan Gueibe, Nadine Mattielli, Christelle Not, and Claude Hillaire-Marcel
 Sedimentary provenances over glacial/interglacial stages in central Arctic constrained by mineralogy and radiogenic tracers
- A465 EGU2011-3321
Chunming Shi, Valérie Daux, Valérie Masson-Delmotte, Camille Risi, Jing Gao, Xiaochun Wang, and Qi-Bin Zhang
 Climatic interpretation of tree ring stable isotopes in the southeast Tibetan Plateau: links with regional cloud cover

- A466 EGU2011-3415
Valérie Daux, Jean-Louis Edouard, Valérie Masson-Delmotte, Georg Hoffmann, and Olivier Mestre
 Can climate variations be inferred from tree-ring parameters and stable isotopes from *Larix decidua*: budmoth outbreaks, juvenile effects and divergence problem.
- A467 EGU2011-4999
Francois Paquay and Greg Ravizza
 Variations in the osmium isotopes record during the Azolla phase (IODP Expedition 302)
- A468 EGU2011-9047
Mikhail Vasiliev, Keita Yamada, and Naohiro Yoshida
 Evaluation of clumped-isotopes of land snail's shells as a paleo-environmental indicator
- A469 EGU2011-9435
Lisa Wingate, Raphaël Dulhoste, Didier Bert, Barbara Köstner, Thomas Grünwald, Johannes Franke, and Jérôme Ogée
 Intra-annual variations in the density and stable isotope composition of Norway spruce tree rings at the Tharandt FLUXNET site
- A470 EGU2011-12646
Robert Sherrell, Hélène Planquette, Marie Séguret, Sharon Stammerjohn, and Per Andersson
 Continental sources of Fe and Nd isotopes to the Antarctic shelf systems of the Amundsen Sea and Western Antarctic Peninsula
- A471 EGU2011-13030
Gerald Dickens, Francesca Sangiorgi, Kristen St John, Catherine Stickley, Martin Jakobsson, Appy Sluijs, Henk Brinkhuis, and Jan Backman
 Re-Os Isotope Data Highlights Existing Problems With Interpretations of the Middle Lithological Units in Cores from the Central Arctic Ocean
- A472 EGU2011-13339
Zou Zou Kuzyk, Charles Gobeil, Miguel Goni, and Robie Macdonald
 Distributions and Inventories of Pb-210 and Cs-137 in Sediments along the North American Arctic Margin
- A473 EGU2011-1782
Lilia Sanchez-Vargas, Alberto Sanchez, Sergio Aguiñiga Garcia, and Eduardo Balart
 Stable oxygen isotopes in Benthic Foraminifera Recent of the Northeast Pacific

CR10.20 – Ice-sheet and climate interactions (co-listed) – Orals

Convener: Philippe Huybrechts | Co-Conveners: Thierry Fichefet, Andrey Ganopolski, Gilles Ramstein

Room: 7

Chairperson: Philippe Huybrechts

- 13:30–13:45 EGU2011-12925
Dorthe Dahl-Jensen
 Greenland ice cores tell tales on the extent of the Greenland Ice Sheet during the warm climate Eemian period 120.000 years BP.
- 13:45–14:00 EGU2011-5758
Michiel Helsen, Roderik Van de Wal, Michiel Van den Broeke, Johannes Oerlemans, and Willem Jan Van de Berg
 Greenland ice sheet retreat during the Eemian
- 14:00–14:15 EGU2011-3747
Didier Roche, Christophe Dumas, Catherine Ritz, and Sylvie Charbit
 Coupled climate - ice-sheet simulations of the "Great Ice Sheets" of the Last Glacial Maximum: progress, pitfalls and lessons using the LOVECLIM-GRISLI coupled model
- 14:15–14:30 EGU2011-234
Alexander Robinson, Reinhard Calov, and Andrey Ganopolski
 A new indicator of Greenland Ice Sheet stability
- 14:30–14:45 EGU2011-3543
Marianne Sloth Madsen, Shuting Yang, and Gudfinna Adalgeirsdottir
 Sensitivity of the Greenland Ice Sheet in the climate model EC-Earth
- 14:45–15:00 EGU2011-9988
Heiko Goelzer, Philippe Huybrechts, Sarah Raper, Marie-France Loutre, Hugues Goosse, and Thierry Fichefet
 Ensemble ice and sea-level change projections with the Earth system model of intermediate complexity LOVECLIM

CR10.20 – Ice-sheet and climate interactions (co-listed) – Posters

Convener: Philippe Huybrechts | Co-Conveners: Thierry Fichefet, Andrey Ganopolski, Gilles Ramstein

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Andrey Ganopolski

- XL146 EGU2011-5898
Malou Maris and Hans Oerlemans
The effect of different climate states on the Antarctic Ice Sheet
- XL147 EGU2011-12717
Jorge Alvarez-Solas, Marisa Montoya, Catherine Ritz, Sylvie Charbit, Gilles Ramstein, and Christophe Dumas
Simulating the effects of oceanic variability on millennial-scale iceberg discharges: focus on Heinrich events
- XL148 EGU2011-9919
Dirk Barbi, Gerrit Lohmann, Malte Thoma, and Klaus Grosfeld
The impact of ice sheet dynamics on ocean circulation in a coupled Earth system model
- XL149 EGU2011-10022
Heiko Goelzer, Ives Janssens, Johanna Nemec, and Philippe Huybrechts
A dynamic continental runoff routing model applied to the last Northern Hemisphere deglaciation
- XL150 EGU2011-2448
Maria Hakuba, Doris Folini, Martin Wild, and Christoph Schär
Greenland in a changing climate: topographic feedback on snow accumulation
- XL151 EGU2011-10726
Florian Ziemer, Christian Rodehacke, Andreas Chlond, and Uwe Mikolajewicz
Simulating Heinrich Events in a Complex Climate Model
- XL152 EGU2011-7035
Sylvie Charbit, Christophe Dumas, Masa Kageyama, Catherine Ritz, and Didier Roche
Investigating the impact of the ablation parameterization on simulated ice sheets over the last glacial cycle
- XL153 EGU2011-3410
Suchithra Sundaram, Qiuzhen Yin, Andre Berger, and Helene Muri
Ice sheet induced North Atlantic Oscillation mode during an interglacial 500,000 years ago and its impact on East Asian Summer Monsoon
- XL154 EGU2011-7858
Aurélien Quiquet, Ralf Greve, and Catherine Ritz
Modelling the Greenland Ice Sheet through the last glacial-interglacial cycle: climatic constraints and climatic uncertainties
- XL155 EGU2011-10873
Martin Stendel, Sebastian Mernild, Jens Hesselbjerg Christensen, Glen E. Liston, Christopher A. Hiemstra, Bent Hasholt, Gudfinna Adalgeirsdottir, Philippe Lucas-Picher, and Ruth Mottram
High resolution modelling of surface mass balance in Western Greenland
- XL156 EGU2011-484
David Naafs, Jens Hefter, Patrizia Ferretti, Ruediger Stein, and Gerald Haug
What controlled the onset of Hudson Strait Heinrich(-like) events in the Mid-Pleistocene (~640 ka)?
- XL157 EGU2011-13818
Oleg Rybak and Philippe Huybrechts
Ensemble simulations of the minimum configuration of the Greenland ice sheet during the Last Interglacial constrained by ice-core data

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

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

Room: 18

Chairperson: Eric Guilyardi, Alexey Fedorov

- 08:30–08:45 EGU2011-4359
Michael McPhaden
The Changing Face of El Niño
- 08:45–09:00 EGU2011-2429
Tom Russon, Alexander Tudhope, Gabriele Hegerl, Mat Collins, and David Battisti
Towards evaluating natural forced and unforced variability in ENSO: strategies for model / paleo-proxy data inter-comparison
- 09:00–09:15 EGU2011-2362
Soon-Il An, Ji-Won Kim, Jae-Heung Park, and Seul-Hee Lim
Warming Trends of Tropical Pacific Warm Pool and Cold Tongue SSTs
- 09:15–09:30 EGU2011-2740
Benjamin Giese, Howard Seidel, and Sulagna Ray
Using SODA Ensemble Reanalyses to Describe ENSO 1871-2008

- 09:30–09:45 EGU2011-5104
James Lloyd, Eric Guilyardi, and Hilary Weller
 The Role of Atmosphere Feedbacks During ENSO in AMIP CMIP3 Simulations
- 09:45–10:00 EGU2011-7236
Yukiko Imada, Jin Fei-Fei, Masahide Kimoto, and Masahiro Watanabe
 ENSO amplitude change in doubled CO₂ experiments evaluated by the temperature variance equation
- 10:00–10:15 EGU2011-6529
Wilco Hazeleger, Geert Jan van Oldenborgh, Karin van der Wiel, Xueli Wang, and Bert Wouters
 Changes in ENSO characteristics in EC-Earth

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Eric Guilyardi, Alexey Fedorov

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

- XY433 EGU2011-11605
Koen Verbist, Andrew W. Robertson, **Wim M. Cornelis**, and Donald Gabriels
Seasonal precipitation predictability in central-northern Chile for dryland management
- XY434 EGU2011-11679
Gushchina Dasha and Dewitte Boris
Intraseasonal tropical atmosphere variability associated to canonical and Modoki El Niños

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Baris Salihoglu, Emilie Breviere, Christoph Garbe

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

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

Thursday, 07 April

BG6.1 – Marine and Terrestrial proxies: development and reconstructions. (co-listed) – Orals

Convener: Lennart de Nooijer | Co-Conveners: Kai G. Schulz, Daniela Schmidt, Gert-Jan Reichart, Oliver Heiri, Darren Gröcke, André F. Lotter, Michel Magny, Stuart Robinson, Jung-Hyun Kim

Room: 24

Chairperson: n.n.

08:30–08:45 EGU2011-9793

Andreas Koutsodendris, Achim Brauer, Heiko Pälike, Jörg Pross, Ulrich C. Müller, and André F. Lotter
Sub-decadal- to decadal-scale climate variability during the Holsteinian interglacial (MIS 11) evidenced in varves from northern Germany

08:45–09:00 EGU2011-8191

Frauke Schmidt, **Heinz Wilkes**, Iris Kristen, and Hedi Oberhänsli
Environmental and biogeochemical changes in Lake Tswaing, South Africa, during the last 84 ka BP

09:00–09:15 EGU2011-1256

Joonas Virtasalo and Aarno Kotilainen
Holocene benthic responses to saline water inflows to the Baltic Sea - INFLOW project

09:15–09:30 EGU2011-1441

Yvonne Hermanns and Harald Biester
Controlling factors of mercury accumulation in lake sediments during the past 17,000 years - A case study from Southern Patagonia

09:30–09:45 EGU2011-3052

Stefan Krause, Volker Liebetrau, Judith A. McKenzie, and Tina Treude
Dolomite-type-ordered carbonate nucleation in biofilm of a marine sulfate-reducing bacterium: the role of extracellular polymeric substances

09:45–10:00 EGU2011-6277

André Krabbenhöft, Anton Eisenhauer, Jacek Raddatz, Volker Liebetrau, Jan Fietzke, Florian Böhm, Thomas Felis, and Stephanie Reynaud
Stable Strontium ($\delta^{88/86}\text{Sr}$) Isotope Fractionation in Scleractinian Corals

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2011-8964

Luke Mackinder, Glen Wheeler, Declan Schroeder, Ulf Riebesell, and Colin Brownlee
Biomining and Gene Expression in *Emiliania huxleyi*

10:45–11:00 EGU2011-4649

Luc Beaufort, Thibault de Garidel-Thoron, Yves Gally, and Nicolas Barbarin
Intradecadal changes of coccolith calcification during the last 1000 years obtained with a new method of thickness measurements

11:00–11:15 EGU2011-6587

Heather Stoll, Gerald Langer, Nobumichi Shimizu, and Kinuyo Kanamaru
B/Ca ratios in coccoliths and relationship to calcification vesicle pH and dissolved inorganic carbon

11:15–11:30 EGU2011-6642

Takashi Toyofuku, Hidetaka Nomaki, Masashi Tsuchiya, and Hiroshi Kitazato
Foraminiferal cellular pH control under high-CO₂ condition in the laboratory

11:30–11:45 EGU2011-8750

Caroline Cleroux, Peter deMenocal, Kristen L. Gore, David Madigan, Jennifer Arbuszewski, and Brad Linsley
Reconstructing the upper water column structure along 35°N–20°S in the Atlantic: a tool to reconstruct past thermocline circulation.

11:45–12:00 EGU2011-3464

Carne Hugué, Jung-Hyun Kim, Stefan Schouten, and Toni Rosell-Melé
Constraints on the application of the TEX₈₆ temperature proxy in the Mediterranean

BG6.1 – Marine and Terrestrial proxies: development and reconstructions. (co-listed) – Posters

Convener: Lennart de Nooijer | Co-Conveners: Kai G. Schulz, Daniela Schmidt, Gert-Jan Reichart, Oliver Heiri, Darren Gröcke, André F. Lotter, Michel Magny, Stuart Robinson, Jung-Hyun Kim

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

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- BG37 EGU2011-286
Angela A. Bruch, Steffen Scharrer, and Ivan G. Gabrielyan
Early Pleistocene climate and environmental change in Armenia - reconstructing temporal corridors of early human expansions
- BG38 EGU2011-516
Evgeniya Gonyk
Paleoenvironmental reconstructions of the n8 coal bed of the Lviv-Volyn basin by palynological data (Western Ukraine)
- BG39 EGU2011-643
Thibaut Caley, Jung-Hyun Kim, Bruno Malaizé, Jacques Giraudeau, Thomas Laepple, Nicolas Caillon, Karine Charlier, Hélène Rebaubier, Linda Rossignol, and Isla Castañeda
Comparison of four independent paleotemperature records over the last 800 ka in the South-West Indian Ocean: similarities and differences
- BG40 EGU2011-2067
Wenwen Chen, Gesine Mollenhauer, Torsten Bickert, and Mahyar Mohtadi
Using organic geochemistry proxies to reconstruct sea surface temperature in the eastern Indian Ocean
- BG41 EGU2011-2636
Irina Bundeleva, Liudmila Shirokova, Pascale Benezeth, Oleg Pokrovsky, and Elena Kompantseva
Experimental modelling of calcium carbonate precipitation during anoxygenic phototrophic bacteria *Rhodovulum* sp. activity
- BG42 EGU2011-2976
Sylvie Derenne, Arnaud Huguet, Céline Fosse, and Fatima Laggoun-Défarge
Effects of in situ artificially increased temperature on the distribution of branched GDGTs in a French peat bog
- BG43 EGU2011-5572
Karoline Kabel, Matthias Moros, Florian Adolphi, Marianne Baas, Christian Porsche, and Jaap S. Sinninghe Damsté
Application of TEX86-paleothermometry in the Baltic Sea: Temperature reconstruction of the past 1000 years
- BG44 EGU2011-6000
Emiliya Kirilova, Oliver Heiri, Siim Veski, and André F. Lotter
Summer temperature shifts during the Late Glacial in Northeastern Europe
- BG45 EGU2011-7216
Liisa Nevalainen and Tomi P. Luoto
Past evolutionary responses of Chydoridae (Cladocera) under oxygen depletion in an Austrian Alpine lake
- BG46 EGU2011-7443
Tomi Luoto and Liisa Nevalainen
Fossil invertebrates reveal major ecological turnovers during the recent centuries in a high altitude lake in the Austrian Alps
- BG47 EGU2011-7827
Noa Fruchter, Anton Eisenhauer, Jonathan Erez, Florian Boehm, and Jan Fietzke
Laboratory experiments on elemental and isotopic fractionation in coral aragonite precipitation
- BG48 EGU2011-8098
Lennart Bach, Christine Bauke, Sebastian Meier, Luke Mackinder, Ulf Riebesell, and Kai Georg Schulz
The influence of pH and dissolved inorganic carbon on coccolith size and morphology of *Emiliania huxleyi*
- BG49 EGU2011-8631
Michał Słowiński, Izabela Zawiska, Agnieszka M. Noryśkiewicz, Karina Apolinarska, and Monika Lutyńska
Macrophyte vegetation development in paleolake Czechowskie (northern Poland), during the late-glacial and early-Holocene
- BG50 EGU2011-8696
Gerald Langer, Lennart De Nooijer, Gernot Nehrke, Tomas Vagner, Nina Keul, Antje Funcke, Marcel Kuypers, and Jelle Bijma
Mg and Sr banding in the shell of the benthic foraminifer *Ammonia tepida* revealed by NanoSIMS
- BG51 EGU2011-8752
Trine Holm, Al Werner, Anne Hormes, Gerhard Kuhn, Matthias Forwick, Roland Psenner, and Karin A. Koinig
Holocene environmental changes in an Arctic lake
- BG52 EGU2011-10452
Lennart de Nooijer, Antje Funcke, Jelle Bijma, and Gert-Jan Reichert
How do foraminifera discriminate against magnesium and how does this affect their calcite chemistry?
- BG53 EGU2011-10548
Michelle Johnson, Manuel Gloor, and Jon Lloyd
Evaluating modelled soil profile evolution with observations from a basalt chronosequence in Queensland, Australia.

- BG54 EGU2011-11041
Mathias Trachsel, Atle Nesje, Jostein Bakke, Bjørn C. Kvisvik, and Pål R. Nielsen
 Inferring organic content of sediments by means of scanning reflectance spectroscopy (380-730 nm); a case study from proglacial lakes in Norway
- BG55 EGU2011-11531
Jian Ren, Rainer Gersonde, Oliver Esper, and Constance Sancetta
 Diatom distribution in North Pacific surface sediments and application for paleoceanographic reconstruction
- BG56 EGU2011-11965
Živil? Žigait?, Alberto Pérez-Huerta, Michael M. Joachimski, and Oliver Lehnert
 The 18O/16O ratio in vertebrate biogenic apatite as a proxy to Palaeozoic seawater temperatures
- BG57 EGU2011-11971
Karoliina Koho, Mariette Wolthers, Ed Hathorne, and Gert-Jan Reichart
 Trace metal content of benthic foraminifera: field study and modelling approach
- BG58 EGU2011-12127
 Willem O. van der Knaap, **Mariusz Lamentowicz** and the Mauntschas/Millennium Team
 Multi-proxy, high-resolution record of peatland development and its drivers during the last millennium from the subalpine Swiss Alps

CL1.11 – Interglacial climate change - Learning from paleoclimate archives and models (co-sponsored by the IGBP project Past Global Changes (PAGES) and the FP7 project Past4Future) – Orals

Convener: Hubertus Fischer | Co-Conveners: Dorthé Dahl-Jensen, Hans Renssen, Joy Singarayer, Andy Ridgwell

Room: 15

Chairperson: n.n.

- 13:30–13:45 EGU2011-12981
Julie Brigham-Grette, Martin Melles, Pavel Minyuk, Andre Andreev, Anatoly Lozhkin, Pat Anderson, Jeff Synder, Volker Wennich, and Elgygytgyn Science Party
 Arctic Interglacial and Pliocene Warm periods of the last 3.6 My: initial results from Lake El'gygytgyn, Western Beringia
- 13:45–14:00 EGU2011-7104
Eric Wolff and the QUEST Theme 2 Methane Team
 Causes of orbital and millennial scale changes in methane concentration
- 14:00–14:15 EGU2011-8682
Matthias Baumgartner, Adrian Schilt, Jakob Schwander, Renato Spahni, Hubertus Fischer, and Thomas Stocker
 Interhemispheric concentration gradient of CH₄ around the last glacial maximum (20-30 kyr BP) and attenuation of the atmospheric signal due to enclosure process in the ice
- 14:15–14:30 EGU2011-5712
Tim Bruecher, Carlo Barbante, Victor Brovkin, Nils Fischer, Natalie Kehrwald, Silvia Kloster, Mitchell J. Power, Thomas Raddatz, and Vannière Boris
 Fire and ice: a comparison of interglacial fire activity within the MPI-ESM and ice core proxies
- 14:30–14:45 EGU2011-11310
Natalie Kehrwald, Elena Barbaro, Paolo Gabrielli, Andrea Gambaro, Lonnie Thompson, Roberta Zangrando, Piero Zennaro, and Carlo Barbante
 Polar and tropical ice cores record fire activity across present and previous interglacial cycles
- 14:45–15:00 EGU2011-9336
Jochen Schmitt, Robert Schneider, Joachim Elsig, Anna Lourantou, Markus Leuenberger, Peter Koehler, Thomas Stocker, Dominique Raynaud, Jerome Chappellaz, and Hubertus Fischer
 New ice core records on the glacial/interglacial change in atmospheric delta 13C of CO₂

Chairperson: n.n.

- 15:30–15:45 EGU2011-3379
Mark Siddall, Eelco Rohling, Bill Thompson, and Andrea Dutton
 Implications of our uncertainties on LIG sea level
- 15:45–16:00 EGU2011-6404
Emma Stone and Daniel Lunt
 Modelling the Climate of the Last Interglacial Using a Fully Coupled General Circulation Model
- 16:00–16:15 EGU2011-10425
Pepijn Bakker, Hans Renssen, and Cédric van Meerbeeck
 The impact of a shrinking Greenland Ice Sheet on the climate in the North Atlantic region during the Last Interglacial.
- 16:15–16:30 EGU2011-9730
Eirik Vinje Galaasen, Ulysses Silas Ninnemann, Nil Irali, and Helga Flesche Kleiven
 Rapid Reductions of North Atlantic Deep Water During the Peak of the Last Interglacial Period

16:30–16:45 EGU2011-2764

Anne de Vernal, Claude Hillaire-Marcel, Bianca Fréchette, Nicolas Van Nieuwenhove, Henning Bauch, and Frédérique Eynaud
The last interglacial in the northern North Atlantic and adjacent areas : Evidence for a more zonal climate than during the Holocene

16:45–17:00 EGU2011-3024

Valérie Masson-Delmotte and the co-authors Team
A comparison of the present and last interglacial periods in six Antarctic ice cores

CL1.11 – Interglacial climate change - Learning from paleoclimate archives and models (co-sponsored by the IGBP project Past Global Changes (PAGES) and the FP7 project Past4Future) – Posters

Convener: Hubertus Fischer | Co-Conveners: Dorthe Dahl-Jensen, Hans Renssen, Joy Singarayer, Andy Ridgwell

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Hubertus Fischer, Dorthe Dahl Jensen, Hans Renssen, Joy Singarayer, Andy Ridgwell

XL1 EGU2011-1233

James Levine, Eric Wolff, Anna Jones, Louise Sime, Paul Valdes, Glenn Carver, Nicola Warwick, Alex Archibald, and John Pyle
Reconciling the changes in methane sources and sinks between the last glacial maximum and the pre-industrial era

XL2 EGU2011-1684

Samuel Albani, Barbara Delmonte, Claudia Mazzola, and Valter Maggi
The new mineral dust record from the TALDICE ice core (East Antarctica)

XL3 EGU2011-1884

Aurélien Mairesse, Marie-France Loutre, **Hugues Goosse**, Xavier Crosta, Pierre Mathiot, Svetlana Dubinkina, and Yoann Sallaz-Damaz
How does data assimilation in the Southern Hemisphere affect the representation of climate during the Holocene climate optimum?

XL4 EGU2011-2994

Bernhard Bereiter, Dieter Lüthi, Michael Siegrist, Thomas F. Stocker, and Hubertus Fischer
Atmospheric carbon dioxide from 115,000 to 38,000 years BP and its implications for changes in the carbon cycle

XL5 EGU2011-3109

Christian Leipe, Dieter Demske, Pavel E. Tarasov, Thomas Kleinen, Victor Brovkin, Zhuo Zheng, Bernd Wünnemann, and Frank Riedel
Late Quaternary changes in vegetation, Indian monsoon and westerly circulation derived from the pollen data from the Himalayan lake Tso Kar, NW India: An attempt of quantitative reconstruction and comparison with model simulation results.

XL6 EGU2011-3238

Jesper Sjolte and Georg Hoffmann
Weak temperature control of Greenland $\delta^{18}O$ during the previous interglacial

XL7 EGU2011-3262

Nils Fischer and Johann H. Jungclauss
Evolution of the Seasonal Temperature Cycle in a Transient Holocene Simulation: Orbital Forcing and Sea Ice

XL8 EGU2011-3590

Niklaus Merz, Christoph C. Raible, and Thomas F. Stocker
Orbitally forced differences in the variability of the Northern Hemisphere atmospheric flow during two periods of the Holocene

XL9 EGU2011-3621

Thomas Kleinen, Victor Brovkin, Guy Munhoven, and David Archer
The interglacial carbon cycle

XL10 EGU2011-4588

Andreas Born, Kerim Hestnes Nisancioglu, Bjørge Risebrobakken, and Masa Kageyama
Late Eemian warming in the Nordic Seas delayed glacial inception in Scandinavia

XL11 EGU2011-570

Marion M. Bisiaux, Ross Edwards, Joseph R. McConnell, Mary. R. Albert, Thomas Neumann, Elisabeth Isaksson, Helgard Anschuetz, Tas D. Van Ommen, Mark A.J. Curran, and Andrew Smith
Ice Core Records of Black Carbon Fluxes to Antarctica A.D. 1800-2000

XL12 EGU2011-6139

Patrizia Ferretti, Carlo Barbante, Clara Turetta, Simon J. Crowhurst, Michael A. Hall, and Isabel Cacho
Early-Middle Pleistocene interglacial climate variability: a high-resolution study of Marine Isotope Stages 19 and 21 from the North Atlantic Ocean

- XL13 EGU2011-7136
Willem Jan van de Berg, Michiel van den Broeke, and Frank Kaspar
Impact of enhanced precipitation seasonality on Greenland Eemian $\delta^{18}\text{O}$ temperature
- XL14 EGU2011-7371
Hubertus Fischer, Robert Schneider, Jochen Schmitt, and Fortunat Joos
The carbon isotopic signature of CO_2 in the current and penultimate interglacial period: ocean, peat or human influences?
- XL15 EGU2011-7477
Bas de Boer, Roderik S. W. van de Wal, Lucas J. Lourens, and Richard Bintanja
New perspectives on the inception after the Eemian from inverse ice-sheet modelling
- XL16 EGU2011-8173
Christian Groll, Ben Marzeion, Harald Bartenstein, and Helen Johnson
Diapycnal Mixing and the Physical Carbon Pump in a Box Model of the Meridional Overturning Circulation
- XL17 EGU2011-8332
Louise Sime, Tom Bracegirdle, Eric Wolff, Valérie Masson-Delmotte, Kevin Oliver, and Julia Tindall
Understanding differences in East Antarctic ice cores during interglacials
- XL18 EGU2011-8551
Matthias Baumgartner, Adrian Schilt, and Neem Gas Consortium
 CH_4 and N_2O concentrations from the deepest part of the NEEM ice core: affected by artifacts?
- XL19 EGU2011-9609
Bo Vinther, S. L. Buchardt (1), H. B. Clausen, D. Dahl-Jensen (1), S. J. Johnsen, D. A. Fisher (2), R. M. Koerner, D. Raynaud (3), V. Lipenkov, K. K. Andersen (1), T. Blunier, and S. O. Rasmussen (1), J. P. Steffensen (1), A. M. Svensson
The Climate and Evolution of the Greenland Ice Sheet during the Holocene
- XL20 EGU2011-10636
Anil Bozbiyik, Marco Steinacher, Fortunat Joos, and Thomas F. Stocker
Fingerprints of changes in the terrestrial carbon cycle in response to large reorganizations in ocean circulation
- XL21 EGU2011-12219
Morten Andersen, Derek Vance, Corey Archer, Michael Ellwood, and Robert Anderson
The Zn/Si and isotopic composition of diatom frustules, a proxy for Zn availability in surface seawater
- XL22 EGU2011-12995
Bastian Hambach, Yongsong Huang, and Antoni Rosell-Melé
Interglacial Climatic Changes in Southern Iberia during MIS 1-6 and 11-12

CL1.13 – Advances in understanding Holocene climate variability and its impact on human society – Orals

Convener: Vasile Ersek | Co-Conveners: Daniel Veres, Sebastian Breitenbach

Room: 13

Chairperson: Vasile Ersek

- 15:30–15:45 EGU2011-10684
Thomas Spanghel, Semjon Schimanke, and Ulrich Cubasch
Simulation of European winter climate from the Maunder Minimum to present day using different solar forcings
- 15:45–16:00 EGU2011-2150
Toshiki Osada
Environmental changes and the Indus civilization
- 16:00–16:15 EGU2011-4902
Sena Akcer On, Namik Memet Cagatay, Mehmet Sakinc, Cenk Yaltirak, Umut Baris Ulgen, and Dursun Acar
High-Resolution Late Holocene Climatic Records of Lakes and Lagoons at Western Turkey
- 16:15–16:30 EGU2011-12105
Sándor Gulyás and Pál Sümegi
Climate-induced transformation of alluvial environments and subsistence crisis in first farming groups of the Carpathian Basin during the 6th millennium BC
- 16:30–16:45 EGU2011-11954
R. Timothy Patterson, Lameed O. Babalola, Alice S. Chang, Arun Kumar, Andreas Prokoph, Helen M. Roe, Natalia Vazquez-Riveiros, and Andrew P. Wigston
Linking solar forcing with climate and primary productivity changes in the Northeast Pacific: evidence from mid to late Holocene laminated sediments
- 16:45–17:00 EGU2011-9273
Jennifer Marlon and The Global Palaeofire Working Group Community
Climate and human influences on biomass burning during the Holocene

CL1.13 – Advances in understanding Holocene climate variability and its impact on human society – Posters

Convener: Vasile Ersek | Co-Conveners: Daniel Veres, Sebastian Breitenbach

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Daniel Veres

- XL23 EGU2011-9737
Sebastian F M Breitenbach, Douglas Kennett, Yemane Asmerom, Victor Polyak, Keith M Prufer, Valorie Aquino, Brendan J Culleton, and Gerald H Haug
A 2 ka stalagmite record of hurricane activity from Belize, Central America
- XL24 EGU2011-13493
Vasile Ersek and Gideon Henderson
Holocene evolution of the monsoon in Southeast Asia
- XL25 EGU2011-8870
Anne Dallmeyer and Martin Claussen
Assessing the impact of Holocene land cover change on the Asian monsoon climate
- XL26 EGU2011-2046
Hideaki Maemoku, Yorinao Shitaoka, Tsuneto Nagatomo, and Hiroshi Yagi
Geomorphological examination on the drastic change in river system of Ghaggar River during mature Harappan period, northern India
- XL27 EGU2011-8987
Ollivier Vincent, Joannin Sébastien, Roiron Paul, Nahapetyan Samuel, Gabrielyan Ivan, and Chataigner Christine
Shamb travertine, southern Armenia : evidence of rapid climatic and morphogenic changes around 9500 cal. BP in the Lesser Caucasus
- XL28 EGU2011-9237
Erwan Messenger, Soumaya Belmecheri, Ulrich Von Grafenstein, Sébastien Nomade, Pierre Voinchet, Vincent Ollivier, Ana Mgeladze, and David Lordkipanidze
Palaeoenvironmental records of the last 13 ka in Lesser Caucasus: First data from Paravani lake (Djavakheti, Georgia).
- XL29 EGU2011-9477
Ollivier Vincent, Fontugne Michel, Lyonnet Bertille, and Helwing Barbara
Geomorphological studies in the Middle Valley of the Kura River (Azerbaijan) First key to understand the Postglacial landscape mutations linked to climate changes and human occupation
- XL30 EGU2011-534
Lars Beierlein, Bernd R. Schöne, Elizabeth V. Nunn, Pascal Radermacher, and Anne-France Maurer
High-resolution climate archives from archaeological sites in Central Europe: new data from freshwater bivalve shells
- XL31 EGU2011-13478
Mona Court-Picon and the UGent GOA Team
Palaeoenvironments and climate during the Late Glacial and Early Holocene in Sandy Flanders (NW Belgium): the high-resolution multiproxy record of the Moervaart palaeolake
- XL32 EGU2011-9953
Miriam Gómez-Paccard, Juan C. Larrasoaña, Carlos Sancho, Arsenio Muñoz, Eric McDonald, Edward J. Rhodes, Maria C. Osácar, Elisenda Costa, and Elisabet Beamud
Early Holocene rapid climate change and its impact on semiarid landscape dynamics: evidence from the Bardenas Reales Natural Park (NE Spain)
- XL33 EGU2011-9562
Maureen Conte, Philippe Martinez, Dunia Urrego, Pierre Charles-Dominique, Giles Peroz, Michel Cremer, Jacques Giraudeau, and Philippe Gaucher
High resolution reconstruction of late Holocene climate variability of the Guiana Highlands of northeastern South America
- XL34 EGU2011-1735
Maurits Ertsen
The delicate balance between irrigated landscape and climate changes in human history

CL1.24/AS4.1 – Aeolian dust, initiator, player, and recorder of environmental change (co-organized) – Orals

Convener: Jan-Berend Stuut | Co-Conveners: Peter Knippertz

Room: 15

Chairperson: n.n.

- 08:30–08:45 EGU2011-917
Björn Machalett, Eric A. Oches, Eddie Haam, Zhongping Lai, and Wilfried Endlicher
Late Pleistocene Aeolian Dust Dynamics in Central Asia and their Teleconnection with Short-term Climate Oscillations and Abrupt Climate Events in the Northern Hemisphere

- 08:45–09:00 EGU2011-4931
Denis-Didier Rousseau, Pierre Antoine, Christine Hatté, France Lagroix, Caroline Gauthier, Adriana Sima, Masa Kageyama, Markus Fuchs and the ACTES team members & ACTES fellows Team
 Millennial-scale record in European eolian deposits: Data-model comparison (ACTES & EOLE projects)
- 09:00–09:15 EGU2011-3208
Charlotte Skonieczny, Aloys Bory, Viviane Bout-Roumazeilles, Wafa Abouchami, Steve Galer, Bruno Malaizé, Francis Grousset, Roger François, Celine Liorzou, and Claire Bassoullet
 A 25 ka record of the aeolian terrigenous signal in the North-Eastern Tropical Atlantic Ocean
- 09:15–09:30 EGU2011-8084
Jean Robert Petit and Barbara Delmonte
 Climatic parameters influencing Glacial Interglacial changes in dust concentration in Antarctic ice cores
- 09:30–09:45 EGU2011-1487
Samuel Albani, Natalie Mahowald, Gisela Winckler, Michelle Goman, Bette Otto-Bliesner, Barbara Delmonte, Valter Maggi, and David McGee
 Data synthesis and modeling of Holocene dust
- 09:45–10:00 EGU2011-1986
Charlie Bristow and Karen Hudson-Edwards
 Fertilizing the Amazon and Equatorial Atlantic with dust from the Bodélé Depression in Chad

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-11508
Béatrice Marticorena, Jean Louis Rajot, Bernadette Chatenet, and Catherine Schmechtig
 Mineral dust over West Africa : Highlights from the AMMA international program
- 10:45–11:00 EGU2011-1739
Konrad Kandler, Lieke Kirsten, Benker Nathalie, Ebert Martin, Küpper Miriam, Schütz Lothar, Scheuvers Dirk, Jäckel Simon, and Weinbruch Stephan
 Mineral dust chemistry, mineralogy, shape, mixing state and complex refractive index determined by electron microscopy and by X-ray diffraction at Praia, Cape Verde, in winter 2008
- 11:00–11:15 EGU2011-9055
Martina Klose and Yaping Shao
 Parameterization of Dust Emission for Convective Atmospheric Conditions
- 11:15–11:30 EGU2011-11456
Karsten Haustein and the NMMB/BSC-DUST regional Team
 A model for prediction of mineral dust from meso to global scales: Regional experiments for North Africa
- 11:30–11:45 EGU2011-12180
 Stavros Solomos, **George Kallos**, and Elias Mavromatidis
 Density currents and their role on dust mobilization
- 11:45–12:00 EGU2011-1967
Helen Brindley and Jacqueline Russell
 Using geostationary satellite data to quantify the effects of mineral dust aerosol on the Earth's Radiation Budget

CL1.24/AS4.1 – Aeolian dust, initiator, player, and recorder of environmental change (co-organized) – Posters

Convener: Jan-Berend Stuut | Co-Conveners: Peter Knippertz

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL35 EGU2011-8245
Pierre Antoine, Denis-Didier Rousseau, Christine Hatté, France Lagroix, Markus Fuchs, Olivier Moine, Caroline Gauthier, Jirí Svoboda, and Lenka Lisa
 Dolní Věstonice (Czech Republic): a new high-resolution loess-palaeosol record of the last climatic cycle in Central Europe
- XL36 EGU2011-13043
Erzsebet Horvath, Manfred Frechen, Agnes Novothny, Paul Königer, Christine Thiel, Lara Wacha, Christian Rolf, Ulrich Hambach, Gabriella Barta, and Bernadett Bajnóczi
 High resolution multi-proxy study of the Süttő loess-palaeosol sequence, Hungary

- XL37 EGU2011-7191
Janneke IJmker, Georg Stauch, Kai Hartmann, Bernhard Diekmann, Elisabeth Dietze, Alexandra Hilgers, Stephan Opitz, Bernd Wünnemann, and Frank Lehmkuhl
 Geochemical and sedimentological analyses of dune fields on the NE Tibetan Plateau and their environmental implications
- XL38 EGU2011-3951
Joseph Mason, Mark Sweeney, and Paul Hanson
 Evidence for Eolian Remobilization of Loess in the Central Great Plains, USA, and Implications for Paleoclimatic Interpretation of the Loess Record
- XL39 EGU2011-11374
Maarten Prins, Kay Beets, Gert-Jan Weltje, and Hongbo Zheng
 Reconstructing paleo-wind strength variability from loess grain-size distributions: an application to the late Quaternary Mangshan loess-paleosol sequence, China
- XL40 EGU2011-6314
Jan-Berend Stuut and Maarten Prins
 Downwind changes in grain size of aeolian dust; examples from marine and terrestrial archives
- XL41 EGU2011-11398
 Xiangtong Huang, Hedi Oberhänsli, **Hans von Suchodoletz**, and Phillippe Sorrel
 Aeolian dust deposition in the Aral Sea - implications for changes in atmospheric circulation in Central Asia during the past 2.000 years
- XL42 EGU2011-8959
Menno Rudolf Bloemsma, Gert Jan Weltje, Jan Berend Stuut, and Matthias Zabel
 Modelling the relation between grain-size distribution and geochemical composition: application to a marine record of mixed fluvial-eolian provenance (Late Quaternary, offshore Northern Senegal)
- XL43 EGU2011-2103
Anna Wegner, Hubertus Fischer, and Urs Ruth
 Changes in the phase lag of dust concentration and size in the EPICA-DML ice core during the last transition
- XL44 EGU2011-1370
Natalia Sudarchikova and Uwe Mikolajewicz
 Mineral dust under different climate conditions with a particular focus on the Antarctic region
- XL45 EGU2011-2094
Károly Barta, Andrea Farsang, Gábor Négyesi, József Szatmári, and Máté Bartus
 Estimation of nutrient movement caused by wind erosion on chernozem soil with wind channel experiments
- XL46 EGU2011-9167
 Harvey Elliott, **Nilton Renno**, Earle Williams, Brian Russell, Matt Balme, Steve Metzger, Asmin Pathare, Steven Rogacki, Robert Gillespie, and Stephen Musko
 Diagnosing the Electrical Structure of Dust Devils
- XL47 EGU2011-3294
Charlotte Skonieczny, Aloys Bory, Viviane Bout-Roumazeilles, Wafa Abouchami, Steve Galer, Xavier Crosta, Aboubacry Diallo, Thierno Ndiaye, Celine Liorzou, and Claire Bassoullet
 A multi-proxy study of present-day aeolian terrigenous particles deposited between 2006 and 2008 at M'Bour, Senegalese coast
- XL48 EGU2011-13029
Slobodan Nickovic, Mirjam Vujadinovic, Ana Vukovic, Vladimir Djurdjevic, Goran Pejanovic, and Milan Dacic
 Database of mineral composition in arid soils and its application in atmospheric transport of iron embedded in dust
- XL49 EGU2011-12052
Tanja Stanelle, Isabelle Bey, Christian Reick, and Thomas Raddatz
 A new parameterization for deriving potential dust sources in the emission scheme of the global climate-aerosol model ECHAM6-HAM
- XL50 EGU2011-12102
Christos Spyrou, Christina Mitsakou, Panos Athanasiadis, George Kallos, and Christina Kalogeri
 Study of the radiative effects of desert dust on weather and climate
- XL51 EGU2011-12308
Sigurður Jónsson and Haraldur Ólafsson
 Modeling the transport of resuspended ash from the Eyjafjallajökull eruption
- XL52 EGU2011-4215
Adriana Sima, Masa Kageyama, Denis-Didier Rousseau, Gilles Ramstein, Yves Balkanski and the ACTES Team
 Modeling dust emission variations in Eastern Europe related to North-Atlantic abrupt climate changes of the last glacial period
- XL53 EGU2011-1119
John Marsham, Peter Knippertz, Nick Dixon, Douglas Parker, and Grenville Lister
 Summertime dust uplift over West Africa

- XL54 EGU2011-8041
Kornelija Špoler ?ani?, Nataša Strelec Mahovi?, Iva Kav?i?, and Zvezdana Benceti? Klai?
 Saharan dust episodes in urban aerosol in Croatia
- XL55 EGU2011-7547
 Francesca Guarnieri, **Marco Gaetani**, Caterina Busillo, Francesca Calastrini, and Massimiliano Pasqui
 Summer Mediterranean SST impact on circulation mechanisms responsible for Saharan dust transport
- XL56 EGU2011-1269
Lars Klüser, Dmytro Martynenko, and Thomas Holzer-Popp
 Exploitation of IASI thermal infrared observations for dust research applications

CL2.6 – Earth radiation budget, radiative forcing and climate change – Orals

Convener: Martin Wild | Co-Conveners: Rolf Philipona, Paul Stackhouse

Room: 16

Chairperson: n.n.

- 08:30–08:45 EGU2011-9585
Kurtis Thome, Bruce Wielicki, David Young, and Martin Mlynyczak
 Role of climate forcings and feedbacks in mission definition of CLARREO
- 08:45–09:00 EGU2011-5106
Simon Tett, Michael Mineter, Coralia Cartis, Dan Rowlands, and Ping Liu
 Constraining Climate Sensitivity using Top Of Atmosphere Radiation Measurements.
- 09:00–09:15 EGU2011-10572
Nathalie Schaller, Jan Cermak, and Reto Knutti
 The sensitivity of the surface energy budget and hydrological cycle to different forcing agents
- 09:15–09:30 EGU2011-6939
Bjørn H. Samset and Gunnar Myhre
 Sensitivity of radiative forcing to aerosol vertical distribution
- 09:30–09:45 EGU2011-2922
Wouter Greuell and Erik van Meijgaard
 Evaluation of model predicted top-of-atmosphere radiation and cloud parameters over Africa with observations from GERB and SEVIRI
- 09:45–10:00 EGU2011-47
Pavel Kishcha, Boris Starobinets, Olga Kalashnikova, and Pinhas Alpert
 Aerosol optical thickness trends and population growth in the Indian subcontinent

COFFEE BREAK

Chairperson: n.n.

- 10:30–11:00 EGU2011-10758
Graeme L. Stephens, Tristan LEcuyer, and Seiji Kato
 The Radiation Balance of Earth Revisited
- 11:00–11:15 EGU2011-12610
Rachel T. Pinker, Xiaolei Niu, and Yingtao Ma
 High-Latitude Surface Radiative Fluxes: Challenges for Climate Research
- 11:15–11:30 EGU2011-1730
Kaicun Wang, Robert Dickinson, Martin Wild, and Shunlin Liang
 Atmospheric Controls on Climate Variability of Surface Incident Solar Radiation
- 11:30–11:45 EGU2011-2589
Joerg Trentmann, Richard W. Müller, Rebekka Posselt, Reto Stöckli, and Christine Träger-Chatterjee
 Evaluation and applications of a new satellite-based surface solar radiation data set for climate analysis
- 11:45–12:00 EGU2011-1871
Rolf Philipona
 Greenhouse warming - solar brightening and climate sensitivity in and around the Alps

CL2.6 – Earth radiation budget, radiative forcing and climate change – Posters

Convener: Martin Wild | Co-Conveners: Rolf Philipona, Paul Stackhouse

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: M. Wild / R. Philipona

- XL57 EGU2011-9587
Taiping Zhang and the Taiping Zhang Team
Climate Variability and Change as Represented by the NASA GEWEX SRB(Re13.0) Data
- XL58 EGU2011-11848
Paul Stackhouse, Ehrhard Raschke, Takmeng Wong, Laura Hinkleman, Stefan Kinne, William Rossow, Yuanchong Zhang, Ellsworth Dutton, Charles Long, Martin Wild and the Additional GEWEX RFA Members Team
The GEWEX Radiative Flux Assessment: Progress and Future Plans
- XL59 EGU2011-12939
Xiaogang Shi, Martin Wild, and **Dennis P. Lettenmaier**
Surface radiative fluxes over the pan-Arctic land region: Variability and trends
- XL60 EGU2011-2061
Ping Wang, Wouter H. Knap, and Piet Stammes
Cloudy-sky shortwave radiative closure study for the Cabauw BSRN site
- XL61 EGU2011-3898
H. Damon Matthews
Radiative forcing and climate response to zeroed emissions of greenhouse gases and aerosols
- XL62 EGU2011-10812
Gareth Thomas, Nicola Chalmers, Bethan Harris, Eleanor Highwood, and Don Grainger
Estimates of Global radiative forcing derived from the GlobAEROSOL data set
- XL63 EGU2011-4505
Hermann Harde
How much CO₂ really contributes to global warming? Spectroscopic studies and modelling of the influence of H₂O, CO₂ and CH₄ on our climate
- XL64 EGU2011-1645
Marc Olefs, Wolfgang Schöner, and Martin Mair
New Radiation initiatives in Austria: Part I (Monitoring according to BSRN standard)
- XL65 EGU2011-1647
Marc Olefs, Wolfgang Schöner, Bernhard Hynek, Ulrich Strasser, Thomas Marke, Florian Hanzer, and Michael Warscher
New radiation initiatives in Austria: Part II (Modeling)
- XL66 EGU2011-13144
Justin Sheffield, Eric Wood, and Michael Roderick
Uncertainties in the long-term surface radiation balance and its impact on hydrologic variability and changes in drought occurrence
- XL67 EGU2011-10899
Kun Yang, Wenjun Tang, Jun Qin, Charles Cheng, and Jie He
Solar radiation trend across China in recent decades: a revisit with quality-controlled data
- XL68 EGU2011-3009
Martin Wild
The global energy balance from a surface perspective
- XL69 EGU2011-1745
Martin Wild and Edgar Schmucki
Assessment of global dimming and brightening in IPCC-AR4/ CMIP3 models and ERA40
- XL70 EGU2011-1753
Martin Wild, Beate Liepert, and Christoph Schaer
The Earth radiation balance as driver of the global hydrological cycle
- XL71 EGU2011-2206
Doris Folini and Martin Wild
Dimming and brightening in 20th century Europe as seen by ECHAM5-HAM
- XL72 EGU2011-2219
Doris Folini, Martin Wild, and Adeline Bichet
Transient GCM Simulations, 1950 - 2000: aerosol effects in China
- XL73 EGU2011-1300
Arturo Sanchez-Lorenzo, Martin Wild, Michele Brunetti, and Jose Antonio Guijarro
Towards a homogenization of the long-term surface solar global radiation series over Europe
- XL74 EGU2011-8813
Arturo Sanchez-Lorenzo, Josep Calbó, Enric Pallé, Jose Antonio Guijarro, Michele Brunetti, and Martin Wild
Updating and extending the "dimming" and "brightening" over Spain
- XL75 EGU2011-9489
Arturo Sanchez-Lorenzo, Martin Wild, Josep Calbó, Enric Pallé, Rudolf Brazdil, Xiangao Xia, Gerald Stanhill, and Michele Brunetti
"Early global brightening"
- XL76 EGU2011-5112
Marc Chiacchio, Elena Arabini, and Martin Wild
A new surface solar radiation gridded dataset over Europe from the Global Energy Balance Archive

- XL77 EGU2011-5114
Marc Chiacchio, Tracy Ewen, Martin Wild, Mian Chin, and Thomas Diehl
 Decadal variability of aerosol optical depth in Europe and its relationship to the temporal shift of the NAO in the realm of dimming and brightening
- XL78 EGU2011-5377
Jing Zeng, Christa Peters-Lidard, John Eylander, Jun Wang, and Yudong Tian
 Evaluation of Three Downward Shortwave Radiative Flux Datasets for Near Real-time Land Surface Modeling
- XL79 EGU2011-5728
Henriette Schwarz and the RET Team
 Terrestrial albedo determinations using Earthshine: First results from the new Telescope - system characteristics and impacts of observing strategies on albedo data quality.
- XL80 EGU2011-5754
Peter Thejll, Rainer Hollman, Jörg Trentmann, Maarit Lockhoff, Frank Kaspar, and Martin Stendel
 Terrestrial albedo models: Comparing results from CMSAF EO data and a GCM.
- XL81 EGU2011-6271
Michael Mayer and Leopold Haimberger
 Poleward atmospheric energy transports and their variability as evaluated from reanalysis data
- XL82 EGU2011-7970
Rodrigo Guzman, Laurence Picon, and Rémy Roca
 Analysis of tropical clear sky OLR variability with CERES products and METEOSAT data: sensitivity to water vapor and surface conditions.
- XL83 EGU2011-9448
Georgia Alexandri, Charikleia Meleti, Aristeidis Georgoulas, and Dimitris Balis
 The spatial and temporal variability of shortwave and longwave surface radiation in Europe as derived from satellite and ground based data.
- XL84 EGU2011-10071
Geneviève Sèze, Marcel Derrien, Hervé Legleau, Jacques Pelon, and Bruno Six
 Evaluation of the global 3-D cloud cover distribution obtained from multi-Geostationary data with CALIPSO lidar observations in the tropical belt.
- XL85 EGU2011-13013
Christos Papadimas, Nikolaos Hatzianastassiou, Christos Matsoukas, and Ilias Vardavas
 The effect of clouds on shortwave radiation over the Mediterranean basin based on recent satellite data
- XL86 EGU2011-12621
Nikos Hatzianastassiou, Christos Papadimas, Christos Matsoukas, Aggeliki Fotiadi, Kostas Pavlakis, Martin Wild, and Ilias Vardavas
 Patterns of surface solar radiation dimming and brightening at the turn of 21st century
- XL87 EGU2011-13622
 Ferenc Miskolczi and **Miklos Zagoni**
 The stable stationary value of the Earth's global average Planck-weighted greenhouse-gas optical thickness

CL2.12 – Solar and Geomagnetic Activity and Their Influences on the Earth's Weather and Climate – Orals

Convener: Jean Lilensten | Co-Conveners: Sergei Avakyan, Thierry Dudok de Wit

Room: 16

Chairperson: Jean Lilensten

- 13:30–13:45 EGU2011-5033
Colin Price
 The Global Atmospheric Electric Circuit
- 13:45–14:00 EGU2011-14115
Jean-François Hochedez
 Solar irradiance
- 14:00–14:15 EGU2011-12902
Joachim Curtius and the CLOUD Team
 Investigating the link between cosmic rays and Earth's climate: the CLOUD experiment at CERN
- 14:15–14:30 EGU2011-8298
Alexander Shapiro, Werner Schmutz, Eugene Rozanov, Micha Schoell, Margit Haberleiter, Anna Shapiro, and Stephan Nyeki
 A new approach to long-term reconstruction of the solar spectral irradiance suggests large historical solar forcing
- 14:30–14:45 EGU2011-10813
Luis Eduardo Vieira, Thierry Dudok de Wit, Matthieu Kretschmar, and Gaël Cessateur
 SOTERIA Project: Real-time reconstructions of the solar total and spectral irradiance for space weather applications

14:45–15:00 EGU2011-4438

Claus Fröhlich

Total solar irradiance during the last three solar cycles: Consequences for the reconstruction back to 1900.

CL2.12 – Solar and Geomagnetic Activity and Their Influences on the Earth's Weather and Climate – Posters

Convener: Jean Lilensten | Co-Conveners: Sergei Avakyan, Thierry Dudok de Wit

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jean Lilensten

XL88 EGU2011-677

Renata Lukianova and Genrikh Alexseev

High solar irradiance episode in 2001/2002 and relevant Earth's climate anomalies

XL89 EGU2011-1467

Peter Stauning

Solar activity - climate relations: A different approach.

XL90 EGU2011-1479

Laure Lefevre, Frederic Clette, and Laurence Wauters

Towards advanced sunspot-based indices and solar forcing proxies

XL91 EGU2011-1608

Mykhaylo Lyashenko, Viktor Burmaka, Leonid Chernogor, Igor Domnin, Leonid Emelyanov, and Dmitry Kotov

Experimental Investigations of the Ionospheric Processes during Solar Activity Minimum Period

XL92 EGU2011-2877

Libor Hejkrlik

Lunar signal in cloudiness is stronger than in precipitation

XL93 EGU2011-4450

Claus Fröhlich

Spectral Solar Irradiance over Solar Cycle 23 from Sunphotometers of VIRGO on SOHO.

XL94 EGU2011-4648

Robert Cahalan, Guoyong Wen, Peter Pilewskie, and Jerald Harder

Atmospheric Temperature Responses to Solar Spectral Irradiance Variations

XL95 EGU2011-6436

Venera Dobrica, Crisan Demetrescu, and Georgeta Maris

On the response of the European climate to solar/geomagnetic long-term activity

XL96 EGU2011-8292

Yuri Brugnara and Stefan Brönnimann

Assessing uncertainty of solar signals in the tropospheric temperature field

XL97 EGU2011-10474

Thierry Dudok de Wit and Luis Eduardo Vieira

Are different Total Solar Irradiance records and reconstructions consistent with each other ? A statistical view.

XL98 EGU2011-10664

Anna Shapiro, Eugene Rozanov, Alexander Shapiro, Tatiana Egorova, Werner Schmutz, and Thomas Peter

The contribution of different factors to the evolution of the middle atmosphere state from 2004 to 2009

XL99 EGU2011-10831

Anna Shapiro, Eugene Rozanov, Alexander Shapiro, Tatiana Egorova, Werner Schmutz, and Thomas Peter

The response of the MLS mesospheric daytime hydroxyl to the short-term solar irradiance variability

CL2.17 – Physical and biogeochemical feedbacks in the climate system and climate observations from space – Orals

Convener: Vladimir Alexeev | Co-Conveners: Gerd Folberth, Gottfried Kirchengast, Joerg Schulz, Barbara Scherllin-Pirscher

Room: 16

Chairperson: n.n.

15:30–15:45 EGU2011-9343

Kirsti Ashworth, Nick Hewitt, Oliver Wild, and Gerd Folberth

Atmospheric Impacts of Biofuels

15:45–16:00 EGU2011-1883

Alexander T. Archibald, N. Luke Abraham, Paul J. Telford, Mike E. Jenkin, and John A. Pyle

Investigating the impacts of HO_x recycling in the oxidation of isoprene: Sensitivity studies of past, present and future atmospheres using the UKCA model.

16:00–16:15 EGU2011-1288

Ray Bates

Climate stability and sensitivity in some simple conceptual models

- 16:15–16:30 EGU2011-2934
Barbara Sulzberger
 Arguments against ocean iron fertilization: Undesired environmental effects and feedbacks on climate
- 16:30–16:45 EGU2011-11429
 Heinrich Bovensmann, Michael Buchwitz, Oliver Schneising, Maximilian Reuter, and **John Burrows**
 Passive satellite remote sensing of carbon dioxide and methane - from SCIAMACHY towards CarbonSat
- 16:45–17:00 EGU2011-5189
Stephen Leroy, Chi Ao, David Rosenbaum, and Yi Huang
 Radio Occultation on CLARREO

CL2.17 – Physical and biogeochemical feedbacks in the climate system and climate observations from space –

Posters

Convener: Vladimir Alexeev | Co-Conveners: Gerd Folberth, Gottfried Kirchengast, Joerg Schulz, Barbara Scherllin-Pirscher

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Vladimir Alexeev, Gerd Folberth and Gottfried Kirchengast

- XL100 EGU2011-1430
Pierre-Philippe Mathieu, Mark Doherty, Stephen Briggs, and Pascal Lecomte
 Brief Overview of the ESA Climate Change Initiative (CCI)
- XL101 EGU2011-5461
Yuriy Kuleshov, Kefei Zhang, Yuei-An Liou, and Alexander Pavelyev
 Satellite remote sensing: A cornerstone of modern environmental information for climate monitoring
- XL102 EGU2011-6064
 Federica Pacifico, **Gerd Folberth**, Chris D. Jones, and Sandy P. Harrison
 Interactive biogenic isoprene emissions modelling with HadGEM2-ES
- XL103 EGU2011-8250
Peter L. Langen, Thorsten Mauritsen, and Rune G. Graversen
 Water vapor feedback amplifies high-latitude warming
- XL104 EGU2011-6990
Thorsten Mauritsen, Rune Grand Graversen, and Peter L. Langen
 Arctic amplified climate response to albedo, cloud and water vapor radiative feedbacks in a global climate model
- XL105 EGU2011-9661
Vladimir Alexeev
 Atmospheric polar amplification mechanisms of global warming
- XL106 EGU2011-10310
Simona Malmusi and Mauro Boccolari
 Correlations between atmospheric water vapour content and outgoing longwave radiation from satellite observations
- XL107 EGU2011-12437
Iryna Tereshchenko, Alexander Zolotokrilin, Luis Brito-Castillo, and Tatiana Titkova
 Precipitation and seasonal variation of surface temperature-controlling factors in the Sonoran Desert, North-West Mexico.
- XL108 EGU2011-12868
Pavel Groisman, Richard Knight, and Thomas Karl
 Changes in Intense Precipitation over the Conterminous U.S.: Effects of the global change and/or a feedback of the land use changes?
- XL109 EGU2011-11779
Ulrich Foelsche, Stig Syndergaard, Barbara Scherllin-Pirscher, Johannes Fritzer, and Gottfried Kirchengast
 Systematic Errors in GNSS Radio Occultation Data - Part 1
- XL110 EGU2011-10024
 Chris Jones, John Hughes, Spencer Liddicoat, and **Gerd Folberth**
 HadGEM2-ES Climate-carbon Cycle feedbacks in CMIP5/AR5 simulations
- XL111 EGU2011-9872
Bettina Christina Lackner, Andrea K. Steiner, Gabriele C. Hegerl, and Gottfried Kirchengast
 GNSS Radio Occultation Trend Patterns for Atmospheric Climate Change Detection With a Fingerprinting Method
- XL112 EGU2011-3366
Sebastian Sonntag and Inga Hense
 Biological-physical feedback mechanisms in marine systems: a model study involving cyanobacteria
- XL113 EGU2011-11180
Axel Andersson, Christian Klepp, and Stephan Bakan
 Evaluation of Climate Model Ocean Surface Fluxes Using HOAPS Satellite Data

- XL114 EGU2011-12272
Veronika Proschek, Gottfried Kirchengast, and Susanne Schweitzer
 Greenhouse Gas Profiles Retrieval in Cloudy Air from Combined IR-Laser and Microwave Occultation Measurements
- XL115 EGU2011-12111
Tanja Stanelle, Isabelle Bey, and Christain Reick
 Did anthropogenic land use change alter the amount and distribution of dust particles in the atmosphere?
- XL116 EGU2011-1969
Yongkang Xue, Fernando De Sales, Ratko Vasic, Carlos Mechoso, Stephen Prince, and Akio Arakawa
 Global and Temporal Characteristics of hydroclimate/Vegetation Biophysical Process feedbacks
- XL117 EGU2011-6992
Maria Malene Kvalevåg and Gunnar Myhre
 Reducing the uncertainty in terrestrial carbon cycle modeling
- XL118 EGU2011-12854
Thomas Schneider von Deimling, Anders Levermann, Veronika Huber, Malte Meinshausen, and John Schellnhuber
 The role of permafrost feedback in amplifying future warming

NH1.7/AS4.6/CL3.6 – Assessment of Weather-related Risk on Agricultural Production and Agribusiness (co-organized) – Orals

Convener: Ana Maria Tarquis | Co-Conveners: Nicolas R. Dalezios, Antonio Saa, Mikhail Semenov, Fernando Burgaz, Anne Gobin, Marijn van der Velde

Room: 4

Chairperson: Ana M. Tarquis

- 15:30–15:45 EGU2011-197
Mónica Alexandra Rodrigues, Ana Monteiro, Solange Leite, and Hervé Quénol
 Climate Observation and Modeling over Land Vines in the Context of Climate Change: a Douro Region Case Study
- 15:45–16:00 EGU2011-2664
 Aureliano C. Malheiro, **João A. Santos**, and Joaquim G. Pinto
 Impacts of climate change on viticultural zoning in Europe
- 16:00–16:15 EGU2011-2113
Fausto Tomei, Rodica Tomozeiu, Giulia Villani, and Vittorio Marletto
 Climate change and irrigation in northern Italy, scenarios of adaptation from the Agrosценari project
- 16:15–16:30 EGU2011-7906
 Zbigniew Szwejkowski, Leszek Kuchar, Ewa Dragańska, and **Krystyna Grabowska**
 Risk in agricultural production in Poland and climate change
- 16:30–16:45 EGU2011-10049
Nicolas Dalezios
 Assessment of Cotton Production in Drought-Prone Areas in Greece
- 16:45–17:00 EGU2011-13418
Anne Gobin
 Climate impacts on biomass production in Belgium

NH1.7/AS4.6/CL3.6 – Assessment of Weather-related Risk on Agricultural Production and Agribusiness (co-organized) – Posters

Convener: Ana Maria Tarquis | Co-Conveners: Nicolas R. Dalezios, Antonio Saa, Mikhail Semenov, Fernando Burgaz, Anne Gobin, Marijn van der Velde

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Anne Gobin and Nicolas Dalezios

- XY359 EGU2011-200
Mónica Alexandra Rodrigues, Alfredo Rocha, Ana Monteiro, Hervé Quénol, and José Rodrigues de Freitas
 Simulation of the Climatic Risks episodes in the Demarcated Douro Region Vineyards using the WRF model
- XY360 EGU2011-4111
Mónica Alexandra Rodrigues, Ana Monteiro, Maria Helena Pina, Hervé Quénol, and José Rodrigues de Freitas
 Contribution of the Agriculture Advices in the Prevention and Evaluation of Risks in Vineyard within the Demarcated Douro Region
- XY361 EGU2011-12324
Barbara Köstner, Johannes Franke, Thoralf Hänsel, Matthias Kuhnert, Marco Lorenz, and Tobias Donix
 Importance of different climate projections for the analysis of climate impact on agricultural production

- XY362 EGU2011-13018
Francesca Todisco, Francesco Mannocchi, and Lorenzo Vergni
Intensity-duration-frequency curve for the agricultural drought
- XY363 EGU2011-13074
Luigi Perini, Luca Salvati, **Antonella De Angelis**, and Sofia Bajocco
Climate change assessment: proposal for a standardized index
- XY364 EGU2011-13285
Marijn van der Velde
Contrasting crop responses to extreme weather events
- XY365 EGU2011-13638
Mario Cunha and **Christian Richter**
Modelling the Cyclical Behaviour of Wine Production in Douro Region Using a Time-Varying Parameters Approach
- XY366 EGU2011-1784
M. Carmen Cartagena, **M.Teresa Castellanos**, A.Maria Tarquis, M. Jesús Cabello, Francisco Ribas, and Augusto Arce
Risk of nitrate pollution in agricultural systems
- XY367 EGU2011-13729
Jose Luis Valencia, Fredi Leonidas, Antonio Saa-Requejo, Jose María Gascó, and Ana Maria Tarquis
Spatial and temporal precipitation patterns of the Ebro River Basin, Spain
- XY368 EGU2011-6827
Jose M Anton, Juan B Grau, Ana M Tarquis, Raúl Sánchez, Leonor Rodriguez, and Diego Andina
Some past decision theory models for euro construction model codes and for road drainage in Spain, and modest hints with multi-criteria methods for agro and environmental assurance
- XY369 EGU2011-1894
Ruben Moratiel, José M Durán, Richard L. Snyder, and Ana M. Tarquis
Future reference evapotranspiration in Duero Valley (Spain)
- XY370 EGU2011-1944
Pieranna Servadio, Simone Bergonzoli, and Davide Dell'Unto
Effects on some soil qualities following the traffic of high axle load machinery at different water contents
- XY371 EGU2011-5076
Angelica Giarolla, Priscila S. Tavares, Chou S. Chan, and Renan L. B. Souza
Evaluation of seasonal forecasts of surface air temperature from Eta model for a soybean producing location in Brazil
- XY372 EGU2011-2737
Saeb Khresat
Assessment of the risks from climate change and water scarcity on agriculture production in Jordan
- XY373 EGU2011-3252
Araya Berhe, Saskia Keesstra, and Leo Stroosnijder
Simple model for assessing climatic constraints under the past and present agriculture in the northern Ethiopia
- XY374 EGU2011-5917
Eline Vanuytrecht and Dirk Raes
Assessment of the 'CO₂ fertilization effect' on crops with the AquaCrop model
- XY375 EGU2011-6284
Franziska Strauss, Franz Sinabell, and Erwin Schmid
The relative weight of weather risks in crop production volatility in Austria
- XY376 EGU2011-6508
Jose M Anton, **Juan Bautista Grau**, Colombo Speroni, Lisandro De los Rios, Diego Andina, and Ana Maria Tarquis
Mathematical model for the arrangement and the cleaning of the river basin and surroundings of the river sandy grounds to its passage by the city of Salta (Argentina)
- XY377 EGU2011-10291
Antonio Saa, **Ana Tarquis**, M^a Rosario García, M^a Cruz Díaz, and Fernando Burgaz
Extreme temperature events analyzed with Fast Fourier Transform
- XY378 EGU2011-13624
Fulgencio Buendia, Rafael Bermudez, Ana Maria Tarquis, and Diego Andina
FMECA Application in Rainfall Hazard Prevention

ESSI1/AS4.17/CL4.8 – International Collaboration and Integration Strategies for Climate and other Geosciences Informatics (co-organized) – Posters

Convener: David Arctur | Co-Conveners: Monique Petitdidier, Bryan Lawrence, Sandro Fiore, Mohan Ramamurthy

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: David Arctur, Mauro Messerotti

- XL168 EGU2011-1599
Lisa Raymond, **Cynthia Chandler**, Roy Lowry, Ed Urban, Gwenaelle Moncoiffe, Peter Pissierssens, and Cathy Norton
Data Publication: An Example of Data Repository and Library Cooperation
- XL169 EGU2011-12341
Andrew Maffei, Cynthia Chandler, Laura Stolp, Janet Fredericks, and Nancy Galbraith
Rolling Deck to Repository (R2R): A Controlled Vocabulary and Ontology Development Effort for Oceanographic Research Cruise Event Logging
- XL170 EGU2011-13450
Sarah Cornell and Cat Downy
Building a useful and usable data legacy from major interdisciplinary research programmes: the QUEST experience.
- XL171 EGU2011-3946
Jay Pearlman, Max Craglia, Francis Bertrand, Gregoire Dubois, Steffen Fritz, Gerimantas Gaigalas, **Stefano Nativi**, and Stefan Niemeyer
Interdisciplinary Approaches for Decision-making Information Across Forestry, Biodiversity and Drought
- XL172 EGU2011-2653
Giovanni Lapenta and Soteria Consortium
Progress within the SOTERIA FP7 EC-funded Consortium.
- XL173 EGU2011-9993
André Csillaghy, Robert Bentley, Abouardham Jean, and Helio Team
The architecture of the e-Infrastructure HELIO
- XL174 EGU2011-13723
Jean Abouardham, Peter Gallagher, Robert D. Bentley, Andre' Csillaghy, and The HELIO Team
A tool for Space weather science: The Heliophysics Features Catalogue
- XL175 EGU2011-13962
Mauro Messerotti, Alessandro Marassi, Andrej Santin, Valentina Alberti, Antonio Volpicelli, Chris Perry, Philip Richards, Robert D. Bentley, and The HELIO Team
The Heliophysics Event Catalogue (HEC): an advanced tool of the Heliophysics Integrated Observatory (HELIO) for space weather event characterisation
- XL176 EGU2011-13727
Hanna Sathiapal and The HELIO Team
HELIO-lab - From Backyard Observations to Heliospheric Science
- XL177 EGU2011-13939
Massimo Ramella and Giulia Iafrate
The astronomer's Virtual Observatory as a tool for students, teachers and amateur astronomers
- XL178 EGU2011-2488
Delia-Georgeta Dumitras, Cristina Ghinet, Stefan Marincea, Oana Gabriela Sebe, and Raluca-Mihaela Maftei
From the geological museum collections to teaching Earth Sciences
- XL179 EGU2011-314
Denis Zhilin
Neogeoscience and scientific education
- XL180 EGU2011-14057
Mauro Messerotti
Dissemination, education and public outreach: a roadmap for meteorology of space
- XL181 EGU2011-13726
Ann Jabro and Jay D. Jabro
Education and communication plans to address community misunderstanding of the Soil Vapor Extraction technique
- XL182 EGU2011-4502
Olga Malandraki and the SEPServer Team
Data Services and Analysis Tools for Solar Energetic Particle Events and Related Electromagnetic Emissions - SEPServer
- XL183 EGU2011-11214
Antonio Guerrero, Consuelo Cid, Elena Saiz, Yolanda Cerrato, and Jesus Aguado
Space Weather Service developed at UAH
- XL184 EGU2011-12445
Joerg-Micha Jahn and Heather A. Elliott
Predicting Space Weather With Pattern Recognition
- XL185 EGU2011-6086
Wim Som de Cerff, Maarten Plieger, Ge Verver, and Else van den Besselaar
The EURO4M web based Climate Information Bulletin environment
- XL186 EGU2011-6409
Sandro Fiore and Giovanni Aloisio
Metadata harvesting, map-enabled data access and distributed monitoring in the Climate-G testbed

- XL187 EGU2011-9387
Kevin Marsh
 Climate Data from the BADC
- XL188 EGU2011-10391
Lizzie Froude, Kevin Hodges, and Robert Gurney
 Storm Prediction Information for Decision Making at Sea

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michel Rixen and Emanuel Coelho

- XY619 EGU2011-2813
Robin Wedd, Oscar Avles, and Yonghong Yin
 Multi-Variate Salinity Assimilation Pre- and Post-Argo
- XY620 EGU2011-2951
 Pierre Mathiot, Christof Konig Beatty, **Hugues Goosse**, Thierry Fichefet, and Francois Massonnet
 Assimilation of sea ice freeboard and concentration data in a coupled ice-ocean model.
- XY621 EGU2011-2969
Melanie Juza, Bernard Barnier, and Thierry Penduff
 Contribution of the shallow water areas not sampled by the Argo floats to the variability of the global ocean heat content
- XY622 EGU2011-3062
Nicolas Freychet
 Ocean data assimilation with a reduced rank smoother
- XY623 EGU2011-3348
Uwe Stöber and James N. Moum
 Automated detection of nonlinear internal waves from seafloor pressure time series
- XY624 EGU2011-3516
Laurent Parent, Nicolas Ferry, Gilles Garric, Olivier Legalloudec, Charles-emmanuel Testut, Bernard Barnier, Eric Greiner, Stephanie Guinehut, Clement De boyer montegut, and Clement Bricaud
 GLORYS2: A Global ocean reanalysis simulation of the period 1992-present
- XY625 EGU2011-3640
Lea Wynn and Mark Cobb
 Mode Water in the Sea of Japan: A Study on the Reproducibility of Mode Water in the Data-Assimilating Regional Navy Coastal Ocean Model
- XY626 EGU2011-3826
Sheila Natalí Estrada Allis, Rui Caldeira, Xavier Couvelard, Francisco Machín, Ángel Rodríguez Santana, and Pablo Sangrà
 Towards the construction of a validated numerical system to study the mesoscale dynamics of the North East Atlantic (2003-2006)
- XY627 EGU2011-4941
Atanas Palazov, Veselka Marinova, Violeta Slabakova, and Asen Stefanov
 Bulgarian Activities in the building of Black Sea In Situ Thematic Assembly Centre within MyOcean project
- XY628 EGU2011-6336
George Galanis, George Zodiatis, Dan Hayes, Andreas Nikolaidis, and George Kallos
 CYCOFOS new wave forecasting system incorporating sea currents
- XY629 EGU2011-6903
Claire Dufau, Isabelle Pujol, Yannice Faugère, and Marie-Hélène Rio
 Regional High-Resolution Altimeter Products for Model Assessment and Data Assimilation
- XY630 EGU2011-8983
Jay Veeramony, Mark Orzech, and Hans Ngodock
 Twin Experiment Study Using a Discretized Adjoint Model for SWAN
- XY631 EGU2011-12171
Svetlana Losa, Jens Schröter, Sergey Danilov, Lars Nerger, Tijana Janjić, and Frank Janssen
 Assimilating NOAA SST data into BSH operational circulation model for the North and Baltic Seas: What can we learn about the model and data
- XY632 EGU2011-11519
Abdelali El Moussaoui, Coralie Perruche, Eric Greiner, and Marion Gehlen
 Integration of biogeochemistry and ecology model to Mercator ocean systems
- XY633 EGU2011-9916
Marta Umbert, Nina Hoareau, Joaquim Ballabrera, and Marcos Portabella
 Multivariate statistical model for the air-sea heat fluxes

- XY634 EGU2011-10683
Baptiste Murre, Jacopo Chiggiato, Fabian Lenartz, and Michel Rixen
Ocean temperature uncertainty forecast from 3-D super-ensemble modelling
- XY635 EGU2011-10725
Baptiste Murre and Alberto Alvarez
Operational glider adaptive sampling during REP10 experiment
- XY636 EGU2011-10112
Juan Fernandez, Gabriel Jorda, Vicente Gracia, and Manuel Espino
Operational sediment transport modelling in the Western Mediterranean. System implementation and quality assessment
- XY637 EGU2011-11110
Gianluca Volpe, Simone Colella, Rosalia Santoleri, Vega Forneris, and Cristina Tronconi
Operational oceanography in the Mediterranean Sea: the ocean colour satellite observing system
- XY638 EGU2011-12875
Sebastian Grayek, Joanna Staneva, Johannes Schulz-Stellenfleth, Willhelm Petersen, and Emil V. Stanev
Use of FerryBox surface temperature and salinity measurements to improve model based state estimates for the German Bight
- XY639 EGU2011-12265
David Lewis, Richard Gould, Adam Lawson, Zhongping Lee, Paul Martinolich, Ronald Vaughan, Samir Ahmed, Alex Gilerson, Tristan Harmel, and Giulietta Fargion
Vicarious Calibration of the Hyperspectral Imager for Coastal Oceans (HICO) to Improve Bio-Optical Property Retrievals for Hydrodynamic Models
- XY640 EGU2011-11193
Johannes Schulz-Stellenfleth, Emil Stanev, and Joanna Staneva
Assimilation of HF radar data into a 3D primitive equation model to improve forecasts of the circulation in the German Bight
- XY641 EGU2011-8793
Didier Jourdan, Mathilde Faillot, and Claire Maraldi
SOAP-3: An example of integrated oceanographic information system for naval applications
- XY642 EGU2011-4404
Xunqiang Yin, Fangli Qiao, Changshui Xia, and Yongzeng Yang
Using Ensemble Adjustment Kalman Filter to assimilate Argo profiles in a coastal OGCM
- XY643 EGU2011-3790
Atanas Palazov, Emil Stanev, Georgi Korchev, Elisaveta Peneva, and Violeta Slabakova
Development of National research infrastructure as a Bulgarian component of the Euro ARGO network - Bul ARGO
- XY644 EGU2011-8833
Ed Blockley and Alistair Sellar
Assessment of ocean currents in the FOAM system : site-specific vs. feature based analysis
- XY645 EGU2011-8896
Byoung Woong An, Antti Westerlund, and Tapani Stipa
Validation of the Baltic Sea Ice ensemble forecasting
- XY646 EGU2011-9898
Marta Umbert and Joaquim Ballabrera
Do EnKF compare to 4D-Var to retrieve model parameters? The case of a deterministic model assimilating deterministic and stochastic observations
- XY647 EGU2011-11250
Nicolas Ferry, Bernard Barnier, Stéphanie Guinehut, Keith Haines, Simona Masina, Laurent Parent, Sandrine Mulet, Maria Valdivieso, and Andrea Storto
The global ocean reanalysis effort of MyOcean: description and early results

EOS06/BG1.14/CL5.1/ERE5.4 – Modern Climate Science Education and Communications (co-organized) – Orals

Convener: Klaus Grosfeld | Co-Conveners: Annette Ladstaetter-Weissenmayer, Eva-Maria Pfeiffer, Oliver Dilly

Room: 29

Chairperson: n.n.

- 08:30–08:45 EGU2011-8969
Christina Klose and Dierk Hebbeln
The Bremen International Graduate School for Marine Sciences - GLOMAR
- 08:45–09:00 EGU2011-13164
Eva-Maria Pfeiffer, Detlef Stammer, Oliver Dilly, and **Hermann Held**
Interdisciplinary MSc and Doctoral Education in Climate System Science at the University of Hamburg
- 09:00–09:15 EGU2011-11972
Marianela Fader, **Andreas Hilboll**, Florian Rauser, and Sebastian Sonntag
Presenting Young Earth System Scientists (YESS) - a new network for new scientists

- 09:15–09:30 EGU2011-7511
Heike Huebener
 Regional environmental agencies as facilitators for communicating climate change information
- 09:30–09:45 EGU2011-5766
Kirsti Jylhä and Reija Ruuhela
 Visualization of climate change information - feedback from web page visitors
- 09:45–10:00 EGU2011-9511
Jennifer Lenhardt, Richard W. Müller, Uwe Pfeifroth, and the EURO4M team
 The EURO4M project: Improving climate data products and services by interacting with climate data users

EOS06/BG1.14/CL5.1/ERE5.4 – Modern Climate Science Education and Communications (co-organized) – Posters

Convener: Klaus Grosfeld | Co-Conveners: Annette Ladstaetter-Weissenmayer, Eva-Maria Pfeiffer, Oliver Dilly

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Klaus Grosfeld

- Z1 EGU2011-10213
 Lorenz Martin, **Christoph Raible**, and Martin Grosjean
 The Graduate School of Climate Sciences, University of Bern
- Z2 EGU2011-9833
Klaus Grosfeld, Gerrit Lohmann, Annette Ladstätter-Weissenmayer, John Burrows, Claudia Sprengel, Claudia Hanfland, Jelle Bijma and the joint ESSReS-PEP-POLMAR Team
 ESSReS-PEP-POLMAR, an international and interdisciplinary postgraduate education concept on Earth and Environmental Sciences
- Z3 EGU2011-6623
Avan Antia, Kerstin Hoffmann, and Angelika Hoffmann
 Education for
- Z4 EGU2011-13047
Antje Weitz and Bjorn Stevens
 Structured supervision of doctoral studies in the IMPRS-ESM
- Z5 EGU2011-12028
Enrica Caporali, Elena Palmisano, and Juna Valdiserri
 Enhancing Environment Education in Eastern Europe
- Z6 EGU2011-8395
Susanne Pfeifer, Hinnerk Ries, and Daniela Jacob
 From regional climate models to climate change impact assessment: data support and demand
- Z7 EGU2011-11195
 Peter Lemke, **Klaus Grosfeld**, Marietta Weigelt, Renate Treffeisen and the REKLIM Speakers Team
 Climate Initiative Regional Climate Change (REKLIM), from climate simulation to climate advice
- Z8 EGU2011-12369
Hinnerk Ries, Daniela Jacob, and Richard Schmitt
 Perceived temperature as an indicator for extreme events
- Z9 EGU2011-12901
hossien sharifan, Mona Saffar, A.Ahmad Dehghani, and Mohsen Tahmasebi
 Investigation of Water temperature effects on Evaporation from of Salt Water Surfaces
- Z10 EGU2011-12779
hossien sharifan, Mehry Abdi, and Afsaneh Asady
 Forecasting of annual precipitation in Different Regions

ESSI8 – Uncertainty in Environmental Data and Models (co-listed) – Orals

Convener: Dan Cornford | Co-Conveners: Stefano Nativi, Edzer Pebesma, Gerard Heuvelink

Room: 19

Chairperson: n.n.

- 13:30–13:45 EGU2011-13514
Sarah Cornell
 Social perspectives on environmental risk and uncertainty
- 13:45–14:00 EGU2011-11580
Jon Olav Skøien, Grégoire Dubois, Phuong Truong, Dan Cornford, and Michael Shulz
 Uncertainty propagation in assessing ecosystems similarities - an example application using eHabitat
- 14:00–14:15 EGU2011-5932
Kristin Vogel, Carsten Riggelsen, and Frank Scherbaum
 Learning Ground Motion Models from Data using Bayesian Networks

- 14:15–14:30 EGU2011-7767
Johan deHaan, Maarten Sneep, and Pepijn Veefkind
 Retrieval algorithms for TROPOMI - improving error estimates of retrieved quantities by using Optimal Estimation with explicit a priori data
- 14:30–14:45 EGU2011-1880
Lindsay Collins, Ken Carslaw, Graham Mann, Kirsty Pringle, and Dominick Spracklen
 A systematic approach to computer model evaluation, using a global aerosol model
- 14:45–15:00 EGU2011-11001
Wouter Dorigo, Robert Parinussa, Klaus Scipal, Yi Liu, Richard de Jeu, and Wolfgang Wagner
 Error characterisation of global active and passive microwave soil moisture data sets
- Chairperson: n.n.
- 15:30–15:45 EGU2011-9677
Heiko Mueller, Qing Liu, Quan Bai, Corne Kloppers, and Andrew Terhorst
 Enabling Assessment and Propagation of Information Quality in the South Esk Hydrological Sensor Web
- 15:45–16:00 EGU2011-5384
Lucy Bastin, Matthew Williams, John Paul Gosling, Phuong Truong, Dan Cornford, Gerard Heuvelink, and Frederic Achard
 Web Based Expert Elicitation of Uncertainties in Environmental Model Inputs
- 16:00–16:15 EGU2011-8339
Judith Versteegen, Floor van der Hilst, Derek Karssenberg, and André Faaij
 Communicating Uncertainty in Spatial Decision Support Systems - a Case Study of Bioenergy-Crop Potentials in Mozambique
- 16:15–16:30 EGU2011-3230
Didier G. Leibovici, Amir Pourabdollah, and Mike Jackson
 Meta-propagation of Uncertainties for Scientific Workflow Quality Management in Interoperable Spatial Data Infrastructures
- 16:30–16:45 EGU2011-10149
Siegbert Kunz and Kym Watson
 A Spatial Information Infrastructure for linking environmental and health data: the approach to information fusion including uncertainty handling in the EO2HEAVEN project
- 16:45–17:00 EGU2011-5554
Lydia E. Gerharz, Benjamin Proß, Christoph Stasch, and Edzer Pebesma
 A Web-based Uncertainty-enabled Information System for Urban Air Quality Assessment

ESSI8 – Uncertainty in Environmental Data and Models (co-listed) – Posters

Convener: Dan Cornford | Co-Conveners: Stefano Nativi, Edzer Pebesma, Gerard Heuvelink

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dan Cornford

- XL199 EGU2011-769
Euan Macrae, Clare Bond, and Zoe Shipton
 Quantification of uncertainty in geoscience interpretation: a statistical analysis of the factors that affect interpretational ability
- XL200 EGU2011-2965
Antonia K. Runge, Frank Scherbaum, and Carsten Riggelsen
 Quantification of expert knowledge for PSHA using graphical tools
- XL201 EGU2011-2642
Christopher Moseley, Claus Döring, Bernd Ahrends, and Oleg Panferov
 Uncertainties in regional climate scenarios data and their effect on results of impact models in forestry
- XL202 EGU2011-3372
Rachel Lowe, David Stephenson, Trevor Bailey, Tim Jupp, Richard Graham, and Adrian Tompkins
 Communicating probabilistic climate-sensitive disease risk forecasts
- XL203 EGU2011-13186
Dan Cornford, Richard Jones, Alexis Boukouvalas, and Remi Barillec
 Statistical Issues of Managing Uncertainties in Environmental Models
- XL204 EGU2011-13126
Dan Cornford, Edzer Pebesma, Stefano Nativi, Matthew Williams, Christoph Stasch, Richard Jones, and Lydia Gerharz
 Realising the Uncertainty Enabled Model Web
- XL205 EGU2011-4077
Kerry Gallagher, Thomas Bodin, Malcolm Sambridge, Dominik Weiss, Malin Kylander, and David Large
 Inference of abrupt changes in noisy data records using Bayesian transdimensional changepoint models

- XL206 EGU2011-5057
Matthias Vanmaercke, Jean Poesen, Faruk Ocakoglu, Mahmood Arabkhedri, and Maria Radoane
How long should we measure to obtain reliable average catchment sediment yields?
- XL207 EGU2011-11108
Mohamar Ouedraogo, **Aurore Degré**, Eléonore Beckers, and Charles Debouche
A methodology to assess the exactness of Stream Network modeling process on agricultural watersheds
- XL208 EGU2011-10893
Philipp Weihs and the actinicflux Team
The influence of the spatial resolution of topographic input data on the accuracy of 3-D UV actinic flux and irradiance calculations
- XL209 EGU2011-7018
Nadine Goris and Hendrik Elbern
Singular vector based uncertainties of initial values and emissions for the ZEPTEP-2 campaign
- XL210 EGU2011-2566
Maurice Cox, Alistair Forbes, Nigel Fox, Peter Harris, Graham Machin, and Michael de Podesta
Metrological issues in producing gridded temperature data sets
- XL211 EGU2011-9630
Greg Timms, Ben Howell, Paulo de Souza, Claire D'Este, Daniel Smith, Ross Atkins, and Chris Sharman
Automated Assessment and Visualisation of Measurement Uncertainties in a Low-Cost Marine Sensor Network
- XL212 EGU2011-7137
Richard Wartenburger, Alexander Stickler, and Stefan Brönnimann
Quality Control of Selected Historical Radiosonde Observations from 1948-1966
- XL213 EGU2011-8871
David Huard and Diane Chaumont
Bayesian uncertainty analysis of climatological changes in IDF curves
- XL214 EGU2011-7428
Nikos Gianniotis, Carsten Riggelsen, and Frank Scherbaum
Ensembles of Ground Motion Models
- XL215 EGU2011-9504
Anja Vrežko and Tomaž Podobnikar
Error Assessment of DEM generated from Contours

NP3.7 – Geophysical Downscaling Methods (co-listed) – Orals

Convener: Tobias Sauter | Co-Conveners: Victor Venema, Douglas Maraun, Erika Coppola

Room: 13

Chairperson: Douglas Maraun

- 13:30–13:45 EGU2011-3764
Xavier Beuchat, **Bettina Schaefli**, André Mermoud, and Marc Soutter
Toward a robust method for sub-daily rainfall downscaling from daily data
- 13:45–14:00 EGU2011-8826
Matthieu Lafaysse, Benoit Hingray, Joël Gailhard, and Abdelkader Mezghani
Evaluating the temporal transferability of statistical downscaling models for climate change impact studies.
- 14:00–14:15 EGU2011-11395
Abdelkader Mezghani and Benoit Hingray
Statistical downscaling of precipitation: interest of moisture variables
- 14:15–14:30 EGU2011-7963
Tobias Sauter and Victor Venema
Natural three-dimensional predictor domains for statistical precipitation downscaling
- 14:30–14:45 EGU2011-6410
Simona Barbarino, Daniele Cane, and Christian Ronchi
Regional climate model downscaling with Multimodel SuperEnsemble in the Alpine area and wildfire potential evaluation in the scenario
- 14:45–15:00 EGU2011-1139
Amadou Idrissa BOKOYE
Assessment of the influence of the global climate model (GCM) generation on Empirical Statistical Downscaling outputs: A case study from Canadian GCMs
- 15:00–15:15 EGU2011-11123
Anne Schindler, Douglas Ma, and Jürg Luterbacher
The annual cycle of intensity and frequency of extreme precipitation events across the UK in observations and future projections
-

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

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

Room: 11

Chairperson: n.n.

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

COFFEE BREAK

Chairperson: n.n.

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

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-3519
Peter Janssen
Ocean Wave effects on the daily cycle in SST
- 13:45–14:00 EGU2011-3930
Johannes Gemmrich and Svein Vagle
Observations of wave-induced mixing
- 14:00–14:15 EGU2011-4324
Yeli Yuan and Ming Lu
A unified theory of waves in a general ocean

- 14:15–14:30 EGU2011-1932
Anna Rutgersson, Björn Carlsson, Rajesh Kumar, Alvaro Semedo, Øyvind Sætra, and Øyvind Breivik
Impact of surface waves on the atmosphere in a coupled wave-atmosphere regional climate model
- 14:30–14:45 EGU2011-1080
Lev Shemer and Andrey Zavadsky
On Reynolds stresses over wind waves
- 14:45–15:00 EGU2011-3906
Paul Hwang
Ocean Surface Roughness and Remote Sensing

Friday, 08 April

CL1.6 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic – Orals

Convener: Fabio Florindo | Co-Conveners: Michele Rebesco, Henk Brinkhuis, Matthias Forwick, Jan Sverre Laberg, David Harwood, Angelo Camerlenghi, Berit Oline Hjelstuen

Room: 16

Chairperson: n.n.

13:30–13:45 EGU2011-12962

David Harwood, Fabio Florindo, Richard Levy, Franco Talarico, and SMS Project Science Team
Early and Middle Miocene Antarctic Ice Sheet Behavior: results from the ANDRILL SMS Project

13:45–14:00 EGU2011-10814

Peter Bijl, James Bendle, Jörg Pross, Stefan Schouten, Ursula Röhl, Catherine E Stickley, Matthew Olney, Lisa Tauxe, Henk Brinkhuis, Carlota Escutia and the Expedition 318 scientists Team
Integrated stratigraphy of the Eocene Wilkes Land Margin, Antarctica; preliminary results from IODP Expedition 318: dinoflagellate cyst and TEX86 results

14:00–14:15 EGU2011-8825

James Bendle, Peter Bijl, Lineth Contreras, Jörg Pross, Stefan Schouten, Ursula Röhl, Mark Pagani, Robert DeConto, Steven Bohaty, Henk Brinkhuis and the Expedition 318 Scientists Team
Extremely warm early Eocene marine and terrestrial temperatures on the Antarctic margin: implications for the persistent data-model mismatch problem in Greenhouse climate intervals

14:15–14:30 EGU2011-10495

Paolo Stocchi, Rob DeConto, Carlota Escutia, Henk Brinkhuis, Dave Pollard, Bert L.L.A. Vermeersen, Alexander J.P. Houben, Peter K. Bijl and the Expedition 318 Scientists Team
The onset of Cenozoic Antarctic glaciation: understanding relative sea-level changes - model and field data comparison

14:30–14:45 EGU2011-10532

Alastair Graham, James Smith, Robert Larter, Karsten Gohl, Claus-Dieter Hillenbrand, and Gerhard Kuhn
Palaeo-ice streams in the Amundsen Sea sector of the West Antarctic Ice Sheet during the last glacial period: flow dynamics, retreat histories, and geological controls

14:45–15:00 EGU2011-10093

H. Christian Hass, Gerhard Kuhn, Gabriela V. Tosonotto, Nina Wittenberg, and Anne-Cathrin Wölfl
Recent and subrecent climate-controlled sedimentation in Potter Cove and Maxwell Bay, King George Island, Antarctica

Chairperson: n.n.

15:30–15:45 EGU2011-12977

Ross Powell and Timothy Hodson
Rapid Retreat of the Glacier Bay Ice Stream from the Last Glacial Maximum of the Cordilleran Ice Sheet, SE Alaska

15:45–16:00 EGU2011-7746

Frank Niessen, Tanja Dufek, Anne Hegewald, Rüdiger Stein, Jens Matthiessen, and Wilfried Jokat
Pleistocene Ice sheets and Ice Shelves on the Chukchi Borderland, Mendeleev Ridge and East Siberian Continental Slope (Arctic Ocean)

16:00–16:15 EGU2011-6596

Monica Winsborrow, Chris D Clark, and Chris R Stokes
Exploring controls on ice stream location

16:15–16:30 EGU2011-1046

Heidi Kjennbakken, Hans Petter Sejrup, and Hafliði Hafliðason
Mid- to late Holocene oxygen isotopes from Voldafjorden, western Norway

16:30–16:45 EGU2011-4291

Audrey Dallimore, Randolph J. Enkin, Kristen Cooke, and Murray B. Hay
Reconstruction of palaeo-environments of the northeastern Pacific Ocean during the Late Holocene based on multi-proxy analyses of marine sediments preserved in the coastal fjords of British Columbia, Canada.

16:45–17:00 EGU2011-13180

Witold Szczuciński
Modern and Little Ice Age sediment accumulation rates in fjords of Svalbard

CL1.6 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic – Posters

Convener: Fabio Florindo | Co-Conveners: Michele Rebesco, Henk Brinkhuis, Matthias Forwick, Jan Sverre Laberg, David Harwood, Angelo Camerlenghi, Berit Oline Hjelstuen

Hall XL | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: n.n.

- XL1 EGU2011-5489
Berit Oline Hjelstuen, Heidi Kjennbakken, Vegard Bleikli, Remi Anthoni Ersland, Sigurd Kvilhaug, and Christine Euler
Sedimentary processes within fjord systems - evidence from Fensfjorden, western Norway
- XL2 EGU2011-4596
Daniel Winkelmann, Wilfried Jokat, Laura Jensen, and Hans-Werner Schenke
Dynamic Ice on the Continental Shelf of NE-Greenland - The Submarine Morphological Record
- XL3 EGU2011-997
Jan Sverre Laberg
Submarine glacial debris flows - a review
- XL4 EGU2011-1095
Evgenia Bazhenova, Ruediger Stein, and Christoph Vogt
Provenance discrimination in late Quaternary sediments from the Amerasian Basin (Arctic Ocean) constrained by mineralogical record
- XL5 EGU2011-2686
Elisabeth Kahlmeyer and Samuel J. Bentley
Dispersal of fluvial sediment in two sub-arctic fjords on the Labrador Coast: Nachvak Fjord and Saglek Fjord, Canada
- XL6 EGU2011-4211
Matthias Forwick and Tore O. Vorren
A Late Weichselian and Holocene stratigraphy for Spitsbergen fjords
- XL7 EGU2011-4461
Vladimir Ivanov, Andrew Dale, and Mark Inall
A high-resolution baroclinic model of Loch Linnhe
- XL8 EGU2011-11445
Maarten Prins, Simon Troelstra, Kay Beets, Noortje Dijkstra, Michel Boos, Karlijn Beers, Daniel Rits, Rik Tjallingii, Dorthe Klitgaard-Kristensen, and Nalan Koç
Environmental change in the European Arctic inferred from fjord sediments: a sediment-provenance study of glacio-marine sediments in Kongsfjorden, Svalbard
- XL9 EGU2011-4525
Mayte Pedrosa, Karin Andreassen, Monica Winsborrow, and Angelo Camerlenghi
Seafloor geomorphology of the Storfjorden Trough outer continental shelf
- XL10 EGU2011-4698
Fiona Hibbert, William Austin, and Robert Gatliff
Correction of Coring Artefacts ('over-sampling'): An example using paired piston and gravity cores from the Rockall Trough, N. Atlantic
- XL11 EGU2011-7787
Juanita Sekkingstad, Ulysses Ninnemann, and Helga Kleiven
Late Holocene Hydrographic variability in the Antarctic Circumpolar Current
- XL12 EGU2011-8053
Tom Rippeth, James Scourse, and Katsuto Uehara
Impact of sea-level rise over the last deglacial transition on the strength of the continental shelf CO₂ Pump
- XL13 EGU2011-9964
Marga Garcia, Julian Dowdeswell, and Martin Jakobsson
Recent glacially influenced sedimentary processes on the East Greenland continental margin and deep basin
- XL14 EGU2011-11397
Kelly Hogan, Julian Dowdeswell, Colm Ó Cofaigh, Justin Dix, and Carol Cotterill
Sediment stratigraphy records the deglacial history of Jakobshavn Isbræ, West Greenland
- XL15 EGU2011-1248
Wolfram Geissler, Wilfried Jokat, and Harald Brekke
The Yermak Plateau in the Arctic Ocean in the light of reflection seismic data - implication for its tectonic and sedimentary evolution
- XL16 EGU2011-3679
Hedinn Valdimarsson and Steingrímur Jónsson
Hydrography and dynamics of Icelandic fjords
- XL17 EGU2011-6648
Maria Włodarska-Kowalczyk and Jan Marcin Włosowski
Biodiversity and community structure of soft-bottom macrozoobenthos in Arctic glacial fjords (west Spitsbergen)

- XL18 EGU2011-1636
Lineth Contreras, Jörg Pross, James Bendle, Stefan Schouten, Peter Bijl, Ursula Röhl, Lisa Tauxe, Catherine Stickley, Steven Bohaty, Henk Brinkhuis and the IODP Expedition 318 Science Party Team
Early Eocene Antarctic terrestrial ecosystem dynamics; a view from the Wilkes Land margin
- XL19 EGU2011-12573
Alexander J.P. Houben and the The IODP Expedition 318 Scientific Party Team
Oligocene environmental changes on the Wilkes Land margin in response to a developing East Antarctic ice sheet.
- XL20 EGU2011-9199
Francesca Sangiorgi, Henk Brinkhuis, Stefan Schouten, James Bendle, Carlota Escutia, Adam Klaus, Fabio Florindo, David Harwood, Veronica Willmott, Gert-Jan Reichert and the Expedition 318 Scientists Team
Miocene environmental changes along the Wilkes Land margin, Antarctica (IODP 318): preliminary results
- XL21 EGU2011-12401
Jhon J Gonzalez, Carlota Escutia, Henk Brinkhuis, Adam Klaus and the Expedition 318 Scientists Team
Linking IODP Expedition 318 Sites to Seismic Profiles: Implications for Depositional Paleoenvironments
- XL22 EGU2011-9102
Tina van de Flierdt, Francisco J. Jimenez-Espejo, Carlota Escutia, Henk Brinkhuis, Adam Klaus, and Expedition 318 Scientists
Bulk sediment geochemistry as a tool in palaeoclimate studies; preliminary results from shipboard analyses of IODP Expedition 318
- XL23 EGU2011-2905
Stefan Hoffmann, Hilmar von Eynatten, and Gerhard Kuhn
Geochemical record of the ANDRILL AND-2A drillcore: Miocene sediment provenance and continental weathering in the McMurdo Sound, Ross Sea, Antarctica
- XL24 EGU2011-5290
Stephen Pekar, Marvin Speece, Gary Wilson, David Sunwall, and Kirsty Tinto
The Offshore New Harbor (ONH) Seismic Expedition: Revealing the Stratigraphic History in the Southern McMurdo Sound Region, Ross Sea, Antarctica from the Greenhouse to Icehouse Worlds
- XL25 EGU2011-7645
Allyson Tessin, Ulysses Ninnemann, and Helga Flesche Kleiven
Centennial scale variability in Scotia Sea surface and bottom water properties during the Late Holocene
- XL26 EGU2011-6505
Cecilie Finsnes, Ulysses Ninnemann, and Helga F. Kleiven
Links between the Antarctic Circumpolar Current, intermediate ocean ventilation, and deglacial CO₂ changes
- XL27 EGU2011-1103
Gabriele Uenzelmann-Neben and Karsten Gohl
Amundsen Sea sediment drifts: Archives of modifications in oceanographic and climatic conditions
- XL28 EGU2011-6495
Karsten Gohl, Gabriele Uenzelmann-Neben, Estella Weigelt, Ansa Lindeque, Thomas Kalberg, Gerhard Kuhn, Claus-Dieter Hillenbrand, and Robert D. Larter
Sedimentary and glacial processes of the Amundsen Sea Embayment, West Antarctica

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

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

Room: 15

Chairperson: Aslak Grinsted

- 08:30–08:45 EGU2011-3244
pierre prandi, michael ablain, nicolas picot, and anny cazenave
Sea level variability in the Arctic Ocean from satellite altimetry
- 08:45–09:00 EGU2011-3793
Christopher Piecuch and Rui Ponte
Low-Frequency Variability in Regional Sea Level: The Roles of Advection, Diffusion and Surface Buoyancy Fluxes
- 09:00–09:15 EGU2011-4343
john moore, svetlana Jevrejeva, and aslak Grinsted
The historical global sea level budget
- 09:15–09:30 EGU2011-5508
Riccardo Riva, Jonathan Bamber, David Lavallée, and Bert Wouters
Sea-level fingerprint of continental water and ice mass change from GRACE
- 09:30–09:45 EGU2011-6046
Bo Christiansen, Torben Schmith, and Peter Thejll
How well can we reconstruct global sea level rise and variability?

09:45–10:00 EGU2011-6278

Isabel M. Vigo, José M. Sánchez Reales, Mario Trottni, and Benjamin F. Chao
Mediterranean sea level variations with regional acceleration/deceleration during 1993-2008

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2011-8229

Stefan Rahmstorf, Martin Vermeer, and Mahé Perrette
Robustness of semi-empirical sea level projections

10:45–11:00 EGU2011-8956

Ichiro Fukumori
Distinguishing Sea Level Change due to Heating and Freshwater Input from Redistribution by Ocean Circulation

11:00–11:15 EGU2011-9264

Christopher W. Hughes, Joanne Williams, Rory Bingham, Chris Wilson, and Vladimir Stepanov
Contributions of bottom pressure and steric signals to regional sea level variability: Extracting the physics from numerical models.

11:15–11:30 EGU2011-13130

Mahé Perrette, Riccardo Riva, Felix Landerer, and Malte Meinshausen
Probabilistic projection of regional sea-level

11:30–11:45 EGU2011-13300

Gabriel Jordà, Damià Gomis, Francisco M. Calafat, and Marta Marcos
Understanding Mediterranean sea level long term variability through a simple conceptual model. Local versus remote forcing.

11:45–12:00 EGU2011-1405

Julian Kuhlmann, Henryk Dobslaw, and Maik Thomas
Improved Modelling of Sea-Level Patterns by Incorporating Loading and Self-Attraction

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

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

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

XL29 EGU2011-1543

Andrzej Jankowski and Wieslaw Maslowski
Dependence of sea level variability in the Nordic Seas on the NAO - results from a Pan-Arctic coupled ice-ocean model

XL30 EGU2011-5157

Robert Tenzer and Vladislav Gladkikh
Analysis of the tide-gauge records in New Zealand

XL31 EGU2011-5257

Curtis Collins, Affonso Mascarenhas, and Rodney Martinez
Structure of Ocean Circulation between the Galapagos Islands and Ecuador

XL32 EGU2011-6693

Svetlana Jevrejeva, John Moore, and Aslak Grinsted
Is the present -day rate of sea level rise unprecedented compared to the last 300 years?

XL33 EGU2011-8225

Marta Marcos, Bernat Puyol, Carmen Herrero i Navarro, María Jesús García Fernández, Guy Woppelmann, Andy Plater, Tim Shaw, and Frazer Bird
The long sea level record at Cadiz (Southern Spain) from 1880 to 2010

XL34 EGU2011-8440

Samantha Royston, Kevin Horsburgh, and Jonathan Lawry
Application of a soft rule-based model to storm surge and sea level variability

XL35 EGU2011-8800

Luca Scarascia and Piero Lionello
Links between Sea Level in the NORTHER ADRIATIC SEA and large scale patterns

XL36 EGU2011-9054

Erricos C. Pavlis, Paraskevas Milas, Keith Evans, Demetris Paradissis, Basil Massinas, and Xenophon Frantzis
THE EASTERN MEDITERRANEAN ALTIMETER CALIBRATION NETWORK - eMACnet

- XL37 EGU2011-9889
Ole Baltazar Andersen, Yongcun Cheng, and Tina Hvid
Regional Sea level change in the Arctic Ocean from a combination of radar and laser altimetry, tide gauges and ocean models
- XL38 EGU2011-10091
Andrew Matthews, Elizabeth Bradshaw, Kathy Gordon, Simon Holgate, Svetlana Jevrejeva, Lesley Rickards, Mark Tamisiea, and Philip Woodworth
The Permanent Service for Mean Sea Level: A review of recent updates
- XL39 EGU2011-10137
Ivica Vilibic, Jadranka Sepic, Marta Marcos, and Gabriel Jorda
Mediterranean sea level variability changes and projections at high frequencies (1-100 days)
- XL40 EGU2011-2230
Detlef Stammer, Neeraj Agarwal, Peter Herrman, **Armin Köhl**, and Roberto Mechoso
Response of the Coupled Ocean-Atmosphere System to Greenland Ice Melting
- XL41 EGU2011-3090
Gilles Larnicol
The ESA Sea Level CCI project
- XL42 EGU2011-4571
Michael Whitworth
Sea level rise and storminess for the south-west of England
- XL43 EGU2011-8649
Svetlana Jevrejeva, John Moore, and Aslak Grinsted
Sea level projections with new generation of scenarios for climate change
- XL44 EGU2011-1859
Olivier Henry, Pierre Prandi, and Anny Cazenave
Arctic sea level changes and variability.
- XL45 EGU2011-2730
Frauke Albrecht, Ralf Weisse, and Hans von Storch
Regional Mean Sea Level Changes in the German Bight
- XL46 EGU2011-8210
Andrey Proshutinsky and Igor Ashik
Rates of sea level change in the Arctic Ocean and decadal variability
- XL47 EGU2011-8313
Kristin Richter, Jan Even Øie Nilsen, and Helge Drange
Contributions to sea level variability along the coast of Norway during the past 60 years
- XL48 EGU2011-9191
Philip Thompson, Gary Mitchum, and Mark Merrifield
Decadal variability in sea level rise rates
- XL49 EGU2011-9726
David Hill, Stephen Griffiths, Dick Peltier, Benjamin Horton, and Torbjorn Tornqvist
High-resolution numerical modeling of tides in the western Atlantic, Gulf of Mexico, and Caribbean Sea during the Holocene
- XL50 EGU2011-10044
Roelof Rietbroek, Sandra-Esther Brunnabend, Jürgen Kusche, and Jens Schröter
What can GRACE gravimetry and altimetry tell us about sea level contributors?
- XL51 EGU2011-11865
Simona Masina, Andrea Storto, Srdjan Dobricic, Pierluigi Di Pietro, Ida Russo, and Antonio Navarra
Impact of data assimilation and model resolution on sea level rise and variability

CL2.7 – Circulation type classification and circulation regimes – Orals

Convener: Christoph Beck | Co-Conveners: Andreas Philipp, Jucundus Jacobeit

Room: 16

Chairperson: Christoph Beck, Andreas Philipp

- 08:30–08:45 EGU2011-267
Alexandre M. Ramos, Michael Sprenger, Luis Gimeno, Heini Wernli, Nieves Lorenzo, and Ana Maria Durán-Quesada
A new circulation type classification based upon clustering of lagrangian air trajectories
- 08:45–09:00 EGU2011-1206
María J. Casado and **María A. Pastor**
How well do IPCC AR4 models simulate circulation types?
- 09:00–09:15 EGU2011-7352
Alexandre Belleflamme, Xavier Fettweis, and Michel Erpicum
Evaluation of the present and future general circulation over western Europe simulated by the IPCC AR5/CMIP5 GCMs with the help of a circulation type classification

- 09:15–09:30 EGU2011-10465
Ulf Riediger, Heiko Steiner, Annegret Gratzki, Sabrina Plagemann, Peter Krahé, and Enno Nilson
 Objective weather types as a tool to quantify the proportion of RCM precipitation bias due to GCM circulation bias
- 09:30–09:45 EGU2011-27
Chris Lennard
 Using self organizing maps to relate changes in extreme rainfall to changes in synoptic circulation
- 09:45–10:00 EGU2011-3297
Tobias Pardowitz, Gregor C. Leckebusch, and Uwe Ulbrich
 Circulation weather types for Europe related to storminess in the state of Hesse

CL2.7 – Circulation type classification and circulation regimes – Posters

Convener: Christoph Beck | Co-Conveners: Andreas Philipp, Jucundus Jacobeit

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Andreas Philipp, Christoph Beck

- XL52 EGU2011-3139
Christian Franzke
 A Hidden Markov Model Perspective on Regimes in Atmospheric Flows
- XL53 EGU2011-7631
Renate Kocen and Stefan Brönnimann
 Towards a daily weather type classification for the alpine region back to the late 18th century
- XL54 EGU2011-12874
Andreas Philipp, Christoph Beck, and Florian Streicher
 COST733CLASS - a software package for circulation and weather type classification
- XL55 EGU2011-4809
Valentina Khan, Vladimir Tischenco, Elena Roget, and Roman Vilfand
 The Classification of Troposphere Circulation Patterns Corresponding to Blocking Anticyclone Situations in the Atlantic-European Sector
- XL56 EGU2011-8583
Juan Pedro Montávez, Juan Andrés García-Valero, Juan José Gómez-Navarro, Sonia Jerez, Raquel Lorente-Plazas, and Pedro Jiménez-Guerrero
 Frequency, persistence and transitions of seasonal Weather Types affecting the Iberian Peninsula
- XL57 EGU2011-6908
Gorica Stanojevic
 Atmospheric circulation types and temperature variability in Serbia
- XL58 EGU2011-269
Alexandre M. Ramos, Luis Gimeno, Nieves Lorenzo, Michael Sprenger, Heini Wernli, and Ana Maria Durán-Quesada
 On the relationship between surface variables and circulation type classification based upon lagrangian air trajectories
- XL59 EGU2011-1934
Alexandre M. Ramos, Ricardo Ramos, Pedro Sousa, Ricardo M. Trigo, Marta Janeira, and Victor Prior
 On the relationship between cloud to ground lightning activity over Portugal and Circulation Weather Types during the 2003-2009 period
- XL60 EGU2011-9219
Iuliana Roman, Sabina Stefan, and Simona Andrei
 Precipitation Variability in Connection to Air Blocking Circulation in Southern Part of Romania
- XL61 EGU2011-8937
Simona Andrei, Sabina Stefan, and Florinela Gergescu
 Assessment of Circulation Types Responsible for Winter Severe Weather Events over South-Eastern Part of Romania, using COST733 Catalogues
- XL62 EGU2011-1881
Miroslava Unkasevic and Ivana Tomic
 Links between the extreme daily precipitation and the prevailing directions of the air masses over Serbia
- XL63 EGU2011-12920
Christoph Beck
 Monthly mean PM10 concentrations in Augsburg (Germany) and their relation to large-scale atmospheric circulation types

CL2.8/AS4.2 – Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-organized) – Orals

Convener: Gregor C. Leckebusch | Co-Conveners: Joaquim G. Pinto, Uwe Ulbrich

Room: 15

Chairperson: Gregor C. Leckebusch

- 13:30–13:45 EGU2011-110
x. I. Wang, y. Feng, g. p. Compo, j. s. Whitaker, p. d. Sardeshmukh, r. j. Allen, and v. r. Swail
 Extra-tropical cyclone activity in the ensemble of 20th Century Reanalysis (20CRv2)
- 13:45–14:00 EGU2011-4411
Yulia Zyulyaeva, Irina Rudeva, and Sergey Gulev
 Centennial and decadal scale changes of synoptic activity in 20C Reanalysis (1871-2008): reliability and evaluation
- 14:00–14:15 EGU2011-6731
Oliver Krueger and Hans von Storch
 On air pressure and past storm activity - an assessment of the informational value of proxies for past storm activity
- 14:15–14:30 EGU2011-6829
Urs Neu, Mirseid Akperov, Angela Coccozza, Masaru Inatsu, Sarah Kew, Kevin Keay, Christoph C. Raible, Irina Rudeva, Sven Ulbrich, Xiaolan L. Wang and the IMILAST Team
 Intercomparison of mid latitude storm diagnostics (IMILAST) - first results
- 14:30–14:45 EGU2011-1688
Mirseid G. Akperov and Igor I. Mokhov
 Estimation of tendencies of change for different characteristics of extratropical cyclones and anticyclones in the Northern Hemisphere
- 14:45–15:00 EGU2011-1349
Carsten Frederiksen, Jorgen Frederiksen, Janice Sisson, and Stacey Osbrough
 Observed Changes and Projections in Southern Hemisphere Mid-latitude Storms, Rainfall and Circulation
- Chairperson: Joaquim G. Pinto
- 15:30–15:45 EGU2011-11166
Helen Dacre and Marc Stringer
 A 3-dimensional composite study of cyclone structure and evolution
- 15:45–16:00 EGU2011-7467
 John Kouroutzoglou, Helena A. Flocas, Ian Simmonds, Kevin Keay, and **Maria Hatzaki**
 On the vertical structure of Mediterranean explosive cyclones employing a high resolution dataset
- 16:00–16:15 EGU2011-6200
Adrian Champion, Kevin Hodges, and Lennart Bengtsson
 Extreme Precipitation from Extra-Tropical Storms: A Limited Area Model Climate Change Analysis
- 16:15–16:30 EGU2011-2558
Christopher Moseley, Holger Göttel, and Daniela Jacob
 Analysis of cyclone water budgets in the North Atlantic and their role for Europe
- 16:30–16:45 EGU2011-8965
Marco Reale and Piero Lionello
 Characterization of cyclones producing intense precipitation events in the Mediterranean region
- 16:45–17:00 EGU2011-9544
Nicholas Graham and Daniel Cayan
 Projections of 21st Century Winter Wave Climate in the North Pacific under the SRES A2 Scenario using a Numerical Wave Model

CL2.8/AS4.2 – Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-organized) – Posters

Convener: Gregor C. Leckebusch | Co-Conveners: Joaquim G. Pinto, Uwe Ulbrich

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Uwe Ulbrich

- XL64 EGU2011-111
x. I. Wang, y. Feng, v. r. Swail, g. p. Compo, j. s. Whitaker, p. d. Sardeshmukh, and r. j. Allen
 Inter-comparison of extra-tropical cyclone activity in five reanalysis datasets
- XL65 EGU2011-4962
Natalia Tilinina, Sergey Gulev, Irina Rudeva, and Peter Koltermann
 Cyclone activity in different modern reanalyses: comparative assessment
- XL66 EGU2011-1316
Jens Grieger, Gregor C. Leckebusch, Mareike Schuster, and Uwe Ulbrich
 Southern Hemisphere cyclone development and transient moisture flux under recent and anthropogenic climate conditions

- XL67 EGU2011-2083
Lan Xia, Frauke Feser, Matthias Zahn, and Hans von Storch
Long-term Analysis of Extratropical Cyclone Activity by Tracking and Clustering Methods
- XL68 EGU2011-7636
Pauli Jokinen, Heikki Tuomenvirta, and Andrea Vajda
Changes in severe wind gust frequencies by the 2050s in Europe
- XL69 EGU2011-8611
Madeleine-Sophie Déroche
Extreme European Winter Storms: Sensitivities to Detection Methods and Reanalysis Datasets
- XL70 EGU2011-13861
Gregor C. Leckebusch, Daniel J. Bafort, Uwe Ulbrich, Annette Ganske, Hartmut Heinrich, and Gudrun Rosenhagen
Estimation of storm surge potential under anthropogenic climate change for the German Bight by means of high resolution storm simulations
- XL71 EGU2011-12104
Gregor C. Leckebusch, Tobias Pardowitz, Uwe Ulbrich, Markus Donat, Olaf Burghoff, Ulrich Bröcker, and Arthur Kubik
On the use of synthetic insurance data in extra-tropical storm loss estimations with high regional resolution
- XL72 EGU2011-7600
Robert Osinski, Philip Lorenz, Tim Kruschke, Maximilian Voigt, Gregor C. Leckebusch, and Uwe Ulbrich
Representation of Winter Storms in the ECMWF's Ensemble Prediction System
- XL73 EGU2011-8903
Tim Kruschke, Gregor C. Leckebusch, Dominik Renggli, and Uwe Ulbrich
Frequency and intensity of synoptic-scale winter storms under anthropogenic climate change
- XL74 EGU2011-9728
Katrin Nissen, Alexander Pasternack, Gregor C. Leckebusch, and Uwe Ulbrich
Regional characteristics of wind storms over Europe in an ensemble of climate change simulations
- XL75 EGU2011-10217
Katrin Nissen, Marco Reale, Gregor C. Leckebusch, Piero Lionello, Joaquim G. Pinto, Sven Ulbrich, and Uwe Ulbrich
Comparison of cyclone statistics based on two cyclone tracking algorithms - a contribution to IMILAST
- XL76 EGU2011-5559
Sven Ulbrich, Joaquim G. Pinto, Margarida L.R. Liberato, Isabel F. Trigo, and Ricardo M. Trigo
Evaluation and climatology of explosive developments in ERA Interim under consideration of multiple tracking approaches
- XL77 EGU2011-10367
Margarida L. R. Liberato, Isabel F. Trigo, Ricardo M. Trigo, Sven Ulbrich, and Joaquim G. Pinto
Storm Xynthia: Life-cycle and impacts of an extreme extra-tropical cyclone in the Euro-Atlantic Region
- XL78 EGU2011-10544
Iñigo Gómara, Belén Rodríguez-Fonseca, Carlos Yagüe, and Concepción Rodríguez-Puebla
Influence of the NAO on the properties of explosive cyclones
- XL79 EGU2011-11203
Helen Dacre, Suzanne Gray, and Lorena Garcies
Quantifying the sensitivity of North Atlantic cyclone development to atmospheric precursor fields
- XL80 EGU2011-10277
Pedro Ribera, **Paulina Ordoñez**, Laura del Rio, Javier Benavente, Maricarmen Alvarez-Castro, and Cristina Peña-Ortiz
Reconstruction of historical coastal storms in the Spanish coasts of the Gulf of Cadiz, 1929-2005
- XL81 EGU2011-1491
Paolo Boi and Marino Marrocu
Frequency, seasonal dependence and synoptic scale patterns of cyclones associated to very intense rainfall on Sardinia island.
- XL82 EGU2011-8840
Marino Marrocu, Antioco Vargiu, Gabriella Pusceddu, and Paolo Boi
Study of intense precipitation events during the last 40 years in Sardinia (Italy) by dynamical downscaling and regional climate modeling.
- XL83 EGU2011-8976
Michelle Simões Reboita, João Rafael Dias Pinto, and Rosmeri P. da Rocha
Environmental conditions associated to a subtropical cyclone development over the southwest of the Atlantic Ocean
- XL84 EGU2011-7334
Alice Favre
Cutoff Lows' frequency and large-scale climate modes in the Southern Hemisphere
- XL85 EGU2011-5748
Xiangdong Zhang and Soumik Basu
Modeling Investigation of the Recently Intensified North American Winter-Spring Storm Activities

- XL86 EGU2011-5271
Kuranoshin Kato and Kenichi Matsuo
 Appearance of storm track along Mongolia to northern Japan and the seasonal temperature rise from winter to spring around the western Japan

CL2.9 – Teleconnections: dynamics, predictability, impacts – Orals

Convener: Bo Christiansen | Co-Conveners: Frank Kwasniok, Uwe Ulbrich, Maarten Ambaum, Julie Jones, N. Rambu

Room: 16

Chairperson: Maarten Ambaum

- 10:30–10:45 EGU2011-7001
Alexey Karpechko
 Uncertainties in future climate attributable to uncertainties in future Northern Annular Mode trend
- 10:45–11:00 EGU2011-13183
 Karen L. Smith, **Paul J. Kushner**, Judah Cohen, and Christopher G. Fletcher
 Why can't climate models capture the observed connection between seasonal snow cover and the Northern Annular Mode?
- 11:00–11:15 EGU2011-9761
Kirstin Krueger, Matthew Toohey, Stefanie Zander, and Claudia Timmreck
 Do tropical volcanic eruptions influence the Southern Annular Mode?
- 11:15–11:30 EGU2011-471
Silvia Terzago, Simona Fratianni, and Roberto Cremonini
 On the snow precipitation variability in Western Alps and its links to large scale forcings
- 11:30–11:45 EGU2011-6430
Freja Hunt, Joel Hirschi, and Bablu Sinha
 Identifying atmospheric teleconnections from point correlation maps using self-organizing maps
- 11:45–12:00 EGU2011-3154
Christian Franzke, Tim Woollings, and Olivia Martius
 Persistent Circulation Regimes and Preferred Regime Transitions in the North Atlantic

CL2.9 – Teleconnections: dynamics, predictability, impacts – Posters

Convener: Bo Christiansen | Co-Conveners: Frank Kwasniok, Uwe Ulbrich, Maarten Ambaum, Julie Jones, N. Rambu

Hall XL | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Bo Christiansen

- XL87 EGU2011-1522
Gwendal Rivière
 A dynamical interpretation of the poleward shift of the jet streams in global warming scenarios
- XL88 EGU2011-1524
Gwendal Rivière
 Role of Rossby wave breaking in the west Pacific teleconnection
- XL89 EGU2011-4879
Camille Li and Justin Wettstein
 Processes of jet variability and their relationship to extratropical teleconnections
- XL90 EGU2011-11819
Francis Codron and Christophe Merlet
 Zonal Asymmetries in the NAO
- XL91 EGU2011-4423
Monica Ionita, Gerrit Lohmann, Norel Rimbu, and Silvia Chelcea
 Large-scale teleconnection patterns associated to Rhine river streamflow variability in spring and autumn
- XL92 EGU2011-5919
Davide Zanchettin, Claudia Timmreck, Angelo Rubino, Hans-F. Graf, Stephan Lorenz, Kirstin Krüger, and Johann H. Jungclaus
 On the implications of volcanic forcing to simulated near-decadal Northern Hemisphere winter climate variability during the last millennium
- XL93 EGU2011-6838
Nube Gonzalez-Reviriego, Concepcion Rodriguez-Puebla, and Belen Rodriguez-Fonseca
 Seasonal changes in simulated Northern Hemisphere Teleconnection patterns by CMIP3 models
- XL94 EGU2011-7850
Andrey Proshutinsky and Mark Johnson
 Arctic Ocean Oscillation Index (AOO): interannual and decadal changes of the Arctic climate

- XL95 EGU2011-10662
Joaquim G. Pinto, Mark Reyers, and Uwe Ulbrich
The variable link between PNA and NAO in observations and in multi-century ECHAM CGCM simulations
- XL96 EGU2011-7393
Martín Jacques-Coper, René Garreaud, and Stefan Brönnimann
Characterization of the Mid-70's Climate Shift in South America
- XL97 EGU2011-8612
Eric J Alfaro and Tito Maldonado
Decadal and interannual SST influences on Central American precipitation
- XL98 EGU2011-9633
MinHo Kwon, Tim Li, WonMoo Kim, Dongchull Jeon, and Jong-Ghap Jhun
Decadal changes in northward propagating ISO in the western Pacific area
- XL99 EGU2011-641
Jorge López-Parages and Belén Rodríguez-Fonseca
Multidecadal Modulation of the interannual rainfall variability over the Euro-Mediterranean region
- XL100 EGU2011-13121
Norel Rimbu, Bogdan Onac, and Gheorghe Racovita
Teleconnection patterns associated to temperature variability inside Scarisoara Ice Cave

NH1.1/AS4.5/CL3.3 – Extreme events induced by extreme weather and climate change: Evaluation and forecasting of disaster risk and proactive planning (co-organized) – Orals

Convener: Athanasios Loukas | Co-Conveners: Maria-Carmen Llasat, Uwe Ulbrich

Room: 10

Chairperson: M.C. Llasat, U. Ulbrich, A. Loukas

- 08:30–08:45 EGU2011-12911
Deniz Bozkurt, Baris Onol, and Omer Lutfi Sen
Simulated intense convective precipitation over the Black Sea coasts: sensitivity to temporal modifications of SST
- 08:45–09:00 EGU2011-3103
Yves Tramblay, Luc Neppel, Julie Carreau, and Kenza Najib
Non-stationary frequency analysis with climatic covariates of heavy rainfall events in the French Mediterranean region
- 09:00–09:15 EGU2011-10251
Margarida L. R. Liberato, Isabel F. Trigo, and Ricardo M. Trigo
Variability of Extreme Precipitation Events in Western Iberia
- 09:15–09:30 EGU2011-5719
Marina Baldi, Virginia Ciardini, John David Dalu, and Tiziana De Filippis
A climatology of hail frequency and intensity in Italy
- 09:30–09:45 EGU2011-11767
Juan Cuesta, Pierre H. Flamant, and Cyrille Flamant
Aggravation of air quality conditions due to multi-layer aerosol load in the Paris area during the heatwave of August 2003
- 09:45–10:00 EGU2011-10820
Jan Bliefernicht, András Bárdossy, Harald Kunstman, and Patrick Laux
Robust identification of rare atmospheric states for statistical downscaling of hydro-meteorological extremes

COFFEE BREAK

Chairperson: M.C. Llasat, U. Ulbrich, A. Loukas

- 10:30–10:45 EGU2011-4462
Rana Samuels, Maayan Harel, and **Pinhas Alpert**
Building High Resolution Climate Change Ensembles for Forecasting Future Rainfall in the Middle East
- 10:45–11:00 EGU2011-10015
Christian Dobler
Assessment of climate change impacts on flood hazard potential in an Alpine watershed
- 11:00–11:15 EGU2011-7649
Markus Stowasser, Ivo Bánovský, Erasmo Buonomo, Carlo Buontempo, Thomas Dubeau, Cressida Ford, Jane Toothill, and Silvio Tschudi
Climate Change and Extreme Surface Flooding in Northern Italy

- 11:15–11:30 EGU2011-5141
Markus Donat, Tobias Pardowitz, Gregor C. Leckebusch, and Uwe Ulbrich
 Estimating the risk of losses caused by winter storms in Germany
- 11:30–11:45 EGU2011-12411
Jürgen Grieser, Christos Mitos, and Steve Jewson
 Modelling Wind Loss from Convective Events in Europe - Hazard, Vulnerability, Exposure
- 11:45–12:00 EGU2011-13853
John Tzabiras, Athanasios Loukas, and Lampros Vasiliades
 Evaluation of monthly precipitation downscaling methods accuracy for the assessment of climate change impacts on droughts

NH1.1/AS4.5/CL3.3 – Extreme events induced by extreme weather and climate change: Evaluation and forecasting of disaster risk and proactive planning (co-organized) – Posters

Convener: Athanasios Loukas | Co-Conveners: Maria-Carmen Llasat, Uwe Ulbrich

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: M.C. Llasat, U. Ulbrich, A. Loukas

- XY174 EGU2011-195
 Boryana Markova, Viara Rafailova, Rumjana Mitzeva, and **Guergana Guerova**
 Severe thunderstorm developed on 28 June 2007 over northeast Bulgaria
- XY175 EGU2011-1389
Stephan Pfahl and Heini Wernli
 Spatial coherency of extreme weather events in Central Europe
- XY176 EGU2011-2700
Florinela Georgescu and Sabina Stefan
 Dynamic of the troposphere in cases of weather extreme events
- XY177 EGU2011-2704
 Ana C. Costa, **João A. Santos**, and Joaquim G. Pinto
 Climate change scenarios for precipitation extremes in Portugal based on COSMO-CLM ensemble simulations
- XY178 EGU2011-5173
Seth Westra
 Joint dependence between extreme rainfall and storm surge in the coastal zone
- XY179 EGU2011-6698
Kai Born, Rabea Haas, Patrick Ludwig, Adam Podlaha, and Joaquim G. Pinto
 Extreme Winds: Improvement of RCM storm simulations using gust parameterizations and MOS
- XY180 EGU2011-6721
Patrick Ludwig, Kai Born, Radovan Drinka, Alexandros Georgiadis, and Joaquim G. Pinto
 Diagnosis of exceptional recent European winter storms
- XY181 EGU2011-6909
Susanna Mohr and Michael Kunz
 Trend analysis of convective indices relevant for hail events in Germany
- XY182 EGU2011-6910
Ingo Meirold-Mautner, Benedikt Bica, and Yong Wang
 INCA-CE: A Central European initiative in nowcasting applications
- XY183 EGU2011-6933
Haiyan Zhao, Ge Gao, Peiqun Zhang, and Xiaodong Yan
 The modification of Meteorological Drought Composite Index
- XY184 EGU2011-7416
Blaz Kurnik, Andrej Ceglar, and Lucka Kajfez Bogataj
 Assessing droughts in Europe using Standardised Precipitation Index (SPI) and Regional Climate Models (RCMs)
- XY185 EGU2011-12632
Johannes Merklein and Oleg Panferov
 3D-Modelling of the destructive effects of windstorms on spatially complex forests
- XY186 EGU2011-11550
Jose de Jesus Salas Perez, Carme Llasat, and Carlos González-Gándara
 Climatology of the Nortes of the Gulf of Mexico
- XY187 EGU2011-12985
 Andrés Merino, Eduardo García-Ortega, **Laura López**, and José Luis Sánchez
 Pre-frontal hailstorm episodes in the Iberian Peninsula: identification, analysis and prediction.
- XY188 EGU2011-1582
Emanuele Eccel, Piero Cau, Kathrin Riemann-Campe, and Franco Biasioli
 Climatology of hailstorms in an alpine area and its links with atmospheric precursors

- XY189 EGU2011-2318
francesco cioffi, Upmanu Lall, Evgeny Volodin, Christina Karamperidou, and Roberto Purini
21st Century Projections of Precipitation Extremes in the Mediterranean from a medium resolution GCM
- XY190 EGU2011-4541
Weibiao Li
Characteristics of the Precipitation Extremes over the Urban Areas of the Pearl River Delta of China
- XY191 EGU2011-7558
Thorsten Simon, Christian Ohlwein, and Andreas Hense
Downscaling of Monsoon Precipitation in Poyang Basin, China, using a Generalized Pareto Distribution
- XY192 EGU2011-10387
Nikolay Sidorenkov
Causes of anomalous hot summers and the possibility of their forecasts
- XY193 EGU2011-10697
Christos Mitas
Numerical Simulation of Extreme European Windstorms
- XY194 EGU2011-11616
Sarah Kew, Frank Selten, Geert Lenderink, and Wilco Hazeleger
Robust assessment of future changes in extreme precipitation over the Rhine basin using a GCM
- XY195 EGU2011-12289
Amílcar Soares, Dora Roque, Pedro Benevides, Pedro Nunes, Ricardo Armas, and Maria Pereira
Desertification Indicators derived from Earth Observation Data: Application to Portugal and Brazil
- XY196 EGU2011-12331
Martin Granerød and Haraldur Ólafsson
Climatology and meteorology of lightnings in Norway
- XY197 EGU2011-10835
Giuseppe Delmonaco, Domenico Fiorenza, Luca Guerrieri, Carla Iadanza, Claudio Margottini, **Daniele Spizzichino**, Alessandro Trigila, and Eutizio Vittori
Geological risk assessment, mitigation and IT services and tools management: the BRISEIDE Project approach
- XY198 EGU2011-13809
Zhou Haiguang
Mesoscale Structure of the Snow Storm in Zhejiang on 29 January 2008 by Dual-radar
- XY199 EGU2011-7439
Olga Petrucci, Maurizio Polemio, and A. Aurora Pasqua
Damaging Hydrogeological Events in Calabria (Italy): new results of an ongoing historical research
- XY200 EGU2011-11928
Alessio Capriolo, Francesca Giordano, Rosa Anna Mascolo, and Daniele Spizzichino
Climate change and disaster risk reduction through adaptation plans and policies: the ACT (Adapting to Climate change in Time) project approach

ESSI1/AS4.17/CL4.8 – International Collaboration and Integration Strategies for Climate and other Geosciences Informatics (co-organized) – Orals

Convener: David Arctur | Co-Conveners: Monique Petitdidier, Bryan Lawrence, Sandro Fiore, Mohan Ramamurthy

Room: 19

Chairperson: n.n.

- 15:30–15:45 EGU2011-571
A Babatunde Rabi
African Geospace Society: Example of Continental-Wide Collaboration in Africa
- 15:45–16:00 EGU2011-4992
Monique Petitdidier, Charles Barton, Boubakar Barry, Victor Chukwuma, and Les Cottrell
eGY-Africa - better Internet connectivity to reduce the digital divide
- 16:00–16:15 EGU2011-13510
Tom Yoksas, Raj Pandya, Abudulai Adams-Forgor, Patricia Akweongo, Vanja Dukic, Mary Hayden, Tom Hopson, Benjamin Lamptey, Roberto Mera, Sylwia Trazka and the UCAR Africa Initiative Team
The UCAR Africa Initiative - Overview and Update
- 16:15–16:30 EGU2011-2181
Stefano Nativi, Steffen Fritz, Russ Lefevre, Paolo Mazzetti, and Stuart Marsh
EGIDA: Coordinating Earth and Environmental cross-disciplinary projects to promote GEOSS
- 16:30–16:45 EGU2011-6514
Joan Maso
GeoViQua: Making quality easy for the Global Earth Observation System of System

16:45–17:00 EGU2011-13502

Patrick West, **Gregory Leptoukh**, Stephan Zednik, Chris Lynnes, Suraiya Ahmad, Jianfu Pan, and Peter Fox

Experiences Developing a Semantic Representation of Product Quality, Bias, and Uncertainty for a Satellite Data Product

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

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

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Alex Babanin, Miguel Onorato, Fangli Qiao

XY450 EGU2011-5374

Alexander Babanin and Dmitry Chalikov

Numerical investigation of turbulence generation in non-breaking potential waves

XY451 EGU2011-9087

Jonas Takeo Carvalho and Valdir Innocentini

Wind wave climate along Brazilian coast using a spectral partitioning algorithm

XY452 EGU2011-4410

Dejun Dai, Fangli Qiao, Wojciech Sulisz, Lei Han, and Alexander Babanin

An Experiment on the Non-Breaking Surface-Wave-Induced Vertical Mixing

XY453 EGU2011-4389

Vladimir Dulov and Maria Kosnik

A Field Study of 2D-Wavenumber Spectra of Short Wind Waves

XY454 EGU2011-1520

Alina Galchenko, Alexander Babanin, and Dmitry Chalikov

Influence of wind forcing on evolution and breaking of nonlinear wave groups.

XY455 EGU2011-7390

Georgia Kalantzi, **Christine Gommenginger**, and Meric Srokosz

Spectral wave dissipation, operational wave models and observations: is there a way of improving wave forecasts?

XY456 EGU2011-7116

Charles-Antoine Guérin and Guillemette Caulliez

Statistical properties of short wind waves: a high resolution laboratory study

XY457 EGU2011-2837

Mark Hemer, Kathleen McInnes, and Roshanka Ranasinghe

Projected future wave climate along Australia's eastern margin

XY458 EGU2011-12478

Rajesh Kumar, Anna Rutgersson, and Prasad Kumar

Impact of rain in modifying wave height in a coupled wave - climate model

XY459 EGU2011-10268

Alexey Mironov

Theoretical description of breaking crests distributions measured in field conditions

XY460 EGU2011-10250

Alexey Mironov, Charles-Antoine Guerin, Danièle Hauser, Maria Kosnik, and Vladimir Dulov

Statistical properties of short wind-waves obtained from photo-stereo observations of sea surface.

XY461 EGU2011-6352

Miguel Onorato and Francesco Zonta

Direct numerical simulation of the boundary layer induced by surface gravity waves

XY462 EGU2011-5158

Ruslan Puscasu, Alexander Babanin, and Michael Stiassnie

Numerical investigation of a novel wave-action transfer model for near-resonant water waves

XY463 EGU2011-4145

Fangli Qiao, Zhenya Song, Changshui Xia, and Dejun Dai

The improvement of ocean and climate models through surface wave: From mean state to long-term variations

XY464 EGU2011-12871

Ivan Savelyev and Robert Handler

Infrared imaging of near-surface eddies generated by steep and by breaking surface waves.

XY465 EGU2011-6275

Mathieu Dutour Sikiri?, Aron Roland, Ivica Janekovi?, Igor Tomaži?, and Milivoj Kuzmi?

Two-way coupling of ROMS and WWM models

- XY466 EGU2011-4629
Zhenya Song and Fangli Qiao
The establishment of the atmosphere-wave-ocean circulation coupled models-The improvement of CGCMs's simulations by the wave-induced vertical mixing
- XY467 EGU2011-2099
Chia-Huan Ting, Alexander Babanin, and Dmitry Chalikov
Dependence of Drag Coefficient on the Directional Spreading of Ocean Waves
- XY468 EGU2011-5399
Alessandro Toffoli, Alexander Babanin, and Jason McConochie
Field observations of the mixed layer depth in the Indian Ocean: effect of wave-induced turbulence
- XY469 EGU2011-8695
Oleg Druzhinin and **Yuliya Troitskaya**
Investigation of statistical parameters of turbulent air flow over waved water surface by direct numerical simulation
- XY470 EGU2011-4501
Wu-ting Tsai and Li-ping Hung
Characteristics of interfacial transport in a wind-driven gravity-capillary surface wave
- XY471 EGU2011-12295
Kimmo K Kahma, **Laura Tuomi**, and Heidi Pettersson
Wave statistics in seasonally ice-covered seas
- XY472 EGU2011-2794
Anatoli Vakhguel't and Alexander Babanin
Influence of water droplet size variations on propagation of the pressure wave above water surface
- XY473 EGU2011-5966
Soeren H. Ahmerkamp, **Jörg-Olaf Wolff**, and Stephen G. Monismith
On wave motions at the steep slope of a coral reef
- XY474 EGU2011-6958
Changshui Xia and Fangli Qiao
The Establishment of the Wave-circulation Coupled Model and Its Application

