EGU General Assembly 2012  
Programme Group Programme  
CL – Climate: Past, Present, Future

**Monday, 23 April**

<table>
<thead>
<tr>
<th>AS1.10</th>
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**Tuesday, 24 April**

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**Wednesday, 25 April**

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**Thursday, 26 April**

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Monday, 23 April

**AS1.10 – The global monsoon system: variability and dynamics (co-listed) – Orals**
Convener: J. Li | Co-Conveners: Dr Turner, A. Bracco, P. Terray
Room: 10
Chairperson: n.n.

15:30–15:45 EGU2012-3078
Y. Ming, M. Bollasina, and V. Ramaswamy
Anthropogenic aerosols and the weakening of the South Asian summer monsoon

15:45–16:00 EGU2012-5187
D. Folini, M. Frischknecht, and M. Wild
Recent changes in surface solar radiation and precipitation in India: sensitivity studies with ECHAM5-HAM

16:00–16:15 EGU2012-1999
J. Zhu, H. Liao, J. Li, and J. Feng
Impacts of interannual variation of the East Asian winter monsoon on aerosol concentrations over eastern China

16:15–16:30 EGU2012-2549
Y. Qian, M. Flanner, R. Leung, and W. Wang
Sensitivity studies on the impacts of Tibetan Plateau snowpack pollution on the Asian hydrological cycle and monsoon climate

16:30–16:45 EGU2012-3752
Ultra-Low Clouds over the Southern West African Monsoon Region

16:45–17:00 EGU2012-8256
A G Turner, B M Harris, and E J Highwood
Monsoon collapse following tropical super-volcanic eruptions

**AS1.10 – The global monsoon system: variability and dynamics (co-listed) – Posters**
Convener: J. Li | Co-Conveners: Dr Turner, A. Bracco, P. Terray
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Andrew Turner, Yun Qian and Jianping Li

XY50 EGU2012-69
C. Lin, K. Yang, and J. Qin
Observed surface and upper-air wind speed changes over China since 1960

XY51 EGU2012-1360
R. Mahmood and S. Li
Asian Black Carbon Influence on East Asian Summer Monsoons

XY52 EGU2012-1398
X. Kuang
Regional Differences in the Seasonal Variation of the upper-tropospheric Jet

XY53 EGU2012-1542
L. Yao-dong, S. Xiao-kang, Z. Shao-hong, and H. Liang
A Study on the Change of Precipitation Characteristics Before and After East Asian Summer Monsoon Onset

XY54 EGU2012-1748
F. Zheng and J. Li
Impact of Preceding Boreal Autumn Antarctic Ozone on Spring Precipitation over South China

XY55 EGU2012-3833
Z. Liantong
Interdecadal Change in SST Anomalies Associated with Winter Rainfall over South China

XY56 EGU2012-3894
H. Hendon, E. Lim, and G. Liu
The role of air-sea interaction for prediction of Australian summer monsoon rainfall

XY57 EGU2012-8994
Y. Song, Z. Li, and Y. Guan
Study on Precipitation Anomalies of North of China in April and Its relationship to Sea Surface Temperature Evolvement

XY58 EGU2012-8998
A G Turner and G Martin
The role of peninsular India in the South Asian monsoon
AS1.14 – Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-listed) – Orals
Room: 7
Chairperson: G.C. Leckebusch

10:30–10:45  EGU2012-7909
  U. Neu and the IMILAST Team
  Intercomparison of mid latitude storm diagnostics (IMILAST) - project update

10:45–11:00  EGU2012-10246
  O. Krueger, F. Feser, F. Schenk, and R. Weisse
  Inconsistencies between long-term trends in storminess derived from the 20CR reanalysis and observations

11:00–11:15  EGU2012-11820
  Properties of European Winter Storms in the ECMWF Ensemble Prediction System

11:15–11:30  EGU2012-8921
  J. Hanley and R. Caballero
  The role of large-scale atmospheric flow and Rossby wave breaking in the evolution of extreme wind storms over Europe

11:30–11:45  EGU2012-5386
  T.M. Trzeciak, P. Knippertz, and J.S.R. Owen
  Assessing model uncertainties in climate projections of severe, mid-latitude windstorms using seamless approach

11:45–12:00  EGU2012-5127
  M.-S. Déroche, M. Choux, F. Codron, and P. You
  Extreme European Winter Storm: Detection And Characterization Of Events Impacting The Insurance Industry

AS1.14 – Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts
(co-listed) – Posters
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: U. Ulbrich and J.G. Pinto

XY78  EGU2012-13193
  F. Schenk and E. Zorita
  Long-term trends in Northern European Storminess since 1850

XY79  EGU2012-1768
  C. Welker and O. Martius
  Variability of cyclones over the North Atlantic and Europe since 1871

XY80  EGU2012-2655
  T. Spengler and A.P. Ballinger
  Arctic Cyclone Climatology: Present and Future

XY81  EGU2012-3241
  Y. Kaspi and T. Schneider
  The role of stationary eddies in shaping mid-latitude storm track dynamics.

XY82  EGU2012-3446
  K. M. Grise and S.-W. Son
  Interannual and Intrasessional Variability of North American Storm Tracks

XY83  EGU2012-4568
  J.S.R Owen, P. Knippertz, and T.M. Trzeciak
  Forecast quality and predictability of severe extra-tropical cyclones in operational forecasts

XY84  EGU2012-5230
  S. Fu
  The Impacts of Eastward displacement of Convective Systems Over Tibetan Plateau on the Formation of Southwest Vortex

XY85  EGU2012-6588
  M. Reale and P. Lionello
  Association between cyclones and severe precipitation in the Mediterranean region as reproduced by different tracking algorithms - a contribution to the IMILAST project

XY86  EGU2012-9036
  J. G. Pinto and the IMILAST Team
  Explosive cyclone developments in era-interim under consideration of multiple tracking approaches

XY87  EGU2012-12837
  S.F. Kew, M.A. Sprenger and the IMILAST Team
  Trends in Northern Hemispheric Cyclone Diagnostics
L. Xia, F. Feser, M. Zahn, and H. von Storch
A Study of Quasi-millennial Extratropical Cyclone Activity Using Tracking and Clustering Methods

S. Pfahl and H. Wernli
Quantifying the relevance of cyclones for precipitation extremes

S. L. Gray and H. F. Dacre
Quantifying the sensitivity of North Atlantic cyclone development to atmospheric precursor fields

K.M. Nissen, U. Ulbrich, G.C. Leckebusch, and N. Becker
Changes in Vb cyclone frequency and rainfall under anthropogenic climate change

Trends and interannual variability of extratropical cyclones derived from different diagnostic methods

A. Comellas, A. Parodi, Z. Fuchs, and L. Molini
Saturation fraction and gross moist stability in severely precipitating systems in the midlatitude Mediterranean environment

A. Troccoli, F. Zambon, KI Hodges, and M Marani
Storm surge frequency reduction in Venice under climate change

W. Gosnold
Repeat Temperature Measurements in Boreholes may Quantify Climate Forcing

N. Zeng
Biomass burial and storage to reduce atmospheric CO2

H. Xu, J. Li, and J. Feng
The Asymmetry Relationship between the Winter NAO and Precipitation in Southwest China

R.R. Kuechler, B. Beckmann, L. Dupont, and E. Schefuß
An apparent contradiction in plant-wax-specific isotopes: How can more rain favor aridity-adapted plants?

U. Heikkilä and A. M. Smith
Production rate and climate influences on the variability of 10Be deposition in Greenland and in Antarctica

N. Rimbu, G. Lohmann, G. König-Langlo, C. Necula, and M. Ionita
Intraseasonal to interannual oscillations of Antarctic climate as recorded at Neumayer polar station

M. Bar-Matthews
Greening of the Sahara - a paleo perspective on the history of water in the Middle East and North Africa

F. Parrenin
Timing of Antarctic temperature and CO2 Changes across the last deglaciation

P. Morozova
Variations climate of East-European Plain and Caspian sea level during last 20000 years (on the basis of numerical simulations within the Paleoclimate Modeling Intercomparison Project)
11:15–11:30  EGU2012-7706
Have abrupt climate variations of the last glacial possibly been muted in the south-west African tropics by counteracting mechanisms?

11:30–11:45  EGU2012-1570
The geochemical and sedimentary imprint on the continental margin of the NW Gulf of Mexico during the last 20 cal ka: glacial melt-water floods and geochemical proxies

11:45–12:00  EGU2012-12518
   B. Parkes, A Gadain, and J Latham
Effects of marine cloud brightening on polar regions and the meridional heat flux

Z204  EGU2012-4276
   K. Chromá, R. Brázdil, H. Valášek, and L. Dolák
Hydrometeorological extremes and their impacts derived from taxation records for south-eastern Moravia (Czech Republic) in the period 1751-1900

Z205  EGU2012-7417
   A.-I. Partanen, A. Laakso, H. Kokkola, and H. Korhonen
Climatic effects of sea spray geoengineering simulated by ECHAM5 model

Z206  EGU2012-7007
   J. Piskozub and T. Neumann
Dim waters: side effects of geoengineering using ocean albedo modification

Z207  EGU2012-8513
   T. Kruger and P. Renforth
Engineering challenges of ocean alkalinity enhancement

Z208  EGU2012-5135
   P. Köhler, J. Abrams, C. Völker, D.A. Wolf-Gladrow, and J. Hartmann
Impact of geoengineering with olivine dissolution on the carbon cycle and marine biology

Z209  EGU2012-4966
   P. Köhler, C. Völker, X. Zhang, G. Knorr, and G. Lohmann
Combined impact of shifts in Southern Ocean westerlies and Antarctic sea ice during LGM on atmospheric CO2

Z210  EGU2012-1143
   S. Sarkar and A. K. Gupta
Century scale climatic rhythms in the equatorial Indian Ocean during the late Quaternary: Faunal and geochemical proxies from the Maldivian Archipelago

Z211  EGU2012-3880
   B.-K. Khim, J. Heo, C. Shimada, M. Uchida, K. Ikehara, and R. Tada
Surface-water exchange between the East Sea/Japan Sea and neighboring seas during the last glacial and deglaciation periods: geochemical and diatom signatures

Z212  EGU2012-6681
   M. Escorza-Reyes, L. Pérez-Cruz, J. Urrutia-Fucugauchi, and D. Salas-de-León
Oceanographic and climatic record for the last 18 ka cal BP in marine sediments from Pescadero Basin, Gulf of California

Z213  EGU2012-7547
   J. Pecho, P. Faško, V. Blížňák, P. Kajabá, J. Košťálková, O. Bochník, and L. Lešková
Long-term variability and changes in thunderstorm induced extreme precipitation in Slovakia over 1951-2010

Z214  EGU2012-8016
   M. Juckes, C. Pascoe, E. Guilyardi, B.N. Lawrence, and E. Da Costa
Exploring the CMIP5 multi-model archive with structured meta-data

Z215  EGU2012-10463
   A. Stickler, R. Allan, M. A. Valente, B. Tinz, and S. Brönnimann
The Data Rescue @ Home Project

Z216  EGU2012-2926
   S. S. Drijfhout, G.-J. van Oldenborgh, and A. A. Cimatoribus
Footprint of the AMOC in future temperature change as simulated by CMIP3 and CMIP5 model ensembles.
Z217 EGU2012-11972
J. Nagy, J. Bartholy, R. Pongracz, and L. Hufnagel
Analysis of regional climate change impacts on European terrestrial wild mammal’s living territory in the 21st century based on ENSEMBLES simulations

Z218 EGU2012-1438
P. Berrisford, P. Kalberg, S. Kobayashi, D. Dee, S. Uppala, A. J. Simmons, P. Poli, and H. Sato
The Atmospheric Energy and Hydrological Cycles in ECMWF Reanalyses

Z219 EGU2012-9209
S. Junq and D. Kroon
Quantifying rates of change in ocean conditions with implications for timing of sea level change

Z220 EGU2012-12823
J Latham, B Parkes, A. Gadian, and S Saltar
Controlled Hurricane Weakening Via Marine Cloud Brightening

Z221 EGU2012-3835
T. Khodzher
Cryolithic zone and Arctic shelf under conditions of climate changes as exemplified by the Kara Sea basin

Z222 EGU2012-12581
Climate change on arctic environment, ecosystem services and society (CLICHE)

Z223 EGU2012-1959
A. Stickler, S. Brönnimann, M. A. Valente, A. Sterin, S. Jourdain, J. Guzman, R. Allan, and D. Dee
Digitisation of Historical Observations for ERA-CLIM

Z224 EGU2012-12334
J. J. Barrott, C. C. Day, R. N. E. Barton, A. Bouzouggar, and G. M. Henderson
Spoleothem Reconstruction of Moroccan Climate: from the Strait to the Sahara

CL1.1 – Progress in understanding Neoproterozoic pan-glaciations (potential Snowball Earth episodes) (posters only) – Posters

Hall Z | Display Time 08:00–19:30
Author in Attendance: 13:30–15:00
Chairperson: Aiko Voigt, Dorian S. Abbot

Z1 EGU2012-125
SNOWMIP2: Comparing simulation of the deep Snowball and the nearly deglaciating Snowball among GCMs

Z2 EGU2012-960
A. Voigt and D. S. Abbot
On the stability of low-latitude sea-ice edges in a comprehensive coupled climate model

Z3 EGU2012-1263
F.A. Macdonald, A.D. Rooney, F.O. Dudas, and D Selby
Osmium and Strontium Isotope Tests of a Sturtian-Rapitan Snowball Earth

Z4 EGU2012-1571
J. Yang and Y. Hu
Supergreenhouse Warming during the Snowball Earth Aftermath

Z5 EGU2012-4984
Carbon isotopes of ICDP FAR-DEEP Hole 3A: alteration or a signal from atmospheric methane oxidation at the onset of the first Huronian glaciation?

Z6 EGU2012-6633
A.J. Campbell, E.D. Waddington, and S.G. Warren
Possible refugium for surface life on Snowball Earth in a nearly-enclosed sea

Z7 EGU2012-6686
B. Light, T. Black, R. Carns, R. Brandt, R. Dadic, and S. Warren
Albedo of cold sea ice with precipitated salt on the tropical ocean of Snowball Earth: field measurements and laboratory experiments

Z8 EGU2012-6756
Albedo of bare ice near the Trans-Antarctic Mountains as an analogue of sea-glaciers on the tropical ocean of Snowball Earth

Z9 EGU2012-9313
R. Boyle
A mechanism for Snowball Earth triggering animal evolution
I. Gyollai, F. Popp, D. Mader, and Ch. Koeberl
Diagenesis, weathering and paleoenvironmental conditions from postglacial diamictite/cap carbonate transition layers of the Otavi Group (NW-Namibia)

Calcium isotopes and environmental conditions in the aftermath of a Cryogenian glaciation

Y. Ashkenazy, H. Gildor, M. Losch, D. Schrag, and E. Tziperman
Ocean circulation under snowball earth conditions

The Rock Magnetic Signature of the Neoproterozoic Glaciation’s Aftermath

J. Blöhdorn, W. Park, M. Latif, and S. Flögel
Mid-Cretaceous Ocean Circulation in the Kiel Climate Model

R. Caballero, M. Huber, and J. Hanley
Transition to a climate state qualitatively different from modern in NCAR CCSM simulations of the Eocene

N. Sagoo, P.J. Valdes, and R. Flecker
Early Eocene perturbed parameter simulations: multiple methods of proxy-model comparison

Assessing data and model uncertainties in modelling Pliocene warm terrestrial climates

G. Jung, M. Prange, and M. Schulz
Mountain uplift and the evolution of the African rainbelt in the late Neogene

T. Kleinen and V. Brovkin
The carbon cycle during recent interglacials
The PMIP 3 Database

Why climate models often fail to reproduce the Atlantic Meridional Overturning Circulation at the Last Glacial Maximum

PMIP-3 Last Glacial Maximum: sensitivity to ice-sheets boundary conditions in the iLOVECLIM climate model

Global energy budget changes and the role of tropical SSTs in the southward ITCZ shifts

Glacial abrupt climate change as a result of internal oscillations

Simulating the impact of abrupt AMOC changes on vegetation and carbon stocks with the ORCHIDEE/IPSL models

The role of Antarctic Ice Shelves in Holocene CO2 concentrations: A study using the University of Victoria Earth System Climate Model

The Nordic Seas in the Pliocene: A hot spot or not?

Large scale features of the Pliocene climate: Results from the PlioMIP experiments

On the effect of orbital forcing on mid-Pliocene vegetation: results from an Earth system model of intermediate complexity.

Modelling the mid-Pliocene Warm Period with the IPSLGCWM: contribution to PlioMIP and feedback mechanisms from the presence of mega-lakes

A new mechanism for the global temperature rebound during the Mid Miocene climate transition

Is Antarctic Glaciation an Important Component of Earth System Sensitivity?

Methane and environmental change during the Paleocene-Eocene thermal maximum (PETM): Modeling the PETM as a multistage event

Comparison of heat stress metrics with modern, future, and past greenhouse climates

CL1.8 – Palaeoenvironmental, tectonic and human evolution across the Levant-Anatolia Regions – Orals
Convener: F. Anselmetti | Co-Conveners: T. Litt, M. Stein
Room: 13
Chairperson: Thomas Litt
Sub-seasonally resolved coral records of northern Red Sea - eastern Mediterranean climate during the Holocene and the last interglacial

Late to middle Pleistocene climate variability recorded in stalagmites from Sofular Cave, Northern Turkey

Abrupt aridities in the Levant-Sahel linked with solar activities

Sediments of Lake Van - a high-resolution archive of changing climate, volcanic events and seismic activity in Eastern Anatolia for the last 500'000 yrs

Long continental pollen record of the last ca. 500 ka in eastern Anatolia - First palynological results from Lake Van cores obtained in 2010

New chronology for Red Sea sea-level record reveals phase relationship between changes in polar climate and ice volume

Structural and stratigraphic analysis of the Lake Van, Eastern Turkey: An integration of high resolution seismic and drilling data

Lake Level Changes of Lake Van over the Last 400 ka: Evidence from Deltas in Seismic Reflection Data and ICDP Drilling

Temporal framework of Lake Van sediments provided by single crystal 40Ar/39Ar dating of tephra layers

Volcanic, tectonic and climate forcing of the system Nemrut-Süphan-Lake Van: dating Late Glacial lake level changes of Lake Van more precisely, tectonic uplift of lake sediments and paleoclimate proxies derived from land deposits

Glacial/interglacial and MIS3 climate variability recorded in Lake Van, eastern Anatolia

Paleogeophysical characterization of a climate archive based on downhole logging in the ICDP project PALEOVAN

Biomarker analysis in 500 kyrs sediment record of Lake Van - potential implications for paleoclimate in eastern Anatolia

Noble gases in the sediment pore water as proxies for physical transport processes and past environmental conditions in Lake Van (Turkey)
CL1.14 – Palaeoclimate records in lakes – Orals
Convener: N. Fagel | Co-Conveners: M.-F. Loutre

Room: 13
Chairperson: Nathalie Fagel

15:30–15:45 EGU2012-12536
N.D. Stansell, D.T. Rodbell, B.G. Mark, and C.M. Sedlak
A ~13,000 year history of glacial variability in the tropical Andes recorded in lake sediments from the Peruvian Andes

15:45–16:00 EGU2012-5785
M. Czymzik, A. Brauer, P. Dulski, and U. von Grafenstein
Solar modulation of Mid- to Late Holocene flood frequency in detrital layers from varved sediments of Lake Ammersee (southern Germany)

16:00–16:15 EGU2012-5523
M. Mathis, P. Sorrel, S. Klotz, and H. Oberhänsli
Holocene climate variability in lake Sonkul sediments (Kyrgyzstan, Central Asia) based on vegetation changes

16:15–16:30 EGU2012-2482
Bacterial GDGTs in Holocene sediments and catchment soils of a high-alpine lake: application of the MBT/CBT-paleothermometer

16:30–16:45 EGU2012-2486
S.B. Wirth, L. Glur, A. Gilli, and F.S. Anselmetti
FloodAlp! - The Holocene flood history of the Central Alps reconstructed from multiple lacustrine sediment records

16:45–17:00 EGU2012-2507
E. Dietze, B. Wünnewmann, K. Hartmann, B. Diekmann, S. Opitz, M. Paprotzki, M. Runge, S. Yang, and G. Lockot
Windows into the past: On-shore highstand sediments from lake Donggi Cona, NE Tibetan Plateau

CL1.14 – Palaeoclimate records in lakes – Posters
Convener: N. Fagel | Co-Conveners: M.-F. Loutre
Z52 EGU2012-311
N. Ogretmen, M.N. Cagatay and the PaleoVan Scientific Team
Paleoenvironmental Changes In Lake Van During the Late Glacial-Holocene

Z53 EGU2012-392
Micromapping of uranium and phosphorus in the lake Baikal sediments (Academicheskiy Ridge, St18; St11)

Z54 EGU2012-329
Benthic bioindicators from the lakes of Northern Yakutia (Siberia, Russia) in paleoclimatic research

Z55 EGU2012-1493
H. Reddad, I. Etabaai, H. Benhardouze, O. Benhardouz, M. Taeib, F. Thevenon, and B. Damnati
Paleofire activity in North Africa during the last 21 ka inferred from a charcoal record from lake Ifrah (Middle atlas - Morocco): climatic implications.

Z56 EGU2012-7344
E. Støren and S.O. Dahl
Holocene glacier fluctuations recorded in eastern Jotunheimen, southern Norway

Z57 EGU2012-10928
H. Guyard, G. St-Onge, R. Plenitz, P. Francus, B. Zolitschka, G.K.C. Clarke, S. Hausmann, V.P. Salonen, P. Lajeunesse, G. Ledoux, and M. Lamothe
Dynamics and evolution of subglacial to postglacial environments inferred from Pingualuit Crater Lake sediments (Nunavik, Canada)

Z58 EGU2012-13979
V. Sacré, N. Fagel, S. Schmidt, D. Alvarez, A. Araneda, and R. Urrutia
Last millenium environmental changes in Lake Bertrand sediments, Chilean Patagonia

Z59 EGU2012-7602
I. Kalugin, A. Darin, G. Tretjakov, D. Rogozin, S. Khromykh, L. Kholodova, and N. Maksimova
Geochemical anomalies in carbonate lacustrine sediments as seasonal and centennial environmental proxy for continental climate conditions in South Siberia during the last 2450 yrs.

Z60 EGU2012-12280
The expression of MIS 11 palaeoclimate in a lacustrine record: An annually resolved archive from Marks Tey, eastern England

Z61 EGU2012-7519
Late Glacial to Holocene environmental variabilities: A new multi-proxy paleolimnological study of sedimentary sequences from Como (northern Italy)

Z62 EGU2012-7139
M. Sarnthein and C. Spötl
Speculations on the spatial setting and temporal evolution of a fjord-style lake

Z63 EGU2012-5108
T. A. Neubauer, O. Mandic, M. Harzhauser, and H. Hrvatović?
The Middle Miocene lacustrine mollusc fauna of the Kupres Basin: palaeobiogeography, palaeoecology, and taxonomic implications (Dinaride Lake System, Bosnia and Herzegovina)

Z64 EGU2012-6174
N. Boesche and M. Trauth
Provenance Analysis of Surface Sediments in the Chew Bahir Basin (Ethiopia) using Remote Sensing Data

Z65 EGU2012-12233
E. Størseth, Ø. Paasche, S.O. Dahl, A. Nesje, and E. Kolstad
Identifying flood deposits in lake sediments: Changing frequencies and potential links to long-term climate change

Z66 EGU2012-11681
What does a lake sediment terrigenous input record actually tell us? Tentative answers based on a multi-lakes source-to-sink approach in the 4000 km2 Arve-Rhône alpine catchment

CL1.15 – Temperature observations in the subsurface: contributions to climate sciences, soil sciences, permafrost, glaciology, hydrology, and heat flow studies – Orals
Room: 13  
Chairperson: Jeanette Noetzli

08:30–08:45  EGU2012-9221  
**S. Gruber**  
Decreasing sensitivity of permafrost temperature to environmental change challenges monitoring and data interpretation

08:45–09:00  EGU2012-7686  
**D. Kitover, H. Renssen, R. van Balen, J. Vandenberghhe, and D.M. Roche**  
Simulating permafrost evolution in Eurasia during the last deglaciation

09:00–09:15  EGU2012-3943  
**M. N. Gooseff, S. E. Godsey, J. E. Barrett, and A. Lewcowicz**  
The Influence of Snow, Water Bodies, and Permafrost Degradation on Shallow Soil Energy and Hydrology in the Arctic and Antarctic

09:15–09:30  EGU2012-6375  
Distributed Temperature Sensing as a tool for monitoring heat transfer processes in the shallow subsurface

09:30–09:45  EGU2012-795  
**A. Markert, S. Trinks, M. Facklam, and G. Wessolek**  
A new method using evaporation for high-resolution measurements of soil thermal conductivity at changing water contents

09:45–10:00  EGU2012-1835  
**A. Rabinovich, G. Dagan, and T. Miloh**  
Underground heat conduction near a spherical inhomogeneity: theory and applications

### COFFEE BREAK

Chairperson: J.F. González Rouco

10:30–10:45  EGU2012-14423  
**V. Cermák**  
Air - Ground - Bedrock Temperature Coupling, Its Monitoring at Borehole Climate Observatories

10:45–11:00  EGU2012-6252  
**J. Majorowicz, J. Šafanda, W. Gosnold, and M. Unsworth**  
Subsurface temperature signature of a large Pleistocene - Holocene surface warming in the North Alberta, Canada

11:00–11:15  EGU2012-1423  
**F. Lucazeau and F. Rolandone**  
Heat-Flow and Subsurface Temperature History in Eastern Senegal (West Africa)

11:15–11:30  EGU2012-13996  
**V. Bense**  
Hydrogeological analysis using heat as a tracer in a variety of geological settings

11:30–11:45  EGU2012-12137  
**K. Zhu, P. Bayer, and P. Blum**  
Urban heat fluxes in the subsurface of Cologne, Germany

11:45–12:00  EGU2012-13383  
**M. Dluzewski, E. Zmudzka, D. Woronko, and K. Biejat**  
The influence of barchan shape on the moisture and temperature of the dune sand and the diversity of local climate

### CL1.15 – Temperature observations in the subsurface: contributions to climate sciences, soil sciences, permafrost, glaciology, hydrology, and heat flow studies – Posters  

#### Hall Z | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00  
Chairperson: Jan Safanda

Z67  EGU2012-4470  
**S. Schneider, M. Hoelzle, and C. Hauck**  
Influence of subsurface heterogeneity on observed borehole temperatures at a mountain permafrost site in the Upper Engadine, Swiss Alps
Z68  EGU2012-2859  
P. Dedeček, J. Šafanda, and D. Rajver  
Detection and Quantification of Local Anthropogenic and Regional Climatic Transient Signals in Temperature Logs from Czechia and Slovenia

Z69  EGU2012-7382  
V. Cermák, J. Šafanda, P. Dedeček, and M. Kresl  
Round-Air Temperature Coupling: Results of Long-Term Temperature-Time Monitoring at the Experimental Borehole Site at Prague (The Czech Republic)

Z70  EGU2012-6475  
V. Rath  
GUMNET - A new subsurface observatory in the Guadarrama Mountains, Spain

Z71  EGU2012-2754  
V. Rath, J. E. Smerdon, J. F. González-Rouco, and H. Beltrami  
Which boreholes do we need to resolve the Common Era in borehole paleoclimatology?

Z72  EGU2012-2870  
G. Bouron, D. Mimoun, and D. Graillot  
Analysis of mechanisms and effects of snow-melting on the groundwater recharge downstream mountainous watershed in a climate-changing context. Example: the Lignon du Forez watershed, Massif Central, France.

Z73  EGU2012-7609  
D. Demezhko, A. Kotlovanova, and Yu. Khachay  
Geothermal evidences of pre-industrial ground temperature changes in the Urals and Eastern Europe

Z74  EGU2012-3707  
N. Andrés, D. Palacios, J.J. Zamorano, C.E. Mendoza-Margáin, and L. Vázquez-Selem  
Ten years monitoring ground temperature at Iztaccíhuatl Volcano (México).

Z75  EGU2012-3716  
N. Andrés, D. Palacios, J.J. Zamorano, C.E. Mendoza-Margáin, and L. Vázquez-Selem  
Deglaciation, ground temperature and volcanic activity in Popocatépetl (México).

Z76  EGU2012-6493  
L.M. Tanarro, D. Palacios, A. Gómez-Ortiz, and F. Salvador-Franch  
Snow cover and ground surface temperature on a talus slope affected by mass movements. Veleta cirque, Sierra Nevada, Spain

Z77  EGU2012-9346  
A. Kellerer-Pirklbauer, G. Winkler, and M. Pauritsch  
Widespread evidences of hoarfrost formation at a rock glacier in the Seckauer Tauern, Austria

Z78  EGU2012-11953  
E. Santolaria and V. Rath  
Parametrizations of land-atmosphere energy and mass transfer: the role of the snow layer and the freeze/thaw cycle

Z79  EGU2012-12336  
M. B. Stevens, H. Beltrami, and J. F. Gonzalez-Rouco  
New metrics for permafrost model validation

Z80  EGU2012-11182  
D. Mottaghy, V. Rath, and G. Schwamborn  
The influence short and long term climate changes on the temperature field at the Lake El'gygytgyn site: results from borehole data and modelling

Z81  EGU2012-3160  
G. Matharoo, H. Beltrami, V. Rath, and L. Tarasov  
Effects of long-term history on borehole paleoclimatology

Z82  EGU2012-12874  
V. Rath, J. Alvarez-Solas, M. Montoya, and C. Ritz  
Can boreholes help to constrain the dynamics of the Laurentide ice sheet on the millennial time-scale during last glacial period?

Z83  EGU2012-13109  
J. Noetzli, P. Deline, M. Phillips, and A. von Poschinger  
Characteristics of the thermal regime in steep bedrock permafrost in the European Alps described by borehole temperatures and heat conduction modeling

Z84  EGU2012-12981  
M. Keuschnig, I. Hartmeyer, A. Schmidjell, and L. Schrott  
The adaptation of iButtons® for near-surface rock temperature and thermal offset measurements in a high alpine environment - Instrumentation and first results, Kitzsteinhorn (3203 m), Hohe Tauern, Austria

CL5.1/GM2.5 – Advances in Quaternary Geochronology (co-organized) – Orals
Convener: T. Kiefer | Co-Conveners: G. Duller, I. Hajdas, A. Lang, F. Parrenin, EW Wolff
Room: 15
Chairperson: n.n.
08:30–08:45  EGU2012-12790
S. Ivy-Ochs, H. Kerschner, and C. Schlüchter
Timing of deglaciation in the northern Alps based on cosmogenic nuclide data

08:45–09:00  EGU2012-12634
F. von Blanckenburg, J. Bouchez, H. Wittmann, and N. Dannhaus
The Beryllium-10(meteoric)/Beryllium-9 ratio as a new tracer of weathering and erosion rates

09:00–09:15  EGU2012-4854
P. J. Applegate and N. Kirchner
Using cosmogenic exposure dates to evaluate modeled Greenland Ice Sheet behavior

09:15–09:30  EGU2012-3821
R. Pickering
Re-arranging the family tree: the new role of U-Pb dating flowstones

09:30–09:45  EGU2012-10671
Bootstrap-Bayesian OSL approach for poorly-bleached sediment sequences tested with dendrochronological age constraints

09:45–10:00  EGU2012-3732
RC Chiverrell
Bayesian modelling of geomorphic time series: collapse of the marine portion of the Irish Sea Ice Stream

COFFEE BREAK

Chairperson: n.n.

10:30–10:45  EGU2012-13984
S. P. Lund
Paleomagnetic Secular Variation as a Regional- to Global-Scale Chronostratigraphic Tool for Paleoclimate Studies

10:45–11:00  EGU2012-11956
S. Ólafsdóttir, Á. Geirsdóttir, G.H. Miller, and J.S. Stoner
Improved Land-Sea Correlations in Iceland Based on Paleomagnetic Secular Variations

11:00–11:15  EGU2012-7054
Towards a complete Holocene tephrachronology for the Faroe Islands

11:15–11:30  EGU2012-9293
D. Fleitmann, A. Borsato, S. Frisia, S. Badertscher, H. Cheng, R.L. Edwards, and O Tüysüz
Speleothems as sensitive recorders of volcanic eruptions - the Bronze Age Minoan eruption recorded in a stalagmite from Turkey

11:30–11:45  EGU2012-13085
J. Stern and L. Lisiecki
Timing of deglacial changes in regional Atlantic benthic ?18O

11:45–12:00  EGU2012-11829
R. De Pol-Holz, M. Mohtadi, and J. Southon
Intermediate water radiocarbon off west Sumatra during the last 45,000 years

LUNCH BREAK

Chairperson: n.n.

13:30–13:45  EGU2012-13849
A common and optimized age scale for Antarctic ice cores

13:45–14:00  EGU2012-7570
H. Toyé Mahamadou Kele, B. Lemieux-Dudon, and E. Blayo
Towards unified ice core chronologies with the Datlice tool

14:00–14:15  EGU2012-7646
Towards an integrated ice core chronology using relative and orbital tie-points
K. Kawamura, S. Aoki, T. Nakazawa, K. Suzuki, and F. Parrenin
Accurate age scale of the Dome Fuji ice core, Antarctica from O2/N2 ratio of trapped air

J. Freitag, S. Kipfstuhl, M. Hörhold, A. Wegner, F. Wilhelms, and M. Bigler
Impurity controlled firn densification: a new model approach

A 62 ka record from the WAIS Divide ice core with annual resolution to 30 ka (so far)

S. Winkler
Addressing geomorphologic uncertainties with terrestrial cosmogenic nuclide dating (TCND) - examples from Holocene moraines in the Southern Alps of New Zealand

D. Fabel, J. McKie, J. Graham, and S. Xu
10Be production rate calibration in Scotland

Isothermal thermoluminescence dating of K-feldspar from sediments to determine fault slip rates: development and assessment

How does sediment mixing affect 10Be concentrations in alluvial sediments? A case study from a small catchment of the Alps, Zieibach, Alto Adige, Italy

A. Claude, S. Ivy-Ochs, F. Kober, M. Antognini, and P.W. Kubik
Geomorphology and landscape evolution at the Chironico landslide (Leventina)

The Lateglacial deglaciation history of the high Alpine Gotthard Pass, Switzerland, based on cosmogenic 10Be and in situ 14C

Mass wasting processes and their control on denudation rates, Matter-Valley, Switzerland

M.W. Buechi, F. Kober, S. Ivy-Ochs, and P. Kubik
Influence of former glaciations on interglacial landscape evolution: A case study from the LGM nunatak Hörnli, Eastern Switzerland

S. E. Lowick
A comparison of the OSL response of quartz and polymineral fine grains to alpha and beta radiation

K. Beerten, N. Vandersmissen, K. Deforce, and N. Vandenberghhe
Chronology of landscape evolution during the last centuries in the Campine area, Northern Belgium: integrating geomorphological, palaeobotanical, historical and pollution archives

B. Mauz, M. Vacchi, and R. Nathan
Using optical dating of beachrock for sea-level reconstruction

C.L. Mellett, B. Mauz, D.M. Hodgson, A.J. Plater, and A. Lang
Optical dating of late Quaternary deposits preserved beneath the eastern English Channel
Z98 EGU2012-12770
J.-P. Buylaert, C. Thiel, A.S. Murray, M. Jain, K.J. Thomsen, and R. Sohbati
Extending the luminescence dating age range using feldspar

Z99 EGU2012-1737
OSL-dating of fluvial deposits of the Middle Elbe River Flood Plains using different statistical approaches

Z100 EGU2012-7880
L. Bickel, J. Lomax, and M. Fiebig
Fluvial terrace gravels of the "Hochterrasse" (N-Alpine Foreland, Austria): luminescence characteristics of quartz and feldspar

Z101 EGU2012-6342
R. Mertz-Kraus, W.D. Sharp, and K.R. Ludwig
Precise and accurate measurement of U and Th isotopes via ICP-MS using a single solution

Z102 EGU2012-7255
14C in a stalagmite from NE India: preliminary results of dating near the limit of radiocarbon time scale

Z103 EGU2012-9008
A. Birkholz, M. Gierga, I. Hajdas, R. Smittenberg, L. Wacker, and S.M. Bernasconi
Compound specific Radiocarbon dating - a tool for dating lake sediments?

Z104 EGU2012-13135
B. Machalett, E.A. Oches, H.M. Roberts, and W.D. McCoy
Deciphering the Geochronological Framework of Serbian Loess Using Amino Acid Stratigraphy and Luminescence Dating

Z105 EGU2012-4572
N. Marwan, K. Rehfeld, B. Goswami, S. F. M. Breitenbach, and J. Kurths
Age models and their uncertainties

Z106 EGU2012-11229
M. Severi, R. Udisti, S. Becagli, B. Stenni, and R. Traversi
Volcanic synchronisation of the EPICA-DC and TALDICE ice cores for the last 42 kyr BP

Z107 EGU2012-792
M. Winstup, A. Svensson, S. O. Rasmussen, O. Winther, E. Steig, and A. Axelrod
An automated approach for annual layer counting in ice cores

Z108 EGU2012-2866
D. Raynaud, V. Lipenkov, M-F. Loutre, A. Landais, and E. Capron
Dating the 800 ka - long EPICA DC ice core by tuning the air content and ?O2/N2 records on local summer insolation.

Z109 EGU2012-5223
Volcanic synchronisation between the EPICA Dome C and Vostok ice cores (Antarctica) 0-145 kyr BP

Z110 EGU2012-5265
On the Delta-depth along the EPICA Dome C ice core

Z111 EGU2012-14158
F. Parrenin and V. Masson-Delmotte
An Antarctic temperature stack, 0-800 kyr BP

Z112 EGU2012-7179
Direct linking of Greenland and Antarctic ice cores at the Toba eruption (74 ka BP)

Z113 EGU2012-8629
R. C. A. Hindmarsh and C.M. Ritz
How deep do you need to drill through ice to measure the geothermal heat flux?

Z114 EGU2012-10143
The influence of impurities on the densification of firn - a case study from North Greenland

Z115 EGU2012-14153
J. R. Petit, F. Parrenin, and B. Delmonte
A chemical pacemaker to refine chronology for the deep East Antarctic ice cores

NP8.1/CL5.2 – Stochasticity and Statistical Physics in Climate Dynamics (co-organized) – Posters
Convener: Dr. Ghil | Co-Conveners: Dr Chekroun, V. Lucarini
XY365  EGU2012-2350  
R. Boschi and V. Lucarini  
Parametric Theory of Climate Change

XY366  EGU2012-9959  
V. Lucarini and S. Pascale  
Time and space scale analysis of the climate entropy budget

XY367  EGU2012-7181  
A. Mukhina, D. Kondrashov, and D. Mukhin  
Empirical modelling of ENSO dynamics: construction of optimal complexity models from data

XY368  EGU2012-6564  
M. Sonnewald, K. I. C. Oliver, and J. Dyke  
Insights from extremum principles: The effects of diffusivity parameters on entropy budgets within an ocean-atmosphere-ice model

XY369  EGU2012-2537  
M. Inatsu, N. Nakano, and H. Mukougawa  
Dynamics and predictability of extratropical wintertime low-frequency variability examined by a stochastic differential equation in a low-dimensional system

XY370  EGU2012-2025  
U. Achatz, U. Keeß, S. Dolaptchiev, and A. Gritsun  
A Climate-Dependent Sub-Grid-Scale Parameterization in Reduced Climate Models

XY371  EGU2012-6405  
B. De Saedeleer  
Characterisation of stochastically-induced climate jumps to other histories paced by the astronomical forcing.

XY372  EGU2012-4873  
T. Bodai, G. Karolyi, and T. Tel  
A conceptual model of the atmosphere driven by different processes: Extreme events and snapshot attractors

XY373  EGU2012-12578  
F. C. Cooper and P. H. Haynes  
Estimation of the response to a forcing of high dimensional non-linear systems

XY374  EGU2012-9613  
K. Fraedrich, I. Bordi, A. Sutera, and X. Zhu  
Transient response to well-mixed greenhouse gas changes

XY375  EGU2012-7873  
P. D. Ditlevsen  
The role of stochastic forcing in rapid climate transitions

XY376  EGU2012-8157  
D. Mukhin, D. Kondrashov, E. Loskutov, A. Feigin, and M. Ghil  
Empirical modeling of ENSO dynamics: Predicting critical transitions in spatially distributed systems

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**CL5.3/HS6.7 – Climate Data Bias-Correction and Homogenization and Climate Trends and Variability Assessment**

(co-organized) – Orals


**Room: 16**

Chairperson: Xiaolan L. Wang

13:30–13:45  EGU2012-14361  
E. Lebarbier  
Some statistical tools for change-points detection

13:45–14:00  EGU2012-2355  
A. Düsterhus and A. Hense  
Automated Probabilistic Quality Assurance for Data Publication

14:00–14:15  EGU2012-11430  
R. Auchmann, S. Brönnimann, M. Begert, and M. Croci-Maspoli  
Homogeneous sub-daily temperature series for Switzerland - a physics-based approach

14:15–14:30  EGU2012-14019  
X. Wenhui, L. Quingxiang, X.L. Wang, Y. Su, Z. Yani, and C. Lijuan  
Homogenization of Chinese Daily Surface Air Temperatures
14:30–14:45  EGU2012-12948  
P. Stepanek, P. Zahradnicek, and A. Farda  
Correcting inhomogeneities in daily time series - comparison of methods for various meteorological elements

14:45–15:00  EGU2012-10654  
An automatic method to homogenize trends in long-term monthly precipitation series

Chairperson: n.n.

15:30–15:45  EGU2012-89  
Temperature and precipitation fluctuations in the Czech Republic during the period of instrumental measurements

15:45–16:00  EGU2012-6954  
Y.Y. Liu, A.I.J.M. Van Dijk, R.A.M. de Jeu, M.F. McCabe, and J.P. Evans  
Development and evaluation of a global long-term passive microwave vegetation product

16:00–16:15  EGU2012-10874  
A Fundamental Climate Data Record of Intercalibrated Brightness Temperature Data from SSM/I and SSMIS

16:15–16:30  EGU2012-10561  
Evaluation of 29 years of CM SAF global cloud products derived from AVHRR

16:30–16:45  EGU2012-13564  
R. T. Pinker, Y. Ma, and E. A. Nussbaumer  
Developing Consistent Earth System Data Records for the Global Terrestrial Water Cycle: Focus on Shortwave and Longwave Radiative Fluxes

16:45–17:00  EGU2012-11488  
B. Bauer-Marschallinger, W. Dorigo, W. Wagner, M. Doubkova, and D. Chung  
Spatiotemporal Analyses of Remotely Sensed Soil Moisture with Respect to Regional Climate Modes and Solar Activity in Australia

CL5.3/HS6.7 – Climate Data Bias-Correction and Homogenization and Climate Trends and Variability Assessment (co-organized) – Posters  
Hall Z | Display Time 08:00–19:30  
Author in Attendance: 17:30–19:00  
Chairperson: Xiaolan L. Wang, Wouter Dorigo, Petr Stepanek

Z116  EGU2012-959  
N. Gnatiuk and S. Krakovska  
Homogenization and quality control of temperature datasets for Ukrainian stations of the Carpathian region

Z117  EGU2012-10761  
P. Stepanek and P. Zahradnicek  
Homogenization results for various meteorological elements in the Czech Republic

Z118  EGU2012-6360  
J. Wang, L. Zhang, A. Dai, F. Immler, M. Sommer, and H. Vömel  
Homogenization of Daily Global Radiosonde Humidity Data: Vaisala RS92 Bias Correction and Impact

Z119  EGU2012-12085  
L. Freitas, M.G. Pereira, L. Caramelo, L. Mendes, L. Amorim, and L. Nunes  
Homogenisation of minimum and maximum air temperature in northern Portugal

Z120  EGU2012-7989  
A.L. Morozova and M.A. Valente  
Homogenization of Portuguese long-term temperature data series: Lisbon, Coimbra and Porto

Z121  EGU2012-13388  
V.K.C. Venema, O. Mestre and the COST-HOME Team  
A blind test of monthly homogenisation algorithms

Z122  EGU2012-3514  
S. Dangendorf, J. Jensen, and S. Niehüser  
On detecting anthropogenic change points in sea level quantiles of mesotidal areas - Application to the German Bight
Z123  EGU2012-10935
M. Rienzner and C. Gandolfi
Changepoint detection in case of step change and inhomogeneous segments (platform-like inhomogeneities)

Z124  EGU2012-5770
A. K. Stips and M. J. Lilover
Recent climate change: Steady linear process or abrupt transition?

Z125  EGU2012-7911
G. Marougianni, D. Melas, I. Kioutsioukis, H. Feidas, P. Zanis, and E. Anandranistakis
Trend analysis of air temperature and precipitation time series over Greece: 1955-2010

Z126  EGU2012-6849
A. Troccoli
Long-term wind speed trends over Australia

Z127  EGU2012-9310
R. Wartenburger, A. Stickler, and S. Brönnimann
Estimation, Classification and Analysis of Errors in Historical Upper-Air Observations for Use as a Data Validation Tool: A Concept

Z128  EGU2012-81
Y. Kuleshov, E. Fu, K. Zhang, D. Silcock, and A. G. Pavelyev
Advancing climate studies in the Asia-Pacific region with the next generation GNSS and an innovative radio occultation technique

Z129  EGU2012-7066
An Improved Stream Temperature Model for Continuous Simulation and Its Application to Formosan Landlocked Salmon's Habitat Assessment

Z130  EGU2012-14325
A. Lin and X. L. Wang
An algorithm for blending multiple satellite precipitation estimates with in situ precipitation measurements in Canada

Z131  EGU2012-12140
P. van Oevelen, C. Kummerow, and J. Schulz
GEWEX Contributions to Long Term Global Data Sets

Z132  EGU2012-11815
W. Dorigo, R.A.M. De Jeu, W. Wagner, R.M. Parinussa, Y.Y. Liu, and D. Fernandez-Prieto
Evaluating trends and anomalies of a multi-sensor soil moisture climate data record

Z133  EGU2012-5706
Validation of long term satellite soil moisture records using tree ring data

Z134  EGU2012-3887
X. Guo
Satellite measurements of air density and ozone distributions in the mesosphere using ultraviolet limb-scan technique

Z135  EGU2012-4841
MB Borsche and AL Loew
Estimation of land surface heat fluxes from remote sensing data - an uncertainty assessment

Z136  EGU2012-10951
Analysis of drought events in a North Africa semi-arid region, Using SPOT- VEGETATION and C band scatterometer satellite Data

Z137  EGU2012-2915
U. Eden, J Timmermans, R van der Velde, and Z Su
Drought assessment by evapotranspiration mapping in Twente

Z138  EGU2012-2717
Drought monitoring over the Horn of Africa using remotely sensed evapotranspiration, soil moisture and vegetation parameters

SC4/CLS.17 – Visualization and Data Analysis in Earth and Climate Science (co-organized) – Orals
Room: 25
Chairperson: n.n.
15:30–17:00
Chairperson: n.n.
17:30–19:00
SSP1.2 – Reef and carbonate platform response to sea-level and environmental changes (co-listed) – Orals
Convener: G. Camoin | Co-Conveners: J. Webster, J. P. Navarro, I. Jarvis
Room: 41
Chairperson: G. Camoin

08:30–08:45 EGU2012-1008
M. Lankarani, A. Amini, and R. Swennen
The Stratigraphy of the Aquitanian-Burdigalian Asmari Formation of Lorestan Sub-Basin, Iran: an Inclusive Study

08:45–09:00 EGU2012-3660
H. Eltom, M. Makkawi, and O. Abdullatif
Characterization of Porosity and Permeability of the Upper Jurassic Arab-D Carbonate Reservoir Using 3D Outcrop Analog, Central Saudi Arabia

09:00–09:15 EGU2012-620
B. Pierson, D. Menier, K.K. Ting, and A. Chalabi
Morphological indicators of growth stages in carbonates platform evolution: comparison between present-day and Miocene platforms of Northern Borneo, Malaysia.

09:15–09:30 EGU2012-3637
O. Abdullatif and M. Yassin
Facies Modeling of of Dam and Hofuf Formations: Outcrop Analog of Mixed Carbonate and Siliciclastic (Miocene-Pliocene) Succession, Eastern Saudi Arabia

09:30–09:45 EGU2012-1819
Norian-Rhaetian sedimentary evolution of the Slovenian Basin (eastern Southern Alps)

09:45–10:00 EGU2012-13294
S.J. Barrett and J. Webster
3D numerical modelling of the Holocene evolution of One Tree Reef, Southern Great Barrier Reef: Implications for understanding the growth and architecture of coral reefs

SSP1.2 – Reef and carbonate platform response to sea-level and environmental changes (co-listed) – Posters
Convener: G. Camoin | Co-Conveners: J. Webster, J. P. Navarro, I. Jarvis
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: G. Camoin

A303 EGU2012-838
A. Zaitsev
Microfacies of the Billingen-Aseri (Lower-Middle Ordovician) carbonate deposits northwest of the Russian Platform

A304 EGU2012-4254
Sequence stratigraphy of the late Quaternary deposits in the central Yellow Sea

A305 EGU2012-2922
Urgonian platform carbonates (Barremian-Early Aptian) of southeastern France: description of a new project and first data

A306 EGU2012-1905
N Marquez and J Kasper
Preliminary geochemical results of corals from the Puerto Morelos Reef, Southeastern Mexico

A307 EGU2012-6682
A. Ortega-Nieto and J. Urrutia-Fucugauchi
Cenozoic Carbonate Stratigraphy of the Yucatan Shelf, Southern Gulf of Mexico

A308 EGU2012-1392
R. M. C. Maia, A. T. Dos Reis, C. Gorini, C. G. Silva, M. Rabineau, and D. Granjeon
Shelf-edge sedimentary systems off Rio de Janeiro State, northern Santos basin-Brazil

A309 EGU2012-3303
S. W. Lokier, T. Onuma, and H. Hamada
Geomorphological evolution of the dynamic Abu Dhabi coastline

A310 EGU2012-6583
A. Garcia-Avendaño and J. Urrutia-Fucugauchi
Lithological and Petrographic Analyses of Carbonates and Sandstones From the Southern Gulf of Mexico

SSP4.2 – Palaeoclimate records from speleothems: analytical techniques, proxies, and application (sponsored by...
IAS) (co-listed) – Orals
Convener: D. Scholz | Co-Conveners: D. Hoffmann, H. Stoll
Room: 41
Chairperson: Denis Scholz

13:30–13:45 EGU2012-12624
H.B. Vonhof and A.J. Nederbragt
Fluid inclusion stable isotope analysis in speleothem calcite as a tool for paleoclimate reconstruction

13:45–14:00 EGU2012-6116
A. Matthews, M. Bar-Matthews, H.P. Affek, A. Ayalon, H.B. Vonhof, S. Zaarur, and Y. Burstyn
Fluid inclusion stable isotopes and clumped isotopes thermometry study of Eastern Mediterranean paleoclimate

14:00–14:15 EGU2012-2151
T. Kluge, S. Zaarur, J. Dublyansky, C. Spötl, and H.P. Affek
Insights into kinetic isotope fractionation in calcite using clumped isotopes in Devils Hole

14:15–14:30 EGU2012-10907
N. Vogel, Y. Scheidegger, M.S. Brennwald, D. Fleitmann, S. Figura, R. Wieler, and R. Kipfer
Noble gas paleotemperatures and water contents of stalagmites - a new extraction tool and a new paleoclimate proxy

14:30–14:45 EGU2012-2863
D. Rudzka and F. McDermott
The14C 'bomb' pulse in selected European stalagmites as a tracer of soil carbon cycling dynamics

14:45–15:00 EGU2012-4735
Speleothem Mg-isotope time-series data from different climate belts

Chairperson: Heather Stoll

15:30–15:45 EGU2012-7124
C. Spötl and Y. Dublyansky
Devil's Hole, Nevada: revisited

15:45–16:00 EGU2012-8206
Decoupling between the tropics and the mid- to high-latitude North Atlantic region during Marine Isotope Stage 7

16:00–16:15 EGU2012-13311
Marine Isotope Stage 5 Climate Variability in the Central Balkan Peninsula

16:15–16:30 EGU2012-4632
A. Fankhauser, F. McDermott, D. Fleitmann, and D.L. Hoffmann
Rapid response of climatic conditions during the last glacial: evidence from U-series dated Irish speleothems

16:30–16:45 EGU2012-10725
Monthly-scale palaeo-rainfall reconstructed using a Belizean stalagmite.

16:45–17:00 EGU2012-1627
L. Comas-Bru, F. McDermott, and D. Fleitmann
A 1,000 year annually resolved record of speleothem 18O from Northern Spain; a potential new proxy for North Atlantic Oscillation (NAO) index reconstruction

SSP4.2 – Palaeoclimate records from speleothems: analytical techniques, proxies, and application (sponsored by IAS) (co-listed) – Posters
Convener: D. Scholz | Co-Conveners: D. Hoffmann, H. Stoll
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Dirk Hoffmann

A327 EGU2012-715
H. Green, J Wood, R Pickering, J Hellstrom, R Drysdale, and J Hergt
Exploring the potential of speleothem palaeoclimatic records from S.E. Australia

A328 EGU2012-5351
P. van Beynen, D Ford, and H. Schwarcz
Annual laminae as measured using fluorescence in historic stalagmites from Baradla Cave, Aggtelek National Park, Hungary.
<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>A331</td>
<td>A new technique for trace elemental analysis of speleothems using microbeam xrf</td>
<td>H. Stoll, W. Muller, and M. Prieto</td>
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<tr>
<td>A333</td>
<td>Trace element patterns across rapid climate change events in Pleistocene speleothems from caves in the Alps</td>
<td>S. Brandstätter, W. Müller, R. Boch, and C. Spötl</td>
</tr>
<tr>
<td>A334</td>
<td>Preliminary Geochemical and Rock Magnetic Study of a Stalagmite From Quintana Roo, Northeastern Yucatan Peninsula</td>
<td>J. Urrutia-Fucugauchi, L. Perez-Cruz, X. Zhao, M. Rebolledo-Vieyra, and A. Rodriguez</td>
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<tr>
<td>A336</td>
<td>Reconstruction of paleoclimate using stalagmite on Ishigaki-Island, Japan</td>
<td>Y. Kayama, S. Sakai, and K. Okamoto</td>
</tr>
<tr>
<td>A337</td>
<td>Chemical characterization of lipids in speleothems and cave drip water by organic trace analysis (HPLC-ESI-IT/MS) and its potential for the investigation of palaeoenvironmental changes</td>
<td>J. Bosle, D. Scholz, and T. Hoffmann</td>
</tr>
<tr>
<td>A338</td>
<td>Climate variability during the Holocene inferred from northeastern Iberian speleothems</td>
<td>A. Moreno, M. Bartolomé, C. Sancho, Á. Belmonte, H. Stoll, I. Cacho, R. L. Edwards, and J. Hellstrom</td>
</tr>
<tr>
<td>A339</td>
<td>Challenges on the way to noble gas temperatures on speleothems</td>
<td>T. Marx and W. Aeschbach-Hertig</td>
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<tr>
<td>A340</td>
<td>Chemical characterization of lipids in speleothems and cave drip water by organic trace analysis (HPLC-ESI-IT/MS) and its potential for the investigation of palaeoenvironmental changes</td>
<td>T.E. Horsfield, M. Rogerson, G.M. Henderson, E.J. Rohling, A. Mihevc, M. Budja, M. Prelovsek, T.J. Coulthard, and G.M. Greenway</td>
</tr>
<tr>
<td>A341</td>
<td>The 8.2 ka event in the northern Alps</td>
<td>A. Moreno, M. Bartolomé, C. Sancho, Á. Belmonte, H. Stoll, I. Cacho, R. L. Edwards, and J. Hellstrom</td>
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<tr>
<td>A342</td>
<td>Influence of the Solar Activity on the Variability of Water Isotopes over Europe during the Late Holocene</td>
<td>H. Hercman and J. Pawlak</td>
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<tr>
<td>A344</td>
<td>The problem of calibration: A possible way to overcome the drawbacks of age models</td>
<td>B. Goswami, J. Heitzig, K. Rehfeld, N. Marwan, and J. Kurths</td>
</tr>
<tr>
<td>A345</td>
<td>Speleothem Evidence for Temporal-Spatial Variation in East Asian Summer Monsoon since Medieval Warm Period</td>
<td>H.-C. Li, P. C. Chu, and C. W. Fan</td>
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<tr>
<td>A346</td>
<td>Shaft speleogenesis in Picos de Europa (North Spain): contribution of cave geomorphological mapping and U-Th dating techniques</td>
<td>D. Ballesteros, M. Jiménez-Sánchez, S. Giralt, J. García-Sansegundo, and G. Sendra</td>
</tr>
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</table>
Tuesday, 24 April

**AS1.10 – The global monsoon system: variability and dynamics (co-listed) – Orals**  
Convener: J. Li | Co-Conveners: Dr Turner, A. Bracco, P. Terray  
Room: 10  
Chairperson: n.n.

08:30–08:45  
EGU2012-1232  
**R. Wu, J.-L. Chen, and W. Chen**  
Distinguishing Different Types of ENSO Influences on the Indian Summer Monsoon Variability

08:45–09:00  
EGU2012-3551  
**J. Li, R. Ding, Z. Wu, J. Feng, and K. Ha**  
Interdecadal shift in the relationship between the East Asian summer monsoon and tropical SST

09:00–09:15  
EGU2012-13987  
**C DeMott, C Stan, and D Randall**  
Evaluating Asian Monsoon Northward Propagation Mechanisms in the ERA-interim Reanalysis and SP-CCSM

09:15–09:30  
EGU2012-10020  
**C. Prodhomme, C Stan, and D Randall**  
Impacts of Indian Ocean SST biases on the Indo-Pacific climate as simulated in a global coupled model

09:30–09:45  
EGU2012-8831  
**M. Vellinga, A. Arribas, and R. Graham**  
Predictability of onset of the West African monsoon in the Met Office's seasonal forecasting system GloSea4

09:45–10:00  
EGU2012-12704  
**S. Materia, F. Fierli, A. Borrelli, S. Gualdi, and A. Bellucci**  
An analysis of the West African Monsoon predictability

**CL1.13 – Decadal to millennial scale climate variability of the late Quaternary – Orals**  
Room: 16  
Chairperson: n.n.

08:30–08:45  
EGU2012-13305  
Long Term Seasonality Changes and Short Term Climate Variability Recorded in Eurasian Loess: Examples from Serbia, Romania, Kazakhstan, and China

08:45–09:00  
EGU2012-6916  
**P. De Deckker, M. Moros, K. Perner, and E. Jansen**  
Tropical and Southern Westerlies Influence on Glacial Interhemispheric Asymmetry over the 35 to 10 ka period. The role of the Indo Pacific Warm Pool

09:00–09:15  
EGU2012-8074  
The late Quaternary environmental evolution of the Northwest Passage: a marine perspective

09:15–09:30  
EGU2012-1374  
**R. Stein and K. Fahl**  
Deglacial/Holocene variability of Arctic sea-ice cover and Younger Dryas Event: Reconstruction from biomarker (“IP25” and “PIP25”) data

09:30–09:45  
EGU2012-1340  
**C. Hillaire-Marcel, J. Maccali, C. Not, and A. Poirier**  
Enhanced sea-ice export from the Arctic to the GIN seas during the Younger Dryas: A “Canadian” source from radiogenic isotope signatures

09:45–10:00  
EGU2012-184  
**C. Pearce, N.F. Reynisson, G. Massé, S.M. Kristiansen, A. Kuijpers, and M.-S. Seidenkrantz**  
Rapid Younger Dryas - Holocene transition recorded in marine sediments offshore Newfoundland

**COFFEE BREAK**

Chairperson: n.n.
10:30–10:45  EGU2012-5933  
H. A. Bauch and E. S. Kandiano  
Watermass evolution and ice-drift patterns in the subarctic Norwegian Sea during the Holocene

10:45–11:00  EGU2012-347  
E. Lind and S. Wastegård  
Tephra horizons in the north Atlantic region contemporary with early Holocene climate events

11:00–11:15  EGU2012-9023  
M. Klug, M.-S. Seidenkrantz, J. A. Piotrowski, J. Heinemeier, L. Rubensdotter, J. Faust, and J. Knies  
Short-term Holocene climate variability in coastal mid-Norway - the terrestrial response to the North Atlantic climate

11:15–11:30  EGU2012-10129  
A. Per?oiu, B.P. Onac, M. Blaauw, J.G. Wynn, and K. Holmgren  
A 10,500 year record of summer temperatures in Central Europe from cave glaciers

11:30–11:45  EGU2012-11340  
E. Levac and E. Bourlon  
Millenial Scale Oscillations in Paleoceanographic Records From Atlantic Canada

11:45–12:00  EGU2012-10840  
LG Collins, CS Allen, J. Pike, DA Hodgson, K. Weckström, and G. Massé  
Highly branched isoprenoid (HBI) biomarkers as an Antarctic sea-ice proxy in deep ocean glacial age sediments

Room: 15  
Chairperson: n.n.

15:30–15:45  EGU2012-4419  
F. Lehner, A. Born, C. C. Raible, and T. F. Stocker  
Barents Sea Inflow as control of the North Atlantic Oscillation during the onset of the Little Ice Age

15:45–16:00  EGU2012-6973  
Sea surface temperature variability of the Labrador Current over the last 2000 years

16:00–16:15  EGU2012-11955  
K Weckström, G Massé, M-A Sicre, M-S Seidenkrantz, A Kuijpers, S Schmidt, and LG Collins  
Sea ice reconstructions in the southwestern Labrador Sea based on a novel biomarker

16:15–16:30  EGU2012-11676  
G. Rueda, A. Rosell-Melé, G. Massé, and L. Polyak  
Sea ice melting increase in the eastern Barents Sea during the last ca. 500 years

16:30–16:45  EGU2012-7146  
J.H. Jungclaus, D. Zanchettin, and D. Notz  
Arctic climate and sea-ice changes in CMIP5/PMIP3 simulations over the last millennium

16:45–17:00  EGU2012-6737  
J.J. Blackford, P.A. Ryan, B. Akinyemiju, and P.D. Hughes  
Arctic climate change in recent centuries: a review

CL1.13 – Decadal to millennial scale climate variability of the late Quaternary – Posters

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

Z1  EGU2012-2268  
Late Quaternary history of circum-Arctic ice sheets and Arctic Ocean paleoceanography: New insights from a sediment core transect across Mendeleev Ridge

Z2  EGU2012-676  
C.L Green, J.A.M Green, and G.R Bigg  
Simulations of deep-draft icebergs and freshwater surges formed during a Barents Ice Sheet collapse

Z3  EGU2012-6627  
J. A. Pavón-Moreno, L. Pérez-Cruz, J. Urrutia-Fucugauchi, and M.A. Monreal-Gómez  
Marine Sedimentary Record of the Gulf of Tehuantepec in the Late Quaternary: paleoceanographic and paleoclimatic implications

Z4  EGU2012-7691  
T.L. Rasmussen, J. Olsen, S. Wastegård, and E. Thomsen  
Stratigraphy of three mid-late Weichselian tephra layers from the Faroe Islands margin
EGU2012-929
Deglacial History and Paleoceanography of the Umanak System, West Greenland

EGU2012-6634
Y. Iizuka, M. Hansson, I. Oyabu, T. Karlin, and K. Goto-Azuma
Chemical compounds of past soluble aerosols preserved in the NEEM and Dome Fuji ice cores

EGU2012-6741
Chemical compositions of soluble particles around the Termination 1 in the Dome Fuji ice core

EGU2012-12907
T.R. Lakeman, B. MacLean, S. Blasco, R. Bennett, and J.E. Hughes Clarke
Chronology and dynamics of the Amundsen Gulf Ice Stream in Arctic Canada during the last glacial-interglacial transition

EGU2012-3936
Y. Iizuka, M. Hansson, I. Oyabu, T. Karlin, and K. Goto-Azuma
Chemical compounds of past soluble aerosols preserved in the NEEM and Dome Fuji ice cores

EGU2012-6741
Chemical compositions of soluble particles around the Termination 1 in the Dome Fuji ice core

EGU2012-12907
T.R. Lakeman, B. MacLean, S. Blasco, R. Bennett, and J.E. Hughes Clarke
Chronology and dynamics of the Amundsen Gulf Ice Stream in Arctic Canada during the last glacial-interglacial transition

EGU2012-5065
A. Mackensen
High preindustrial ?13C in the deep Arctic Ocean: Implications for the interpretation of abrupt benthic ?13C excursions during the last glaciation

EGU2012-8746
V. Montade, N. Combourieu Nebout, M. Kagayema, C. Kissel, G. Siani, and E. Michel
Southern Westerly Wind belt and Carbon dioxide changes during the Antarctic Cold Reversal

EGU2012-4668
A. H. Pasanen, J. P. Lunkka, and N. O. Putkinen
Reconstruction of the White Sea Basin during the late Younger Dryas

EGU2012-3319
M. Meheust, R. Stein, and K. Fahl
Deglacial-Holocene variability of sea ice and surface water temperature in the Bering Sea: Reconstruction based on "IP25" and alkenone data

EGU2012-12901
U.J. van Raden, A. Gilli, J. van Leeuwen, and B. Ammann
Changes in erosional input and environmental conditions at Lake Gerzensee, Switzerland, during Termination 1

EGU2012-12675
Climate impact on the Trzechowskie paleolake ecosystem during the Late Glacial and early Holocene in the light of multiproxy analysis

EGU2012-282
A. Junginger and M.H. Trauth
The Role of the Congo Air Boundary and Solar Variations during the Early Holocene East African Humid Period

EGU2012-5710
A.B. Pedersen, M.-S. Seidenkrantz, F. Mienis, A. Fischel, N. Frank, and D. Hebbeln
Gulf Stream variability in western North Atlantic off Cape Lookout, North Carolina

EGU2012-4047
M.J. Hansen, C.S. Andresen, M.-S. Seidenkrantz, A. Kuijpers, and N. Nergaard-Pedersen
Reconstruction of past oceanographic variability in Southeast Greenland from marine sedimentary records: The influence from the Atlantic Multi-decadal Oscillation

EGU2012-8724
K. Müller-Navarra, U. Kotthoff, U. C. Müller, and J. Pross
Holocene vegetation and climate changes in Northeast Greece deduced from a terrestrial pollen record

EGU2012-8745
V. R. Krossa, H.-J. Kim, M. Moros, W. Dörfler, T. Blanz, J. S. Sinninghe Damsté, and R. Schneider
Mid Holocene climate change and impact on evolution on human settlements in northern central Europe

EGU2012-8301
D. Fritzsche, T. Opel, and H. Meyer
Eurasian Arctic climate over the past two millennia as recorded in the Akademii Nauk ice core (Severnaya Zemlya, Russian Arctic)

EGU2012-12934
M. A. Sicre, P. Rasmussen, U. Ezat, A. Fernane, K. Weckström, A. Kuijpers, and G. Massé
Sea surface temperature history in Isefjord (Denmark) over the last 2000 yrs

EGU2012-11044
O. Bothe, D. Zanchettin, and J. Jungclaus
Climatology of cold and warm periods in recent centuries - consistency of simulations and reconstructions
Z24   EGU2012-3420
A.D. Tegzes, E. Jansen, and R.J. Telford
The Nordic Seas: could inflow variability be driven by atmospheric circulation changes over the past millennium?

Z25   EGU2012-10800
F.J. Davies, H Goosse, and H Renssen
The Influence of Volcanic and Solar forcings on the Freshwater Budget of the Arctic Ocean

Z26   EGU2012-9891
S. Muters, C. Raible, and A. Born
On the role of external forcing for the Atlantic Multidecadal Oscillation.

Z27   EGU2012-5891
D. Zanchettin, J.-H. Jungclaus, D. Matei, O. Bothe, and A. Rubino
The Pacific Decadal Oscillation and the Atlantic Multidecadal Oscillation: how much close during the last millennium?

Z28   EGU2012-527
X. Xiao, K. Fahl, and R. Stein
Modern spatial (seasonal) variability in sea ice cover of the Kara and Laptev seas: Reconstruction from new biomarker data determined in surface sediments

Z29   EGU2012-1377
K. Fahl and R. Stein
Modern seasonal variability of central Arctic Ocean sea-ice cover: Reconstruction based on biomarker ("IP25" and "PIP25") data from sediment trap samples

Z30   EGU2012-5196
E. Bazhenova, H. Zou, C. Vogt, R. Stein, and J. Matthiessen
Provenance discrimination in surface sediments of the Amerasian Basin (Arctic Ocean) constrained by quantitative mineralogical analyses

CL1.16/AS4.1/BG2.12/IG15 – Biogeochemistry of Atmospheric Methane: Isotopes to Models (co-organized) – Orals
Convener: T. Sowers | Co-Conveners: M. Bock, J. Singarayer

Room: 13
Chairperson: Todd Sowers
08:30–08:45   EGU2012-3211
L. Mitchell, E. Brook, T. Sowers, and J. Lee
Multidecadal variability and the Inter Polar Gradient of atmospheric methane in the late Holocene

08:45–09:00   EGU2012-9540
The Ice-core Record of Atmospheric Methane: Chemistry-Climate Interactions on Tens to Thousands of Years

09:00–09:15   EGU2012-4938
Two decades of stable carbon isotope measurements in atmospheric methane - what do they tell us about global methane budget changes?

09:15–09:30   EGU2012-13042
S. Houweling
Global sources and sinks of methane and the use of satellite measurements

09:30–09:45   EGU2012-2937
L. Möller, T. Sowers, M. Bock, R. Spahni, M. Behrens, J. Schmitt, H. Miller, and H. Fischer
Climate and CO2 control on emissions and ecosystem composition of global methane sources over the last 160,000 years derived from 13CH4 in ice cores

09:45–10:00   EGU2012-162
Continuous Methane and Carbon Monoxide Concentration Measurements along the NEEM Core

CL1.16/AS4.1/BG2.12/IG15 – Biogeochemistry of Atmospheric Methane: Isotopes to Models (co-organized) – Posters
Convener: T. Sowers | Co-Conveners: M. Bock, J. Singarayer

Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Michael Bock
Evaluation of a wetland methane emission parameterization for present-day and Last Glacial Maximum

Validation of a methane emission model using eddy covariance observations and footprint modeling.

Modelling land-atmosphere interactions in tropical African wetlands

Histories of atmospheric methane and its carbon and hydrogen isotopic ratios over the last 250 years obtained from an ice core and firn air

Decoupling atmospheric methane isotope records during MIS 5-4 transition

Post pyrolysis trapping of molecular hydrogen improves precision for $\delta^{13}$CH$_4$ analysis

In situ production of ethane and propane in dust-rich Greenland ice core samples: is methane also affected?

Interpolar difference of atmospheric methane around the last glacial maximum

A Robust Reconstruction of Precipitation Variations of China Over Both a Short-term Scale and the Last Two Millennia

Two millennia of torrential activity reconstructed from alpine lake sediments: towards regional patterns of extreme precipitation changes

Stable isotope records for the past 2000 years from ice cores in central Dronning Maud Land, Antarctica

Multiproxy Paleoclimate Reconstruction Using Gaussian Graphical Models

Bias and confidence intervals in climate reconstructions
09:45–10:00  EGU2012-7486
J.P. Werner, J. Luterbacher, and J.E. Smerdon
A pseudo proxy evaluation of pattern-based vs. localised climate field reconstructions

COFFEE BREAK

Chairperson: Juerg Luterbacher

10:30–11:30  EGU2012-14454
M.E. Mann
The Past as Prologue: Learning from the Climate Changes in Past Centuries (Hans Oeschger Medal Lecture)

11:30–11:45  EGU2012-3771
E. Zorita, R. Caballero, and S. Wagner
Global spatial patterns of natural and forced variability in the past millennium

11:45–12:00  EGU2012-448
J. Zhang and T. Wu
The impact of external forcings on climate during the past millennium: Results from transient simulation with BCC_CSM1.1

LUNCH BREAK

Chairperson: Jesus Fidel Gonzalez-Rouco

13:30–13:45  EGU2012-2035
H. Goosse and S. Dubinkina
Towards a reanalysis covering the last millennia

13:45–14:00  EGU2012-225
Forcing, temperature response and climate sensitivity in pre-PMIP3 last millennium simulations and reconstructions

14:00–14:15  EGU2012-7537
A. Hind, A. Moberg, R. Sundberg, H. Grudd, G. Brattström, R. Caballero, and E. Zorita
A GCM-reality intercomparison for the last millennium

14:15–14:30  EGU2012-12032
Climate variability in China during the last millennium based on reconstructions and simulations

14:30–14:45  EGU2012-4794
S. Wagner, E Zorita, J Luterbacher, and J Werner
Added value of a regional climate model simulation of historical times over Europe

14:45–15:00  EGU2012-4725
F. Lehner, C. C. Raible, N. Merz, and T. F. Stocker
Testing the robustness of proxy-based North Atlantic Oscillation reconstructions

CL1.17/EG1 – Reconstructing the climate of the last two millennia (including Hans Oeschger Medal Lecture)
(co-organized) – Posters
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Eduardo Zorita, Jesus Fidel Gonzalez-Rouco, Juerg Luterbacher

Z43  EGU2012-1965
P.D. Breitenmoser, D. Frank, and S. Brönnimann
Forward modeling of tree-ring data: a case study with a global network
Z44  EGU2012-7605


Medieval climate anomaly and little ice age as recorded in speleothem and tree-ring data from the Middle Atlas in Morocco

Z45  EGU2012-2570

A. Laskar, M. Yadava, and R. Ramesh

A 4 kyr stalagmite oxygen isotopic record of the past Indian Summer Monsoon in the Andaman Islands

Z46  EGU2012-9189

Y. Watanabe, M. Kita, T. Fukunaga, S. Sakai, T. Tagami, K. Takemura, and S. Yoden

Geochemical data recorded in stalagmites from West and East Java, Indonesia

Z47  EGU2012-4217

Dr Macdonald, Dr Chiverrell, Ms Hind, Ms Todd, and Dr Charman

A multi-proxy reconstruction of millennial scale drought history for Northern England

Z48  EGU2012-2844

H. Wu, T. Felis, M. Kölling, C. Giry, D. Scholz, and S. Scheffers

Sub-seasonally resolved coral records of Caribbean sea surface conditions during the demise of the Maya civilization (~AD 800-1050)

Z49  EGU2012-7123

M.P. Lüthi

A 1600 year history of Alpine glacier equilibrium line altitude inferred from glacier length records, and the relation to summer temperature and radiation

Z50  EGU2012-10989

F. Ott, B. Brademann, M. Sowiński, P. Dulski, B. Plesssen, M. Blaszkiewicz, and A. Brauer

Seasonal sub-layer variations of a varved record from the Czechowskie Lake, Poland

Z51  EGU2012-7756

D. Schillereff, R. Chiverrell, N. Macdonald, and J. Hook

Lakes as recorders of extreme flows: a millennial-scale paleofoold record from the English Lake District

Z52  EGU2012-13364

I. Gil, L. Keigwin, F. Abrantes, and D. Hebbeln

A late Holocene diatom record from the Laurentian Fan reveals the imprints of solar forcing over oceanic circulation changes

Z53  EGU2012-8098

G. Rueda, A. Rosell-Mélé, and R. Gyllencreutz

Reconstructing climatic conditions in the Skagerrak during the last 2000 years using an organic biomarker approach

Z54  EGU2012-13466

L. Pérez-Cruz, J.M. Bautista, and J. Urrutia-Fucugauchi

High resolution multi-decadal climate record of the last 1200 years in the southern Gulf of California

Z55  EGU2012-8320


Assessing the Physical Consistence of Several Gridded Reconstructions Over Europe Through a High-Resolution Climate Paleosimulation

Z56  EGU2012-10764

M. Gagen, E Zorita, D McCarron and the The Millennium project consortium. Team

Episodes of large unforced variability in European climate over the last millennium.

Z57  EGU2012-4788

J. Franke, D. Frank, C. Raible, J. Esper, and S. Brönnimann

Spectral biases in climate proxies and reconstructions

Z58  EGU2012-6392

P. You, J. Servonnat, M. Yoshimori, D. Swingedouw, M. Khodri, and A. Abe-Ouchi

Stability of weather regimes during the last millennium from climate simulations

Z59  EGU2012-11359


External forcing influence on Weather Types along the last Millennium

Z60  EGU2012-13245

S. Hanhijärvi and A. Korhola

MuReMo: Reconstructing from proxy records of multiple resolutions assuming monotonic transfer functions

CL2.1 – Arctic climate change: governing mechanisms and global implications – Orals

Convener: R. Bintanja | Co-Conveners: R. G. Graversen

Room: 13

Chairperson: Rune Grand Graversen
13:30–13:45 EGU2012-6274
P. L. Langen, T. Mauritzen, and R. G. Graversen
Separation of radiative feedback contributions to polar amplification

13:45–14:00 EGU2012-6926
V. Alexeev and C. Jackson
Polar amplification and atmospheric heat transport

14:00–14:15 EGU2012-11558
E.C. van der Linden and R. Bintanja
Effects of sea-ice changes on Arctic temperature amplification and climate sensitivity

14:15–14:30 EGU2012-1326
J. Cohen, J. Furtado, M. Barlow, V. Alexeev, and J. Cherry
Arctic warming, increasing snow cover and widespread boreal winter cooling.

14:30–14:45 EGU2012-2819
T. Koenigk and U. Willén
Arctic climate change in the global coupled model EC-Earth: The role of the ocean heat transport

14:45–15:00 EGU2012-5880
F. Pithan and T. Mauritzen
On the relation between Arctic Amplification, the Arctic inversion and the lapse-rate feedback

CL2.1 – Arctic climate change: governing mechanisms and global implications – Posters
Convener: R. Bintanja | Co-Conveners: R. G. Graversen
Hall Z | Display Time 08:00–19:30
Author in Attendance: 10:30–12:00
Chairperson: Richard Bintanja

Z61 EGU2012-493
C. Di Biagio, A.G. di Sarra, P. Eriksen, S.E. Ascanius, G. Muscari, and B. Holben
Effect of surface albedo, water vapour, and atmospheric aerosols on the cloud-free shortwave radiative budget in the Arctic

Z62 EGU2012-2862
F. Geyer, H. R. Langehaug, L. H. Smedsrud, and Y. Gao
Is Fram Strait ice export a driver for Arctic sea ice decline?

Z63 EGU2012-3791
E. Dutra, P. Viterbo, G. Balsamo, C. Schär, and P. M. A Miranda
Land-atmosphere interactions associated with snow in a climate model

Z64 EGU2012-5084
Climate impacts of shipping and petroleum extraction in an unlocked Arctic ocean

Z65 EGU2012-8623
R. Bintanja, E.C. van der Linden, and W. Hazeleger
Boundary layer stability and Arctic climate change: a feedback study using EC-Earth

Z66 EGU2012-10287
V.A. Semenov and M. Latif
The Early Twentieth Century Warming and Winter Arctic Sea Ice

Z67 EGU2012-10795
T Semmler, E Gleeson, R McGrath, and T Jung
Impact of decreasing sea ice cover and warming Arctic surface temperature on the Northern mid-latitude climate - comparison of coupled with uncoupled EC-Earth simulations

Z68 EGU2012-11066
R. G. Graversen, M. Kapsch, T. Mauritzen, and M. Tjernström
Arctic temperature amplification and sea-ice melt

Z69 EGU2012-11843
J. von Hardenberg, L. Vozella, V. Vitale, A. Lupi, M. Mazzola, T. P. C. van Noije, A. Strunk, and A. Provenzale
Aerosol optical depth over the Arctic: a comparison of two global aerosol models with ground-based, satellite and reanalysis data

Z70 EGU2012-12091
U. Willen and R. Bintanja
Sensitivity of Arctic amplification to cloud-radiation feedbacks

Z71 EGU2012-13026
T. M. Lenton and V. N. Livina
A recent bifurcation in Arctic sea-ice cover
ZH2  EGU2012-13439  
**R. Bintanja**  
Changes in the seasonality of Arctic sea ice and temperature

ZH3  EGU2012-13449  
**R. T. Pinker**, E. A. Nussbaumer, X. Niu, and Y. Ma  
Radiative Fluxes at High Latitudes: Implications for Climate Research

ZH4  EGU2012-13459  
**A. V. Chernokulsky** and I. I. Mokhov  
Annual and seasonal climatology of total cloudiness in the Arctic from satellite and surface observations and reanalyses

**NH1.11/AS4.16/CL2.4 – Hazard Risk Management in Agriculture and Agroecosystems (co-organized) – Orals**  
**Room: 1**  
Chairperson: M. Semenov

08:30–08:45  EGU2012-7685  
**A. Gobin** and I. Piccard  
Meteorological risks, impacts on crop production systems and agricultural insurances in Belgium

08:45–09:00  EGU2012-556  
**S.A. Khresat**  
Adaptation measures to reduce the impact of climate variability on crop production in Jordan

09:00–09:15  EGU2012-13551  
**K. C. Kesebaum**, M. Gandorfer, and M. Wegehenkel  
Assessment of production risks for winter wheat in different German regions under climate change conditions

09:15–09:30  EGU2012-4151  
**E. Vanuytrecht**, D. Raes, P. Willems, and M. Semenov  
Comparing climate change impacts on crops in Belgium based on CMIP3 and EU-ENSEMBLES multi-model ensembles

09:30–09:45  EGU2012-1690  
**H. Fraga**, J. A. Santos, A.C. Malheiro, and J. Moutinho-Pereira  
Viticultural zoning in Portugal: current conditions and future scenarios

09:45–10:00  EGU2012-6249  
**Z. Dunkel**, E. Vincze, and A. Moring  
Meteorological contribution to the mitigation and adaptation of the 'extreme water events' of Hungarian Great Plain

**COFFEE BREAK**

Chairperson: A. Gobin

10:30–10:45  EGU2012-13848  
**M. Capa-Morocho**, B. Rodríguez-Fonseca, and M. Ruiz-Ramos  
Climatic variability effects on summer cropping systems of the Iberian Peninsula

10:45–11:00  EGU2012-14106  
**M. Bielza**, T. Maestro, A. Algarra, and A. Garrido  
Analysis of the impact of water shortage on irrigated fruit yields in Spain

11:00–11:15  EGU2012-8204  
**M. Gil**, A. Garrido, and N. Hernández-Mora  
Economic Drought Impact on Agriculture: analysis of all agricultural sectors affected

11:15–11:30  EGU2012-4085  
**N. R. Dalezios**, A. Blanta, and N.V. Spyropoulos  
Remotely Sensed Quantitative Drought Risk Assessment in Vulnerable Agroecosystems

11:30–11:45  EGU2012-13927  
**E. Iglesias** and **K. Baez**  
Innovation in drought risk management: exploring the potential of weather index insurance

11:45–12:00  EGU2012-13945  
Pasture Drought Insurance Based on NDVI and SAVI
XY178  EGU2012-378
D. Lobo, K. Verbist, D. Gabriels, M. Puche, G. Bracho, G. Soto, and F. Santibañez
Zonation of hydric regimens in Venezuela based on rainfall characteristics

XY179  EGU2012-4817
Z. Hussain and S. Saeed
Intraseasonal to interannual variability of summer monsoon rainfall and its influence on the Agricultural corps in mountainous Kashmir

XY180  EGU2012-6667
R.R Muita, F.F van Ogtrop, and R.W Vervoort
Dry spell trend analysis in Kenya and the Murray Darling Basin using daily rainfall

XY181  EGU2012-10700
M. G. Cortina-Januchs, J. Quintanilla-Dominguez, A. Vega-Corona, and D. Andina
Time series prediction in agroecosystems

XY182  EGU2012-10745
J M Anton, J B Grau, A M Tarquis, D Andina, and M E Sanchez
Prediction in cases with superposition of different hydrological phenomena, such as from weather “cold drops

XY183  EGU2012-13094
V. Mereu, A. Gallo, G. Carboni, and D. Spano
Impact of climate change and adaptation strategies on crop production in Nigeria

XY184  EGU2012-13788
A. Florentino, D. Torres, A. OSPina, J. Contreras, Z. Palma, and J. Silvera
Soil physical conditions as livestock treading effect in tropical Agroecosystem of dryland and strategies to mitigate desertification risk

XY185  EGU2012-13790
A. OSPina, A. Florentino, and V. Lorenzo
Soil management system for water conservation and mitigation of global change effect

XY186  EGU2012-13851
M. Capa-Morocho, M. Ruiz-Ramos, and B. Rodríguez-Fonseca
Methodological discussion for interdisciplinary project on the effects of climatic variability on cropping systems.

XY187  EGU2012-14338
M.A. Rodrigues, A. Monteiro, A. Rocha, H. Quénol, and J.R. de Freita
Application of Bioclimatic Indexes to the Characterization of the Viticulture Aptitude within the Demarcated Douro Region

XY188  EGU2012-14339
M.A. Rodrigues, A. Rocha, A. Monteiro, H. Quénol, and J.R. de Freitas
Prediction of Frost Risks and Plagues using WRF model: a Port Wine region case study

XY189  EGU2012-2396
MA Semenov and S Pilkington-Bennet
Validation of ELPIs baseline scenarios using ECA&D observed data

XY190  EGU2012-6224
A. Giarolla, N. Resende, S. C. Chou, P. S. Tavares, and D. C. Rodrigues
COFFEE BEVERAGE QUALITY ASSESSMENT BASED ON ETA/CPTEC-HadCM3 MODEL
(A1B-IIPCC/SRES SCENARIO), SOUTHEASTERN BRAZIL

XY191  EGU2012-9024
K. Szafranek, B. Jakubiak, R. Lech, and M. Tomczuk
Results of analysis of archive MSG data in the context of MCS prediction system development for economic decisions assistance - case studies

XY192  EGU2012-9473
H. S. Choi, U. Schneider, E. Schmid, and H. Held
The value of seasonal forecasting and crop mix adaptation to climate variability for agriculture under climate change

XY193  EGU2012-13944
J.L. Valencia, A. Saa-Requejo, J.M. Gascó, and A.M. Tarquis
Frequency and Intensity of drought events over Ebro River basin

XY194  EGU2012-5666
J M Anton, J B Grau, A M Tarquis, D Andina, J M Cisneros, and E Sanchez
Discussion about decision support systems using continuous multi-criteria methods for planning in areas with hydro-basins, agriculture and forests, from examples in Argentine.
XY195  EGU2012-5774
D. Perez-Lopez, M. Ruiz-Ramos, E. Sánchez-Sánchez, A. Centeno, I. Prieto-Egido, and N. Lopez-de-la-Franca
Influence of climate change on the flowering of temperate fruit trees

XY196  EGU2012-2697
Development of mathematical models to elaborate strategies, select alternatives and development of plans for adaptation of communities to climate change in different geographical areas including costs to implement it

XY197  EGU2012-3698
J. M. Mirás Avalos, E. Vidal Vázquez, P. Sande Fouz, and A. Paz González
Coping with Uncertainties in Mapping Extreme and Mean Temperatures at the Regional Level for Risk Management in Agriculture: A Case Study in Galicia, NW Spain

XY198  EGU2012-12312
T. Calheiros, M.G. Pereira, J.G. Pinto, L. Caramelo, J. Gomes-Laranjo, and C.C. Dacamara
Assessing potential changes of chestnut productivity in Europe under future climate conditions

XY199  EGU2012-12447
M. G. Castiglione, M. C. Sasal, M. G. Wilson, A. Paz González, and J. D. Oszust
Temporal Variability of Physical Properties on an Aquic Argiudoll under no Tillage

XY200  EGU2012-12860
J. Ramarohetra and B. Sultan
Are satellite based rainfall estimates accurate enough for crop modelling under Sahelian climate?

XY201  EGU2012-13138
M. A. Pilatti, R. Marano, O. Felli, A. Alesso, M. E. Carrizo, and M. C. Miretti
Degradation and Improvement of Argiudolls in Centre Santa Fe (Argentina): Changes in Physical and Chemical Soil Properties and in its Productive Capacity Using a Simulation Model of Crop Growth

XY202  EGU2012-14075
C. Lozano, A.M. Tarquis, and J.A. Gómez-Barona
Sum Insured Determination for Cereal, Citrus and Vineyards in the Spanish Agricultural Insurance System

CL2.5 – Climate and infectious disease interactions – Orals
Room: 13
Chairperson: Dr Adrian Tompkins

15:30–15:45  EGU2012-1126
F. Di Giuseppe, F. Molteni, and A.M. Tompkins
A rainfall calibration methodology for impact modelling based on spatial mapping

15:45–16:00  EGU2012-1629
V. Ermert, A. H. Fink, H. Paeth, and A.P. Morse
The potential effects of climate change on malaria in tropical Africa using regionalised climate projections

16:00–16:15  EGU2012-2064
C Caminade, JA Ndione, M Diallo, D MacLeod, O Faye, Y Ba, I Dia, JM Medlock, S Leach, KM McIntyre, M Baylis, and AP Morse
Simulating infectious disease risk based on climatic drivers: from numerical weather prediction to long term climate change scenario

16:15–16:30  EGU2012-2349
L. Larsen
An archival examination of environment and disease in eastern Africa in recent history

16:30–16:45  EGU2012-8594
B. Bett, A. Omolo, F. Hansen, A. Notenbaert, and S. Kemp
Spatial-temporal analysis of the of the risk of Rift Valley Fever in Kenya

16:45–17:00  EGU2012-8832
R. Lowe, J. Chirombo, and A. M. Tompkins
Challenges for modelling spatio-temporal variations of malaria risk in Malawi

CL2.5 – Climate and infectious disease interactions – Posters
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Dr Volker Ermert

Z75  EGU2012-1151
A. M Stewart and R Lowe
El Niño-Southern Oscillation and dengue early warning in Ecuador
Z76  EGU2012-1559  
A. P. Morse, C Caminade, A E Jones, D MacLeod, and A E Heath  
The QWeCI Project: seamlessly linking climate science to society

Z77  EGU2012-1878  
D. MacLeod  
Uncertainty in climate-driven disease prediction on seasonal to decadal timescales

Z78  EGU2012-3108  
S. K Tay, L. K. Amekudzi, and G. Tagoe  
Impact of Climate Variability on Prevalence of Urinary Schistosomiasis over Sunyani in the Transition Belt of Ghana

Z79  EGU2012-5140  
F. Di Giuseppe, A.M. Tompkins, R. Lowe, E. Dutra, and F Wetterhall  
The skill of ECMWF long range Forecasting System to drive impact models for health and hydrology in Africa

Z80  EGU2012-8773  
J. Gachohi, F. Hansen, B. Bett, and P. Kitala  
Persistence of Rift Valley fever virus in East Africa

Z81  EGU2012-8969  
J. Chirombo, R. Lowe, and L. Kazembe  
Geostatistical modelling of household malaria in Malawi

Z82  EGU2012-9503  
A platform to integrate climate information and rural telemedicine in Malawi

Z83  EGU2012-9825  
S Kienberger, A Notenbaert, and P Zeil  
Health risk in the context of climate change and adaptation - Concept and mapping as an integrated approach

Z84  EGU2012-11468  
F. Di Giuseppe, A.M. Tompkins, and F Molteni  
Systematic Errors in the ECMWF long range Forecasting System over Africa

Z85  EGU2012-12193  
A. M. Tompkins, V. Ermert, and R. Lowe  
VECTRI: A new dynamical disease model for malaria transmission

Z86  EGU2012-12228  
A. M. Tompkins, E. Asare, and L. K. Amekudzi  
A simple pond parametrization for malaria transmission models

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CR1.40/CL2.11 – State of the cryosphere: observations and modelling (co-organized) – Orals
Room: 5
Chairperson: n.n.

08:30–08:45 EGU2012-5483
S. Kotlarski, C. Steger, T. Jonas, and C. Schär  
Alpine snow cover in a changing climate: A regional climate model perspective

08:45–09:00 EGU2012-5280
O. Anisimov, S. Reneva, and V. Kokorev  
Predictive modelling of terrestrial and sub-aquatic permafrost in Northern Eurasia: implications for the global carbon cycle and climate

09:00–09:15 EGU2012-11647
F. A. Haumann, D. Notz, H. Schmidt, and M. R. van den Broeke  
Response of Wind-Driven Antarctic Sea-Ice Transport to External Anthropogenic Forcingns

09:15–09:30 EGU2012-2460
J. Wahr, T. Jacob, W.T. Pfeffer, and S. Swenson  
Recent contributions of all ice-covered regions, including mountain glaciers and ice caps, to sea level rise, as inferred from GRACE

09:30–09:45 EGU2012-6524
A. Fischer, J. Abermann, and M. Kuhn  
On the accuracy of estimating the potential sea level rise by scaling the area of mountain glaciers

09:45–10:00 EGU2012-10130
R. H. Giesen and J. Oerlemans  
Global glacier volume projections for the 21st century including the dynamical response to changes in climate

COFFEE BREAK
Chairperson: n.n.

10:30–10:45  EGU2012-12349
S. Lhermitte, W. Greuell, E. van Meijgaard, R. van Oss, M. R. van den Broeke, and W. J. van de Berg
Greenland ice sheet surface albedo: trends in surface properties (2000-2011)

10:45–11:00  EGU2012-1481
F. Gillet-Chaulet, O. Gagliardini, M. Nodet, C. Ritz, G. Durand, and T. Zwinger
Greenland Ice Sheet sensitivity to surface mass balance forcing using high resolution full-Stokes simulations

11:00–11:15  EGU2012-12304
R. Mottram, G. Ásladinsdóttir, F. Boberg, O. Bassing Christensen, M. Stendel, and J. Hesselberg
Regional Climate Projections for Greenland 1980 - 2099 using the HIRHAM5 Model

11:15–11:30  EGU2012-8312
On regional ice sheet mass balance from GRACE, the mass budget method, and ICESat

11:30–11:45  EGU2012-11460
A. Jenkins
A simple parameterisation of melting near the grounding lines of ice shelves and tidewater glaciers

11:45–12:00  EGU2012-12900
C. Ritz, G. Durand, T. Edwards, H. Hellmer, T. Payne, S. Shannon, and R. Timmermann
Antarctic instability and possible associated contribution to sea-level rise

CR1.40/CL2.11 – State of the cryosphere: observations and modelling (co-organized) – Posters
Hall XL | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Jonathan Bamber

XL63  EGU2012-5816
D. Micu
Shifts during the snow season in the Romanian Carpathians in response to winter temperature and precipitation change

XL64  EGU2012-6495
G. Serquet, C. Marty, and M. Rebetez
Impact of increasing temperature on snowfall in Switzerland

XL65  EGU2012-4948
S. Kivinen, E. Kaarlejärvi, K. Jylhä, and J. Räisänen
The impact of warming climate on late summer snow cover in northwestern Finland

XL66  EGU2012-4714
M. Huss
Extrapolating glacier mass balance to the mountain range scale: The European Alps 1900-2100

XL67  EGU2012-7748
A.N. Rudoy
Quaternary ledoyoms in the mountains of southern Siberia

XL68  EGU2012-7322
C. Lang, X. Fettweis, and M. Erpicum
Evaluation of the regional climate model WRF over Svalbard

XL69  EGU2012-1177
A. Sharov, D. Rieser, and D. Nikolskiy
Glacier mass balance in high-arctic areas with anomalous gravity

XL70  EGU2012-146
J.R. Carr, C.R. Stokes, and A. Vieli
The role of climatic and oceanic forcing in Arctic tidewater outlet glacier behaviour

XL71  EGU2012-11732
R Forsberg, L S Sørensen, A Khan, C Aas, D Evansberget, G Adalsteinsdottir, R Mottram, S B Andersen, A Ahlstrom, J Dall, A Kusk, J Merryman, C Hvidberg, K Khvorostovsky, T Nagler, H Rott, M Scharrer, A Shepard, F Ticconi, and M Engdahl
Ice_Sheets_CCI: Essential Climate Variables for the Greenland Ice Sheet

XL72  EGU2012-3555
M. Tedesco, M. Hoffman, I. Willis, P. Alexander, and A. Banwell
Multi-directional ice dynamic response to slow and fast supraglacial lake drainages in Greenland.
The first glacier inventory for entire Greenland

Acceleration of the GrIS mass loss as observed by GRACE

Surface movement and elevation change at the NEEM deep drilling site, North Greenland, 2007-2011

Time-varying mass changes of the Greenland and Antarctic ice sheets from radar and laser altimetry

What do we mean by ice sheet mass trends?

Monte Carlo inversion of firm layers observed in firn cores and radar images - a validation of a dynamic firn compaction model

Inhibition of the positive snow-albedo feedback by precipitation on the Antarctic plateau

Dynamical Impacts on Change of Net Precipitation over Antarctica in an A1B Scenario

Initialisation of a vertically-integrated, higher-order ice sheet model using observations of surface mass balance and elevation rate.

Projections of the contribution of the Greenland Ice Sheet to sea level rise for the next 100 years

Ensemble projections of the Greenland ice sheet contribution to future sea-level rise

Future projections of Greenland's ice loss accounting for changes in surface mass balance and dynamic discharge

21st century changes in the surface mass balance of the Greenland ice sheet simulated with the global model CESM

New parameterisations for the Greenland contribution to sea level rise

Surface curvature as a signature of dynamical thinning

Modeling Land Ice in the Community Earth System Model

Uncertainty in Future Solid Ice Discharge from Antarctica

Parameter sensitivity of dynamic ice loss from Antarctica: SeaRISE experiments with the Parallel Ice Sheet Model
NP8.1/CL5.2 – Stochasticity and Statistical Physics in Climate Dynamics (co-organized) – Orals
Convener: Dr. Ghil | Co-Conveners: Dr Chekroun, V. Lucarini
Room: 28
Chairperson: Michael Ghil

08:30–08:45 EGU2012-13897
A. Sutera
Forcing a non-linear system

08:45–09:00 EGU2012-2266
S. Pierini
Environmental tipping points in random dynamical systems: a quasigeostrophic case study

09:00–09:15 EGU2012-11747
J. Laurie and F. Bouchet
A statistical mechanics approach to computing rare transitions in multi-stable turbulent geophysical flows

09:15–09:30 EGU2012-13213
V. Lucarini and J. Wouters
Disentangling multi-level systems: averaging, correlations and memory

09:30–09:45 EGU2012-9799
M. Mathur and J. Sommeria
Experimental modelling of bistability in mid-latitude atmospheric jets

09:45–10:00 EGU2012-7307
E. Loskutov, D. Mukhin, M. Chekroun, and A. Feigin
Empirical modeling of ENSO dynamics: prognosis of critical transitions in delay differential equations models of ENSO

10:00–10:15 EGU2012-2526
B. G. Liepert
Inter-model variability and biases of the global water cycle in CMIP3 coupled climate models

CL5.4/NP4.5 – Climate Time Series Analysis (co-organized) – Orals
Convener: M. Mudelsee | Co-Conveners: M. Trauth, T. Lenton
Room: 13
Chairperson: n.n.

10:30–10:45 EGU2012-6525
X. L. Wang, Y. Feng, and V. R. Swail
A generalized multivariate regression model for modelling ocean wave heights

10:45–11:00 EGU2012-11664
S. Morucci, R. Inghilesi, A. Orasi, and G. Nardone
Wave Climate and Extreme Events Analysis in the Central Mediterranean Sea

11:00–11:15 EGU2012-426
A. A. Turasie, D. B. Stephenson, T. E. Jupp, and J. Davidson
New Cointegration Methods for Detection and Attribution of Climate Trends

11:15–11:30 EGU2012-1105
V. N. Livina and T.M. Lenton
A recent bifurcation in Arctic sea-ice cover

11:30–11:45 EGU2012-5948
Y. Chen, M. Themessl, and A. Gobiet
Using the Quantile Mapping to improve a weather generator

11:45–12:00 EGU2012-13559
E. Brisson and N.P.M. van Lipzig
How does natural climate variability on decadal timescales affect timeseries analysis?

CL5.4/NP4.5 – Climate Time Series Analysis (co-organized) – Posters
Convener: M. Mudelsee | Co-Conveners: M. Trauth, T. Lenton
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

Z87 EGU2012-3453
C. Suteanu, V. Dobrica, and C. Demetreascu
Space-time variability in scaling aspects of surface air temperature records

Z88 EGU2012-6322
E. Holtanova and A. Valerianova
The estimates of probability distribution of annual and seasonal maxima of maximum air temperature
<table>
<thead>
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<th>Z89</th>
<th>EGU2012-11841</th>
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<tr>
<td><strong>T. Feng</strong> and Z.T. Fu</td>
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<td>The role of changes in the seasonality in strong wind season shortening over China</td>
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<th>Z90</th>
<th>EGU2012-6993</th>
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<td><strong>M.C. Bramati</strong> and C. Tarragoni</td>
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<td>Climatic patterns and extreme rainfalls on coastal areas in Central Italy</td>
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<th>Z91</th>
<th>EGU2012-2992</th>
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<td><strong>K. Pandzic</strong> and T. Likso</td>
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<td>Comparing the Palmer Drought Index and the Standardized Precipitation Index for Zagreb Gric Observatory</td>
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<th>Z92</th>
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<tr>
<td><strong>B. Ustaoglu</strong></td>
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<td>Comparisons of Annual Precipitation Gridded and Station Datasets: An example from Istanbul, Turkey</td>
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<th>Z93</th>
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<tr>
<td>Variations of extreme rainfall events in space and time</td>
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<th>Z94</th>
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<td><strong>S. Yerel</strong> and N. Ozbay</td>
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<td>Determination of Climate Changes by Using the Trend Analysis</td>
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<th>Z95</th>
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<tr>
<td><strong>S. Bathiany</strong>, M. Claussen, and K. Fraedrich</td>
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<td>Detecting hotspots of atmosphere-vegetation interaction via Early Warning Signals</td>
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<td><strong>D. Karssenberg</strong> and M.F.P. Bierkens</td>
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<td>Early-warning signals (potentially) reduce uncertainty in forecasted timing of critical shifts</td>
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<td><strong>I. Vieru</strong>, I.H. Holobâc?, O. Pop, I.A. Irimu?, and M. Georgescu</td>
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<td>Climate signal in a Picea abies tree ring chronology in Eastern Romanian Carpathians</td>
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<td><strong>A. Di Piazza</strong>, E. Cordano, and E. Eccel</td>
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<td>Use of a Weather Generator for analysis of projections of future daily temperature and its validation with climate change indices</td>
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<td><strong>N. Schütz</strong>, M. Hayn, M.C. Brown, and M. Holschneider</td>
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<td>Quantifying conjoint patterns of multiple paleo signals based on Bayesian inversion</td>
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<td><strong>K. Rehfeld</strong>, N. Marwan, J. Heitzig, and J. Kurths</td>
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<td>Pearson correlation estimation for irregularly sampled time series</td>
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<td><strong>J. Pawlak</strong> and H. Hercman</td>
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<td>Genetic algorithm as a correlation tool - speleothems stable isotope records example</td>
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<tr>
<td><strong>G. Lenoir</strong> and M. Crucifix</td>
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<td>Climate wavelet spectrum estimation under chronology uncertainties</td>
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<td><strong>D. Divine</strong>, F. Godtliebsen, and H. Rue</td>
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<td>A modelling approach to assessing the timescale uncertainties in proxy series with chronological errors</td>
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<tr>
<td><strong>F. Godtliebsen</strong>, L. Holmstrom, A. Miettinen, P. Erasto, <strong>D. Divine</strong>, and N. Koc</td>
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<td>Pairwise Scale-Space Comparison of Time Series with Application to Climate Research</td>
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**NP2.4/CL5.5 – Climate Sensitivity (co-organized) – Posters**

**Convener:** M. Crucifix | **Co-Conveners:** H. A. Dijkstra, A. S. von der Heydt, P. Langen

**Hall X/Y | Display Time 08:00–19:30**

**Author in Attendance:** 17:30–19:00

**Chairperson:** Henk Dijkstra, Michel Crucifix, Peter Langen, Anna von der Heydt

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<th>XY278</th>
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<tr>
<td><strong>D. Dommenget</strong></td>
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<td>Model Climate Sensitivity Spread forced by Mean Sea Surface Temperature Biases</td>
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<tr>
<td><strong>E. Exarchou</strong>, J.-S. Von Storch, and J. Jungclaus</td>
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<td>The effect of tidally driven mixing on the transient climate response to CO2 increase</td>
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<td><strong>S. Pueyo</strong></td>
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<td>Objective prior distribution of climate sensitivity</td>
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A lower and more constrained estimate of climate sensitivity using updated observations and detailed radiative forcing time series

The climate sensitivity parameter during the last 800 kyr - offsets due to transient effects and state dependency

Estimates of global ocean cooling at the Last Glacial Maximum based on sea-surface temperature and oxygen-isotope reconstructions

On the climate response to zero ozone

Scaling analysis of stochastic climate sensitivities

What do we know about climate sensitivity?

Characterization of New Jersey Shelf Sedimentation using geochemical and physical properties: IODP Expedition 313

In situ gas concentrations in the Kumano forearc basin from drilling mud gas monitoring and sonic velocity data (IODP NanTroSEIZE Exp. 319 Site C0009)

A 500,000-Year-Long Sediment Archive of Lake Van in Eastern Anatolia

Extreme Dead Sea drying event during the last interglacial from the ICDP Dead Sea Deep Drill Core

Bighorn Basin Coring Project (BBCP): High-Resolution Continental Records of Early Paleogene Hyperthermals

Future scientific drilling in the Arctic Ocean: Key objectives, areas, and strategies

The Baltic Sea IODP project “Paleoenvironmental evolution of the Baltic Sea Basin through the last glacial cycle

The Neogene monsoon and oceanic currents in the Indian Ocean: The Maldives archipelago.

> Exploring the Scandinavian Mountain Belt by Deep Drilling (COSC)
16:15–16:30 EGU2012-7104
C Mevel, R Gatilff, J Ludden, G Camoin, B Horsfield, and A. Kopf
Towards a distributed infrastructure for research drilling in Europe

16:30–16:45 EGU2012-12592
B. Esmael, R. Fruhwirth, A. Arnaout, and G. Thonhauser
Operations Recognition at Drill-Rigs

16:45–17:00 EGU2012-14018
H.-J. Wallrabe-Adams, M. Diepenbroek, H. Grobe, R. Huber, U. Schindler, and J. Collier
IODP Scientific Earth Drilling Information Service

CL5.11 – EuroFORUM 2012: Major achievements and perspectives in scientific ocean and continental drilling –
Posters
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: C. Escutia

Z105 EGU2012-11635
Middle to Late Eocene Carbonate Accumulation Events in the Equatorial Pacific - new geochemical records from IODP Exp 320/321 and ODP Leg 199

Z106 EGU2012-5892
The ICDP Dead Sea Deep Drilling Project: An overview and the potential for high-resolution records of floods and droughts in the Levant

Z107 EGU2012-14264
J Hernandez-Molina, D. Stow, C. Alvarez-Zarikian and the Expedition 339 Scientists Team
Onset, evolution and effects of the Mediterranean Outflow: Preliminary Results of IODP Expedition 339 in the Gulf of Cadiz

Z108 EGU2012-6207
M. Schreck, J. Matthiessen, and R. Stein
The Neogene of the Iceland Sea - Paleoenvironmental reconstructions using marine palynomorphs

Z109 EGU2012-6718
K. Katsuki, B.K. Khim, and B. Song
Latest Miocene and Pliocene paleoenvironmental condition in the Southern Ocean based on silicoflagellate assemblage

Z110 EGU2012-12680
J.J. Gonzalez, C Escutia, F.J. Espejo, T Williams, R.M. McKay, S. Passhier, T. van de Flierdt, L. Tauxe, H. Brinkhuis and the Carlota Escutia Team
Records of glacial-interglacial variability during the Pliocene: IODP Expedition 318 - Site U1361

Z111 EGU2012-12607
M. Kobayashi, M. Iwai and the Expedition 318 Scientists Team
Upper Miocene-Pliocene diatoms in the Southern Ocean: IODP Site U1361 on the continental rise off Wilkes Land, Antarctica

Z112 EGU2012-14473
G.B. Dunbar
Mg/Casea surface temperatures during the Marine Isotope Stage 31 collapse of the Ross Ice Shelf

Z113 EGU2012-7650
B.D.A. Naafs, J Hefter, P Ferretti, R Stein, and G.H. Haug
Sea surface temperatures did not control the first occurrence of Hudson Strait Heinrich Events during MIS 16

Z114 EGU2012-9427
C Ohlendorf, C Gebhardt, and the PASADO Science team
A step towards the identification of eolian input in the 51 ka BP sediment record of Laguna Potrok Aike in southeastern Patagonia

Z115 EGU2012-12857
A. Fehr, R. Pechnig, J. Inwood, J. Lofi, F.P. Bosch, and C. Clauser
Thermophysical properties derived from lab measurements and downhole logging at New Jersey Shallow Shelf (IODP Expedition 313)

Z116 EGU2012-9581
Petrographical and geochemical characteristics of the sheeted dyke-gabbro transition zone in ODP/IODP Hole 1256D
Z117  EGU2012-6976
N. T. Arndt and the Barberton Drilling Team
Peering into the Cradle of Life: Scientific Drilling in the Barberton Greenstone Belt, South Africa

Z118  EGU2012-3228
J. Trela, E.C. Ferré, J. Deans, R. Anma, A. Morris, and Expedition 335 Scientific Party
Shape-preferred orientation (SPO) of oceanic gabbros at IODP Hole 1256D: Implications for magmatic processes

Z119  EGU2012-12550
A. Rüggeberg, A. Foubert, A. Vertino, D. Van Rooij, S. Spezzaferri, J.-P. Henriet, W.-C. Dullo, and COCARDE Science Community
COCARDE: new view on old mounds - an international network of carbonate mound research

Z120  EGU2012-9416
C. Gebhardt, L. Naudts, L. De Mol, and M. De Batist
Seismic investigation of Lake Issyk-Kul, Kyrgyzstan

Z121  EGU2012-7644
H. Lorenz and C. Juhlın
The Swedish Deep Drilling Program - projects and status 2012

Z122  EGU2012-6463
Simple, Affordable and Sustainable Borehole Observatories for Complex Monitoring Objectives

Z123  EGU2012-7379
J.-E. Rosberg and H. Lorenz
A new scientific drilling infrastructure in Sweden

Z124  EGU2012-12985
M. Rothfuss, E. Anders, W. H. Müller, T. Rothenwänder, and D. Wunsch
New tools and applications for the retrieval of cores under in situ pressure

Z125  EGU2012-12209
A. Arnaout, R. Fruhwirth, M Winter, B. Esmael, and G. Thonhauser
Model-Based Hookload Monitoring and Prediction at Drilling Rigs using Neural Networks and Forward-Selection Algorithm

Z126  EGU2012-1789
S Tavakoli, S. Poslad, R Fruhwirth, and M. Winter
Using Real-time Event Tracking Sensitivity Analysis to Overcome Sensor Measurement Uncertainties of Geo-Information Management in Drilling Disasters

Z127  EGU2012-9363
B. Jandl, M. Winter, R Fruhwirth, F. Riedel, and H. Zeiner
Rig Side Online Drilling Support System for Prediction and Prevention of Upcoming Crises

Z128  EGU2012-8501
K. Behrends and R. Conze
Science Data Management for a CO2-Sequestration project

CR10.10 – Ice-sheet and climate interactions (co-listed) – Orals
Convener: P. Huybrechts | Co-Conveners: A. Ganopolski, T. Fichefet
Room: 5
Chairperson: Philippe Huybrechts

13:30–13:45  EGU2012-2514
D. Dahl-Jensen
The role of the Greenland ice sheet in future sea level - based on palaeorecords from ice cores and present observations.

13:45–14:00  EGU2012-10049
W. J. van de Berg, M. M. Helsen, R. S. W. van de Wal, M. R. van den Broeke, and J. Oerlemans
Greenland Ice Sheet retreat during the Eemian

14:00–14:15  EGU2012-4426
A. Born and K.H. Nisancioglu
Melting of Northern Greenland during the last interglaciation

14:15–14:30  EGU2012-6978
U. Mikolajewicz, M. Vizcaíno, C. Rodehacke, and F. Ziemen
Anthropogenic climate change and the Greenland ice sheet

14:30–14:45  EGU2012-5482
A. Robinson, M. Perrette, R. Calov, and A. Ganopolski
Irreversible melting of the Greenland Ice Sheet
14:45–15:00  EGU2012-6262
  **P. L. Langen, A. M. Solgaard, and C. S. Hvidberg**
  Self-inhibiting growth of the Greenland Ice Sheet

  Chairperson: Andrey Ganopolski

15:30–15:45  EGU2012-6651
  The Medieval Warm Period-Little Ice Age Relative Sea Level Slowdown in Western Greenland: A response of the Greenland Ice Sheet to a phase shift of the North Atlantic Oscillation?

15:45–16:00  EGU2012-2829
  **J. L. Bamber, E. Behrens, C. Boening, M. van den Broeke, J Lenaerts, J Ettema, and E Rignot**
  Enhanced melting of the Greenland ice sheet and its impact on the Subpolar North Atlantic and AMOC

16:00–16:15  EGU2012-4286
  **M.E. Weber, P.U. Clark, W. Ricken, J.X. Mitrovica, S.W. Hostetler, and G. Kuhn**
  Interhemispheric ice-sheet synchronicity during the Last Glacial Maximum

16:15–16:30  EGU2012-13667
  **R. DeConto, D. Pollard, and D. Kawalewski**
  Antarctic ice sheet response to combined surface and oceanic sub-ice shelf melt during past interglacials and in the future

16:30–16:45  EGU2012-12573
  **J. Alvarez-Solas, M. Montoya, A. J. Robinson, R. Banderas-Carreño, C. Ritz, and A. Ganopolski**
  Northern Hemisphere millennial-scale ice discharges as a response to oceanic forcing simulated with a hybrid ice-sheet/ice-shelf model

16:45–17:00  EGU2012-12551
  **N. Zeng**
  The role of climate-icesheet-carbon interaction in glacial-interglacial cycles

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**GM9.2 – Glacial landforms and palaeoclimatic interpretation (co-listed) – Orals**
Convener: S. Winkler | Co-Conveners: T. Davies, M.P. Kirkbride, L. Iturrizaga

**Room: 21**
Chairperson: Stefan Winkler

13:30–13:45  EGU2012-5435
  **S. Lukas, A. Graf, S. Coray, and C. Schlüchter**
  Genesis, stability and preservation potential of large lateral moraines of Alpine valley glaciers - towards a unifying theory

13:45–14:00  EGU2012-3745
  **N. Andrés and D. Palacios**
  Interpretation of the past glacial landforms from the present processes: the hypothesis of the secondary moraine

14:00–14:15  EGU2012-910
  **L. Kasprzak, M. Ewertowski, I. Szuman, and A.M. Tomczyk**
  Depositional efficiency of the weichselian ice sheet. Central-West Poland.

14:15–14:30  EGU2012-10154
  **B. Mächtle, A.S. Hein, T. Dunai, and B. Eitel**
  Geomorphological evidence of warm-humid and cold-dry glaciations in the dry western Cordillera of the tropical Peruvian Andes

14:30–14:45  EGU2012-6256
  **D. McDougall**
  Glaciation Style, Paraglacial Reworking and the Geomorphological Record: The Challenges of Reconstructing Younger Dryas Glaciers

14:45–15:00  EGU2012-6316
  **G. Roe**
  The Natural Variability of Glaciers

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**GM9.2 – Glacial landforms and palaeoclimatic interpretation (co-listed) – Posters**
Convener: S. Winkler | Co-Conveners: T. Davies, M.P. Kirkbride, L. Iturrizaga

**Hall XL | Display Time 08:00–19:30**
Author in Attendance: 17:30–19:00
Chairperson: Stefan Winkler

XL276  EGU2012-12364
  **P. Fu, J. Harbor, A.P. Stroeven, C. Hättestrand, M.W. Caffee, J. Heyman, and L.P. Zhou**
  Paleo-glaciations of the Shaluli Shan, southeastern Tibetan Plateau
XL296 EGU2012-6451
N. Reznichenko, T.R.H. Davies, J. Shulmeister, and S. Winkler
The rock avalanche sediment in moraines and its implication for palaeoclimate reconstruction

XL297 EGU2012-13653
L. Iturrizaga
Glacial landform assemblages in the catchment area of the upper Quitarasca valley (Cordillera Blanca, Perú)

XL298 EGU2012-6508
I. W. Wolff and N. F. Glasser
The Reconstruction and Climatic Implication of an Independent Palaeo Ice Cap in the Vicinity of the Lago Buenos Aires/Lago Pueyrredón Palaeo Ice Streams, Patagonia.

SSP4.1 – Walking on sunshine - Was human migration affected by past climate changes? (co-listed) – Orals
Room: 41
Chairperson: Viehberg, Schäbitz, Le Tensorer
13:30–13:45 EGU2012-4541
Nonlinear detection of paleoclimate-variability transitions possibly related to human evolution
13:45–14:00 EGU2012-2574
J.S. Compton
Periodic isolation of the southern coastal plain of South Africa and the evolution of modern humans over late Quaternary glacial to interglacial cycles
14:00–14:15 EGU2012-11783
A.W. Kandel, M. Bolus, A.A. Bruch, M.N. Haidle, C. Hertler, and M. Märker
Increasing behavioral flexibility? New archaeological and ecological approaches to understanding the Howieson's Poort in Southern Africa
14:15–14:30 EGU2012-6659
Palaeolithic use of fossil combustible linked to singular environmental conditions: the long term el Kowm record (Syria).
14:30–14:45 EGU2012-5372
Human environment and climate during the Middle Pleistocene in southern Italy (Boiano basin, Molise)
14:45–15:00 EGU2012-388
N. Rudaya, L. Nazarova, D. Papin, and D. Nourgaliev
Middle-Late Holocene environmental history of Kulunda (Southwestern Siberia): vegetation, climate, humans

SSP4.1 – Walking on sunshine - Was human migration affected by past climate changes? (co-listed) – Posters
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Reicherter, Lehmkuhl, Wegmüller
A388 EGU2012-9173
N. Hamon, P. Sepulchre, C. Contoux, J.-J. Jaeger, and G. Ramstein
Middle Miocene Hominoids dispersion and radiation: impact of climate and vegetation changes in Europe
A389 EGU2012-13
A.A. Bruch, C. Sievers, and L. Wadley
Quantification of climate and vegetation from Southern African Middle Stone Age sites - an application using Late Pleistocene plant material from Sibudu, South Africa
A390 EGU2012-7700
Wet feet or walking on sunshine? Reconstruction of wet-dry variations in the source region of modern man: the Chew Bahir project, southern Ethiopia
A391 EGU2012-14329
F. Wegmüller, F.A. Viehberg, and J.-M. Le Tensorer
The Palaeolithic site of Hummal and its potential for paleoclimatic reconstruction
A392 EGU2012-12419
Palaeoenvironmental changes in the Marmara region (Turkey) during late Pleistocene and Holocene. Implication for Neo- and Palaeolithic communities.
A393  EGU2012-8461
K. Panagiotopoulos, A. Aufgebauer, F. Schäbitz, and B. Wagner
Lake Prespa palaeoenvironment since the MIS 5: a continuous record from a mid-altitude site on modern human's way to Europe.

A394  EGU2012-7625
N. Höblig, M.E. Weber, M. Kehl, G.-C. Weniger, R. Juliá, M. Melles, R.-H. Fülöp, H. Vogel, and K. Reichter
60 ka lacustrine record from Lake Banyoles (NE-Spain): Environmental change with respect to human occupation

A395  EGU2012-4029
D. Faust and D. Wolf
Latest Pleistocene and Holocene river dynamics of the Guadalete River (SW-Andalusia)

A396  EGU2012-10280
J. A. Gomes, A. Ramos-Pereira, and J. Trindade
Late Holocene evolution of the River Bensafrim estuary, Lagos (Portugal) - Gearchaeological remarks concerning geomorphological changings

A397  EGU2012-8823
A. Kadereit, C.-J. Kind, and G.A. Wagner
The Weichselian (Würmian) Pleniglacial chronology of the Nussloch loess section/Germany revisited. Implications for the matching of pedosedimentary units with Greenland stadial and interstadial periods.

A398  EGU2012-14430
Environmental transformations and cultural changes: A multidisciplinary case study for the Late Glacial and Final Palaeolithic from Northern Germany

A399  EGU2012-488
T. Swierczynski, S. Lauterbach, P. Dulski, and A. Brauer
Neo lithic Mondssee Culture - Living on lakes and living with floods

A400  EGU2012-8867
B. Mächtle, K. Schittek, M. Forbriger, F. Schäbitz, and B. Eitel
A see-saw of pre-Columbian boom regions in southern Peru, determined by large-scale circulation changes

A401  EGU2012-1738
W.-S. Chen and H.-C. Yang
Shoreline changes of Taiwan since the Last Glacial Maximum

SSS7.5 – Biochar for soil remediation and global warming mitigation (co-listed) – Orals
Room: 3
Chairperson: J. Paz-Ferreiro, G. Gascó, B. Glaser

10:30–10:45  EGU2012-2126
K. Kuzyakov, I. Bogomolova, and B. Glaser
Decomposition and transformation of 14C labeled black carbon in soil

10:45–11:00  EGU2012-4498
J. Paz-Ferreiro, G. Gascó, A. Méndez, N.J. Ostle, and N.P. McNamara
Effects of biochar on greenhouse gas emissions from arable and bioenergy crops

11:00–11:15  EGU2012-241
H.-P. Schmidt
Biochar as carrier for plant nutrients and microorganisms - techniques of agro-activation

11:15–11:30  EGU2012-3776
Y.Y. Fang, B. Singh, B.P. Singh, and E. Krull
Mineralization of biochars in soils of contrasting mineral composition from Australia

11:30–11:45  EGU2012-5141
R. Felber, J. Leifeld, and A. Neftel
Biochar application reduces N2O emission in intensively managed temperate grassland

11:45–12:00  EGU2012-11836
Biochar degradation in different soils

LUNCH BREAK

Chairperson: J. Paz-Ferreiro, A. Merino, P. Pereiro
SSS7.5 – Biochar for soil remediation and global warming mitigation (co-listed) – Posters


Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A.M. Mendez, J. Paz-Ferreiro, A.M. Tarquis

XY613 EGU2012-539
G. Bárcenas-Moreno, E. Escalante, A. Pérez-Bejarano, L.M. Zavala, and A. Jordán
Microbial response to the effect of quantity and quality soil organic matter alteration after laboratory heating

XY614 EGU2012-612
A. Zhang, Q. Hussian, L. Li, J. Zheng, G. Pan, X. Zhang, and R. Bian
Biochar amendment decreased global warming potential of a Cd/Pb contaminated paddy ecosystem from the Tai Lake plain, China

XY615 EGU2012-1274
The role of ash on soil water repellency changes in a Mediterranean area affected by a forest fire: a field conditions study
Sustainable land-use by regional energy and material flow management using “Terra-Preta-Technology”

P. Pereira, A Cerdà, X Ubeda, and J Mataix-Solera

B. Omil, M.T. Fonturbel, J.A. Vega, M.A. Balboa, and A. Merino
Soil organic matter dynamics and microbial activity in a cropland and soil treated with wood ash containing charcoal

I. Campos, N. Abrantes, P. Pereira, C. Vale, A. Ferreira, and J.J. Keizer
Characterization of polycyclic aromatic hydrocarbons and metals in ashes released from a forest fire

J.A. Alburquerque, J.M. Calero, R. Villar, V. Barrón, J. Torrent, M.C. del Campillo, and A. Gallardo
Effects of biochar produced from different feedstocks on soil properties and sunflower growth

P. Pereira and X. Ubeda
Modelling ash extractable Total Phosphorous and Total Sulphur distribution after a forest fire

K. Rasmussen, A. Niemi, F. Fagerlund, J. Carrera, and Y. Tsang
Identification of scale effects in dissolution trapping from the response of a push-pull experiment

E. Agrafioti, G. Bouras, D. Kalderis, and E. Diamadopoulos
Pyrolysis of Greek sewage sludge to produce biochars for soil amendments

S.A. McCormack, A.J. Vanbergen, R.D. Bardgett, D.W. Hopkins, and N. Ostle
Biochar and biological carbon cycling in temperate soils

G. Ojeda, X. Domene, S. Mattana, J.P. Sousa, O. Ortiz, P. Andres, and J.M. Alcañiz
Soil biochar amendments: type and dose effects

B. Beckingham, J.L. Gomez-Eyles, S. Kwon, G. Riedel, C. Gilmour, and U. Ghosh
Sorption of priority pollutants to biochars and activated carbons for application to soil and sediment remediation

Effects of aqueous soil-biochar extracts on representative aquatic organisms: a first evaluation

G. Gascó, J. Paz-Ferreiro, F. Araujo, F. Guerrero, and A. Méndez
Study of heavy metal bioavailability in a soil contaminated by Ni+2 after application of biochar prepared from olive mill pomace

X. Liu, G.X Pan, L.Q. Li, and T. Zhou
Influence of biochar amendment on greenhouse gases emission and rice production in paddy field, China

L. Cui, G. Pan, L. Li, and J. Yan
Effect of Biochar Amendment on Bioavailability and the Uptake of Cd by Crops in a Contaminated Paddy

M. Alhassan and J.M. Andresen
Effect of bone on the pyrolysis product distribution and composition in a fixed bed reactor

C. Niggl and H.-P. Schmidt
Biochar in viticulture

G. Gascó, J. Paz-Ferreiro, F. Araujo, F. Guerrero, and A. Méndez
Remediation of a contaminated soil by Ni+2 after application of biochar prepared from de-inking paper sludge: Influence on enzyme activities

I. Hilber, F. Blum, S. Hale, G. Cornelissen, HP. Schmidt, and T.D. Bucheli
Total and bioavailable PAH concentrations in biochar - a future soil improver

I. Bargmann, J.M. Grefe, and M. Kücke
Impact of hydrochar application on soil nutrient dynamics and plant availability
Effect of biochar on the fate of volatile petroleum hydrocarbons and soil microbiology in an aerobic sandy soil

Biochar application to temperate soils - effects on soil fertility and crop yield

Effects of Amendment of Biochar and Pyroligneous Solution from wheat straw pyrolysis on Yield and soil and crop salinity in a Salt stressed cropland from Central China Great Plain

Fate of Organic Micropollutants during Hydrothermal Carbonization
Wednesday, 25 April

**CL2.8/AS1.13/ST6.5 – Impact of solar and geomagnetic variabilities on the Earth’s lower, middle and upper atmospheres (co-organized) – Orals**

Convener: F.-J. Lübken | Co-Conveners: J. Lilensten, T. Dudok de Wit, M. Kaufmann, P. Preusse

Room: 15

Chairperson: Jean Lilensten

10:30–11:00 EGU2012-7630

**N.A. Krivova, W. Ball, Y.C. Unruh, and S.K. Solanki**  
Solar Spectral Irradiance Variations

11:00–11:15 EGU2012-1520

**T. Woods**  
Solar Irradiance Variability: Comparisons of Observations over Solar Cycles 21-24

11:15–11:30 EGU2012-1920

**S. C. Solomon and L. Qian**  
The Interaction of Solar and Geomagnetic Activity with Climate Change in the Thermosphere

11:30–11:45 EGU2012-2344

**M. Fedrizzi and S.L. Bruinsma**  
Modeling Space Weather in the thermosphere

11:45–12:00 EGU2012-8702

**M. Rapp, R. Lattek, P. Hoffmann, M. Zecha, G. Stober, T. Renkwitz, and W. Singer**  
Mid-mesospheric radar echoes: recent observations with a novel MST-radar and implications for the scattering mechanism

**LUNCH BREAK**

Chairperson: Jean Lilensten

13:30–13:45 EGU2012-8267

**A. Seppälä**  
Particle precipitation impacts on the atmosphere

13:45–14:15 EGU2012-7098

Precipitating Radiation Belt Electrons and Mesospheric Odd Hydrogen

14:15–14:30 EGU2012-7368

**M. Sinnhuber, N. Wieters, and H. Winkler**  
Energetic particle precipitation into the middle atmosphere: measurements and model predictions

14:30–15:00 EGU2012-2828

**F.-J. Lübken**  
Highlights of the CAWSES programme in Germany

Chairperson: Franz-Josef Luebken

15:30–16:00 EGU2012-11335

On the impact of short-term solar variability on the polar summer mesopause and noctilucent clouds

16:00–16:15 EGU2012-2860

Solar Effects on Chemistry and Climate Including Ocean Interactions

16:15–16:30 EGU2012-12600

**J.G. Anet, E. Rozanov, and T. Peter**  
FUPSOL: Modelling the Future and Past Solar Influence on Earth Climate

16:30–16:45 EGU2012-10845

**A. Kubin, J. Abalichin, B. Ayarzagüena, U. Langematz, and P. Jöckel**  
A model study on the downward propagation of the 11-year solar signal in a warming climate

16:45–17:00 EGU2012-8757

**S. Ineson, A. A. Scaife, J. R. Knight, J. C. Manners, N. J. Dunstone, L. J. Gray, and J. D. Haigh**  
Solar forcing of winter climate variability in the northern hemisphere

**CL2.8/AS1.13/ST6.5 – Impact of solar and geomagnetic variabilities on the Earth’s lower, middle and upper atmospheres (co-organized) – Orals**
atmospheres (co-organized) – Posters
Convener: F.-J. Lübken | Co-Conveners: J. Lilensten, T. Dudok de Wit, M. Kaufmann, P. Preusse
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Franz-Josef Luebken

Z1 EGU2012-2905
F.-J. Lübken and U. Berger
Temperature and ice layer trends in the summer middle atmosphere

Z2 EGU2012-3030
H. Lühr and K. Häusler
Dependence of the thermospheric density on solar and magnetic activity

Z3 EGU2012-3781
P. Stauning
Solar activity - climate relations: A critical review.

Z4 EGU2012-3859
M. Smith and A. J. McDonald
Using finite-time Lyapunov exponents to investigate the effect of stratospheric sudden warmings on the polar vortices

Z5 EGU2012-3873
A. J. McDonald
Inter-hemispheric variations in stratopause structure

Z6 EGU2012-4267
L. Sfica and M. Voiculescu
Interplay between effects of solar forcing and internal climatic factors on tropospheric and stratospheric temperature anomalies in the Northern Hemisphere

Z7 EGU2012-4960
J. Hildebrand, G. Baumgarten, J. Fiedler, and F.-J. Lübken
Simultaneous wind and temperature measurements with a twin Doppler lidar in Northern Norway

Z8 EGU2012-5303
M. Kaufmann, H. Schmidt, C. Lehmann, M. Ern, and M. Riese
The evolution of atomic hydrogen between 2002 and 2008

Z9 EGU2012-5427
J. Höffner, R.J. Morris, B. Kaifler, T. Viehl, and F.-J. Lübken
First results of combined Fe-lidar/Radar measurements at Davis, 69° S.

Z10 EGU2012-5445
D.A. Newnham, P.J. Espy, M.A. Clilverd, C.J. Rodger, A. Seppälä, D.J. Maxfield, P. Hartogh, K. Holmén, and R.B. Horne
Observations of nitric oxide in the Antarctic middle atmosphere during recurrent geomagnetic storms

Z11 EGU2012-5513
J. O'Regan, J-P. Muller, and S. Matthews
Towards understanding the nature of any relationship between Solar Activity and Cosmic Rays with thunderstorm activity and lightning discharge

Z12 EGU2012-5726
Science results from the Sova-Picard Total Solar Irradiance instrument

Z13 EGU2012-6059
M. Kopp, M. Gerding, J. Höffner, and F.-J. Lübken
Tidal signatures in temperature data derived by lidars in the mid-latitude middle atmosphere

Z14 EGU2012-6453
C. Delaney, S. G. Jennings, and A. Ó Rodaigh
Polar Mesospheric Cloud Occurrence from Geostationary Satellite Observations in the Northern Hemisphere for the Period 2001 to 2005

Z15 EGU2012-6797
V. R. Narukull, T. Tsuda, D.M. Riggin, and S. Gurubaran
Long-term variability of mean winds in the mesosphere and lower thermosphere within ±22°

Z16 EGU2012-6852
J. Grahn and A. J. McDonald
Testing metrics of mixing using a chaotic advection model

Z17 EGU2012-6998
L. Hejklik
Spectral analysis of luni-solar signal in daily meteorological data at Prague-Klementinum 1775 to 2011
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<td><strong>P. Francia</strong> and M. Vellante</td>
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<td>Long term changes in the plasmaspheric density through measurements of the ULF resonance frequency at low latitude</td>
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<td><strong>S. Versick</strong>, B. Funke, A. Gardini, G. Stiller, T. von Clarmann, and O. Kirner</td>
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<td>Comparison of EMAC model results to satellite observations in the winter 2008/09 within the HEPPA-II intercomparison</td>
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<td>Different forcings and their effect on temperature variations in Portugal: volcanic eruptions, anthropogenic aerosols, atmospheric circulation and solar activity</td>
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<td><strong>V. Dobrica</strong>, C. Suteanu, and C. Demetrescu</td>
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<td>Solar/geomagnetic signature in climate parameters. A comparative analysis of temperature evolution in Atlantic Canada and Central-Eastern Europe</td>
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<td>Solar Spectral Irradiance as observed by LYRA/PROBA2 and PREMOS/PICARD</td>
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<td><strong>S. Kowalewski</strong>, M. Palm, and J. Notholt</td>
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<td>The Mesospheric OH* layer above Spitsbergen: Investigation of polar mesospheric dynamics and temperature trends by means of ground based OH* airglow measurements and model studies</td>
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<td><strong>M. Palus</strong> and D. Novotna</td>
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<td>Phase coherence between solar/geomagnetic activity and climate variability from the stratosphere to the troposphere and the North Atlantic Oscillation</td>
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<tr>
<td><strong>S. Kalisch</strong>, P. Preusse, M. Ern, S. D. Eckermann, and M. Riese</td>
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<td>Gravity wave - planetary wave interaction simulated by gravity wave ray-tracing</td>
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<tr>
<td>Effect of Space Weather on Ionospheric Total Electron Content Variation during the 23rd Solar Cycle.</td>
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<td><strong>L.E.A. Vieira</strong>, T. Dudok de Wit, and M. Kretzschmar</td>
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<td>Modeling the evolution of the total and solar irradiance based on HMI/SDO magnetograms and solar surface magnetic flux transport models</td>
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<td><strong>T. Asikainen</strong>, V. Maliniemi, and K. Mursula</td>
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<td>The corrected NOAA/POES energetic particle database for space climate studies</td>
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<td><strong>H. Lu</strong>, C. Franzke, M. Jarvis, and O. Martius</td>
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<td>Possible Effect of Solar Wind on Rossby Wave Propagation and Breaking</td>
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<td><strong>V. Maliniemi</strong>, T. Asikainen, and K. Mursula</td>
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<td>Correlation between surface temperature variations and energetic electron precipitation in northern hemisphere winter during the last three solar cycles</td>
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<td><strong>O. K. Kvissel</strong>, Y. J. Orsolini, and F. Stordal</td>
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<td>Formation of stratospheric nitric acid by a hydrated ion cluster reaction: chemical and dynamical effects of energetic particle precipitation on the middle atmosphere</td>
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<td>The thermospheric NOx intrusion in Arctic winter 2008/2009</td>
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<td>CO-based examination of the Arctic middle atmosphere dynamics in the Specified Dynamics version of the Whole Atmosphere Community Climate Model (SD-WACCM) using ground-based CO observations from Kiruna</td>
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<td><strong>I. Cnossen</strong> and <strong>H. Lu</strong></td>
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<td>The Vertical Connection of the QBO-Modulated 11-year Solar Cycle Signature during NH Early Winter</td>
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Z36  EGU2012-11861
B. Strelnikov, A. Szewczyk, and M. Rapp
In-situ measurements of small-scale structures in neutrals and plasma species during ECOMA-2010

Z37  EGU2012-12709
T. Demissie, M. Daae, N. Kleinknecht, and P. Espy
Planetary waves during a moderate geomagnetic storm

Z38  EGU2012-2496
S. Misios and H. Schmidt
Model assessment of the response of the tropical lower stratosphere to the 11-yr solar cycle

Z39  EGU2012-7239
G. Chiordo, D.R. Marsh, N. Calvo, and K. Matthes
The impact of volcanic events and ENSO on the detection of the solar cycle signal in the tropical lower stratosphere

Z40  EGU2012-3330
K. Rypdal
Global temperature response to radiative forcing: solar cycle versus volcanic eruptions

Z41  EGU2012-7456
M. Ern, P. Preusse, S. Kalisch, M. Kaufmann, and M. Riese
Global distribution of quasi two-day waves in the mesosphere and possible effects of gravity waves

CL3.1 – Extreme Events and Impacts – Orals
Convener: M. Beniston | Co-Conveners: S. Goyette, P. M. Della-Marta
Room: 13
Chairperson: Stephane GOYETTE

08:30–08:45  EGU2012-13967
S Rahmstorf, D. Coumou, and A. Robinson
A Fivefold Increase in Monthly Heat Records

08:45–09:00  EGU2012-4373
S. Parey
The role of variability in the change of temperature extremes

09:00–09:15  EGU2012-6504
H. de Vries, R.J. Haarsma, and W. Hazeleger
On Future European Cold Spells

09:15–09:30  EGU2012-5992
J.M. Loriaux, G. Lenderink, A.P. Siebesma, and S.R. de Roode
Understanding the unexpectedly high increase of observed (sub-)hourly precipitation extremes with temperature

09:30–09:45  EGU2012-11917
T. Kruschke, P. Lorenz, R. Osinski, M. Voigt, G.C. Leckebusch, and U. Ulbrich
Extreme Wind Gusts within European Winter Storms estimated from Dynamical and Statistical Downscaling

09:45–10:00  EGU2012-1356
A.M. Monteiro, C.V. Carvalho, SV Velho, and CS Sousa
Indexes to anticipate negative impacts of heat waves in urban Mediterranean environments

10:00–10:15  EGU2012-9288
A. Schindler, D. Maraun, and J. Luterbacher
Changes in the annual cycle of heavy precipitation events across the UK in future projections

COFFEE BREAK

Chairperson: Stephane GOYETTE

10:30–10:45  EGU2012-2794
F. Giorgi, E. Coppola, E.I. Soon, N. Diffenbaugh, X.J. Gao, L. Mariotti, and Y. Shi
Higher hydroclimatic intensity with global warming

10:45–11:00  EGU2012-9684
C. Radermacher, L. Tomassini, and D. Jacob
Validation of heavy precipitation and thermodynamic relations in the regional climate model REMO

11:00–11:15  EGU2012-563
R.M.S. Yu, T. Osborn, D. Conway, R. Warren, and R. Hankin
European drought under climate change and an assessment of the uncertainties in projections
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**CL3.1 – Extreme Events and Impacts – Posters**

*Convener: M. Beniston | Co-Conveners: S. Goyette, P. M. Della-Marta*

**Hall Z | Display Time 08:00–19:30**

**Author in Attendance: 17:30–19:00**

**Chairperson: NN**

| Z42 | EGU2012-79 | Y. Kuleshov, D. Jones, and C. M. Spillman | Climate extremes in the Pacific: improving seasonal prediction of tropical cyclones and extreme ocean temperatures to improve resilience |
| Z43 | EGU2012-82 | S. Choy, C. Wang, K. Zhang, and Y. Kuleshov | Detection of severe weather events using new remote sensing methods |
| Z44 | EGU2012-756 | G. Zittis, P. Hadjinicolaou, and J. Lelieveld | Role of soil moisture in the amplification of climate warming in the Eastern Mediterranean and Middle East |
| Z45 | EGU2012-835 | E. B. Bartha, R. Pongracz, and J. Bartholy | Analysis of heat wave occurrences in the Carpathian basin using regional climate model simulations |
| Z46 | EGU2012-962 | M. S. Reboita, R. P. da Rocha, and C. G. Dias | Extreme Events in Present Climate Simulated by RegCM3 Downscaling over the South America |
| Z47 | EGU2012-1754 | H. Davidkovová, J. Kysely, E. Plavcová, A. Urban, B. Kriz, and J. Kync | Impacts of temperature extremes on cardiovascular morbidity and mortality in the Czech Republic |
| Z48 | EGU2012-2007 | I. Tosic and M. Unkasevic | Extreme temperature indices over Serbia |
| Z49 | EGU2012-2295 | M. Unkasevic and I. Tosic | Analysis of extreme dry and wet periods in Belgrade using the Standardized Precipitation Index |
| Z50 | EGU2012-3037 | A.A. Pasqua and O. Petrucci | The impact of two damaging hydrogeological events in Calabria (southern Italy) |
| Z51 | EGU2012-3198 | S. Kawazoe and W. Gutowski | Physical Behavior of Precipitation Extremes in CMIP5 GCMs and Observations |
| Z52 | EGU2012-3848 | Y Xu | Projected changes of precipitation extremes over China by CMIP5 |
| Z53 | EGU2012-4032 | K. Friedrich | Knowledge Data Base of extreme weather events in Europe |
| Z54 | EGU2012-4405 | F. Cioffi, E. Rus, C.K. Krishnamurthy, C. Karamperidou, and U. Lall | Space-time structure of extreme precipitation in Europe over the last century: a climate perspective |
| Z56 | EGU2012-5481 | N. Groll and B. Hünicke | Baltic Sea wave conditions in a changing climate |
| Z57 | EGU2012-6311 | A. Valerianova and E. Holtanova | Winter minimum and maximum air temperature in the Czech Republic |
| Z58 | EGU2012-6714 | O.-Y. Kim | Statistical assessment of changes in daily precipitation extremes over the Asia-Pacific Region |
Influence of the preceding winter Northern Hemisphere annular mode on the spring extreme low temperature events in the north of eastern China

Projections of Extreme Weather in a Changing Climate: Balancing Confidence and Uncertainty

A Kernel based approach for the analysis of extreme precipitation events

The changes of flash flood hazard in Hungary due to climate change

Regional and sub-regional climate simulations over Sub-Saharan African regions and the influence on the heat waves hazard

Understanding and attributing the Euro-Russian summer blocking signatures

A Kernel based approach for the analysis of extreme precipitation events

Statistical Downscaling of Gusts During Extreme European Winter Storms Using Radial-Basis-Function Networks

Regional tendencies of extreme wind characteristics from measured, reanalysis and simulated time series over Hungary

Scaling and trends of hourly precipitation extremes in a warming climate

Simulations of precipitation in a future climate scenario at various horizontal resolutions. Part I - Scandinavia

Simulations of precipitation in a future climate scenario at various horizontal resolutions. Part II - Iceland

Seasonal trends in precipitation and surface air temperature extremes in mainland Portugal, 1941-2007

Winds over Iceland in current and future climate

Climatology of cut-off low systems in the Greater European Alpine region

A perturbed land surface parameter experiment with the ECMWF seasonal forecasting system

Impact of snow initialization on sub-seasonal forecasts
14:00–14:15 EGU2012-6007
S C Chapman, D A Stainforth, and N W Watkins
Evaluating the sensitivity of local temperature distributions to global climate change

14:15–14:30 EGU2012-8445
T. D. Hewson
The new Met Office strategy for seasonal forecasts

14:30–14:45 EGU2012-8742
J. Baehr, M. Botzelt, K. Froehlich, L. Kornblueh, S. Tietsche, and W. Mueller
Towards a Seasonal Prediction System using MPI-ESM

14:45–15:00 EGU2012-10098
C. Buontempo and C. Hewitt
Seasonal and decadal predictions toward climate services.
Chairperson: Andreas Fischer

15:30–15:45 EGU2012-9729
E B Suckling and L A Smith
Do quantitative decadal forecasts from GCMs provide decision relevant skill?

15:45–16:00 EGU2012-11176
J.-F. Guéron and N. Laanaia
Decadal forecasts with CNRM-CM5. Sensitivity to the inclusion of the stratosphere

16:00–16:15 EGU2012-8473
M. Dubrovsky and M. Trnka
Probabilistic climate and agroclimatic scenarios for Europe (PRASCE project results)

16:15–16:30 EGU2012-1873
C. Kerkhoff, H. R. Künsch, and C. Schär
Relations between RCMs and GCMs in the ENSEMBLES simulations

16:30–16:45 EGU2012-6073
P.A.G. Watson, D.J. Karoly, M.R. Allen, N. Faull, and D.S. Lee
Quantifying uncertainty in the dynamical response to ozone recovery

16:45–17:00 EGU2012-3264
A. Sokolov, J. Scott, E. Monier, C.A. Schlosser, D. Kicklighter, and S. Dutkiewicz
Examination of Climate Response to Historical and Projected Forcings Over Years 850-4000 with the MIT IGSM.

CL3.3/NP5.4 – Centennial, decadal, seasonal and monthly climate predictions (co-organized) – Posters
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

Z74 EGU2012-2969
A. Maidens, A. Arribas, A. Scaife, C. MacLachlan, K.A. Peterson, and J. Knight
What explains the successful Met Office seasonal forecast of winter 10/11

Z75 EGU2012-2596
K. Fan
A prediction model for the Atlantic Basin tropical storm frequency using a year-to-year increment approach

Z76 EGU2012-3128
J. Bustamante, S. C. Chou, and G. Sueiro
10- Year Eta Model Seasonal Forecast Climatology over South America

Z77 EGU2012-1265
C. Jiang, G. Lagerloef, and S. Springer
Relationship between PDO and basin-scale ocean circulation variations

Z78 EGU2012-10302
J.M. Eden, M. Widmann, S. Wild, G.R. Evans, and J.G. Hughes
Pacific SST influence on spring precipitation in Addis Ababa, Ethiopia

Z79 EGU2012-78
Y. Kuleshov, D. Jones, H. Hendon, A. Charles, A. Cottrill, E-P. Lim, S. Langford, R. de Wit, and K. Shelton
Enhancing seasonal climate prediction capacity for the Pacific countries

Z80 EGU2012-2990
A. Maidens, A. Arribas, K.A. Peterson, C. MacLachlan, M. Vellinga, M. Gordon, A. Williams, and D. Fereday
Upgrade to GloSea4, the Met Office seasonal forecasting system: Improved resolution and assimilated sea-ice.
Z81  EGU2012-2892
Monthly forecasting of agricultural pests in Switzerland

Z82  EGU2012-10664
L A Smith and D A Stainforth
Putting Weather back into the Definition of Climate

Z83  EGU2012-11444
H. Du, F. Niehorster, and L.A. Smith
Insightful Measures of Predictive Skill in Seasonal Forecasts

Z84  EGU2012-10983
T. Maynard, E B Suckling, and L A Smith
Skill Scores for Probabilistic Climate and Weather Prediction

Z85  EGU2012-7718
R. Gangsto, A. P. Weigel, C. Appenzeller, A. Fischer, and M. A. Liniger
Evaluating decadal predictions - some considerations on bias correction and cross-validation

Z86  EGU2012-8991
S. M.W. Higgins, H.L. Du, and L.A. Smith
Constraints on Rational Model Weighting, Blending and Selecting when Constructing Probability Forecasts given Multiple Models

Z87  EGU2012-3089
The MPI-M CMIP5 Decadal Prediction Experiments

Z88  EGU2012-7664
The VeCAP project: Verification, Calibration and Assessment of Predictability of medium-range climate predictions using satellite data

Z89  EGU2012-9615
J. Servonnat, J. Mignot, E. Guilyardi, D. Swingedouw, and S. Labetoule
Testing surface initialisation strategies for decadal projections in a perfect model framework

Z90  EGU2012-1097
B Wouters, W Hazeleger, GJ van Oldenborgh, and S Drijfhout
Multimodel Decadal Predictability of the Subpolar Gyre

Z91  EGU2012-2611
V. Zunz, H. Goosse, J. Jungclaus, and S. Dubinkina
Evaluating the Decadal Prediction Skill of the Sea Ice Concentration in the Southern Ocean

Z92  EGU2012-11958
L.-P. Caron, C.G. Jones, F.J. Doblas-Reyes, and M. Caian
Multi-year forecast of Atlantic tropical cyclone activity using EC-Earth

Z93  EGU2012-107
G. Wang
A novel approach in predicting non-stationary time series by combining external forces

Z95  EGU2012-8525
T. Toninozzo and S.J. Woolnough
CMIP5 model errors in the tropical Atlantic

Z96  EGU2012-9497
A Lopez, E Suckling, and L.A. Smith
Pattern scaled climate change scenarios: are these useful for adaptation?

Z97  EGU2012-7797
A. Fischer, A. P. Weigel, C. Buser, R. Knutti, C. Schär, H. R. Künsch, M. A. Liniger, and C. Appenzeller
Climate Change Projections for Switzerland based on a Bayesian Multi-Model Approach

Z98  EGU2012-7130
J. D. Annan, J. C. Hargreaves, and K. Tachiiri
A common fallacy in climate model evaluation

Z99  EGU2012-11000
Assessment and Selection of GCM Perturbed Physics Ensemble Members Using Observed Top-of-Atmosphere Fluxes

Z100  EGU2012-6865
K. Tachiiri, J.C. Hargreaves, J.D. Annan, C. Huntingford, and M. Kawamiya
Allowable carbon emissions for a medium mitigation scenario

Z101  EGU2012-4193
T. Simon, Ch. Ohlwein, A. Hense, and C. Simmer
Probabilistic Quantification of Heavy Future Rainfall Events via Statistical Downscaling for the Poyang Catchment in China
Z102  EGU2012-1496
H. Reddad, M. Bakhat, and B. Damnati
Climate change and precipitation evolution in Ifran region (Middle Atlas of Morocco).

Z103  EGU2012-7362
E. Bergin, W. Buytaert, C. Onof, and H. Wheater
Downscaling of rainfall in Peru using Generalised Linear Models

Z104  EGU2012-12832
A.J. Ansorge, R.W. Arritt and the The MRED Team
Precipitation intensity in an ensemble of downscaled seasonal forecasts

Z105  EGU2012-4780
J. Hnilica
Statistical correction of daily precipitation data from the climate models

CL4.3 – Mediterranean Climate: from past to future – Orals
Convener: P. Lionello | Co-Conveners: C.M. Goodess, F. Abrantes, M. Tsimplis
Room: 16
Chairperson: C.Goodess

08:30–08:45  EGU2012-6637
The MedCLIVAR program and the climate of the Mediterranean region

08:45–09:00  Young scientist poster presentations

09:00–09:15  EGU2012-9847
M Rogerson, EJ Rohling, GR Bigg, and J Ramirez
Why does the Mediterranean Outflow vary through time?

09:15–09:30  EGU2012-8770
S. Alessio, C. Taricco, G. Vivaldo, and M. Ghil
Modern decrease of δ18O in Mediterranean sediments over the last 150 y: anthropogenic forcing and natural variability

09:30–09:45  EGU2012-13625
J.-P. Savy, K.M. Yao, F. Touratier, and C Goyet
Temporal evolution of the anthropogenic CO2 and acidification of the northwestern Mediterranean Sea, from the mid-1990s to the mid-2000s

09:45–10:00  EGU2012-2657
J. Llasses, G. Jordà, and D. Gomis
Optimal spatio-temporal design of an hydrographic sampling aimed to monitor climate change in the Mediterranean Sea

COFFEE BREAK

Chairperson: I.Bladé

10:30–10:45  EGU2012-1673
J. Romanski, A. Romanou, M. Bauer, and G. Tselioudis
Atmospheric Forcing of the Eastern Mediterranean Transient by Midlatitude Cyclones

10:45–11:00  EGU2012-10946
M. Gaetani and M. Pasqui
A synoptic characterization of the Saharan dust transport in the Mediterranean basin

11:00–11:15  EGU2012-4573
K. Schepanski and P. Knippertz
Soudano-Saharan Depressions and their Importance for Precipitation and Dust - a new Perspective on a classical synoptic Concept

11:15–11:30  EGU2012-3956
P. Nabat, F. Solmon, S. Somot, and M. Mallet
Implementation of a new emitted dust size distribution in a RCM over the Mediterranean region: application to the impact of aerosols on the Mediterranean climate

11:30–11:45  EGU2012-8974
A. Polonsky and M. Bardin
Variability of Mediterranean cyclonic activity associated with the NAO and AMO
11:45–12:00 EGU2012-5932
S. Josey
To What Extent Do Atmospheric Modes Of Variability Determine Mediterranean Sea Surface Heat Exchange?

LUNCH BREAK

Chairperson: P. Lionello

13:30–13:45 EGU2012-11846
I. Bladé, B. Liebmann, D. Fortuny, and G.-J. van Oldenborgh
The summer North Atlantic Oscillation (SNAO) in CMIP3 models and related uncertainties in precipitation projections in the Euro-Mediterranean region

13:45–14:00 EGU2012-4034
E. Hertig, J. Jacobit, A. Paxian, G. Vogt, S. Seubert, and H. Paeth
Statistical assessments of extreme precipitation and dry periods in the Mediterranean area until the end of the 21st century

14:00–14:15 EGU2012-13623
J. A. Åfzel and the The Weatherathome.net Team
Weatherathome.net: useful simulations for the Mediterranean region

14:15–14:30 EGU2012-194
A.-L. Lereboullet, G. Beltrando, and D.K. Bardsley
Climate change and viticulture in Mediterranean climates: the complex response of socio-ecosystems. A comparative case study from France and Australia (1955-2040)

14:30–14:45 EGU2012-1836
A.G. Koutroulis, I.K. Tsanis, and D. Jacob
Projections of water resources availability in Crete for the 21st century under the global change perspective

14:45–15:00 EGU2012-10819
S. Somot, F. Sevault, M. Déqué, M. Herrmann, C. Dubois, R. Aznar, E. Padorno, E. Alvarez-Fanjul, G. Jordà, M. Marcos, and D. Gomis
Regional ocean climate change scenarios for the Mediterranean Sea: assessing the uncertainties along the 21st century.

15:00–15:15 EGU2012-12375
C. Dubois, S. Somot, S. Calmanti, A. Carillo, M. Déqué, A. Dell’Aquila, A. Elizalde, S. Gualdi, D. Jacob, B. L’Hévéder, L. Li, P. Oddo, G. Sannino, E. Scoccimarro, and F. Sevault
Future projections of the surface heat and water budgets of the Mediterranean Sea in an ensemble of coupled atmosphere-ocean regional climate models.

CL4.3 – Mediterranean Climate: from past to future – Posters
Convener: P. Lionello | Co-Conveners: C.M. Goodess, F. Abrantes, M. Tsimplis
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: P. Lionello

Z106 EGU2012-9097
B. Wilhelm, F. Arnaud, P. Sabatier, C. Crouzet, E. Brisset, F. Guiter, J.L. Reyss, E. Chaumillon, K. Tachikawa, E. Bard, and J.J. Delannoy
1.4 kyrs of flash flood events in the Southern European Alps: implications for extreme precipitation patterns and forcing over the north-western Mediterranean area

Z107 EGU2012-13012
L. Vidal, A. Pothin, M. Revel, K. Tachikawa, M. García, C. Sonzogni, and E. Bard
Climate Variability in the Levant basin during the last deglaciation

Z108 EGU2012-12500
R. Zech, M. Zech, S. Markovic, and Y. Huang
Humid glacial, arid interglacials? Results from a multiproxy study of the loess-paleosol sequence Crvenka, Serbia

Z109 EGU2012-234
Constraints on Mg/Ca-paleothermometry in the western Mediterranean Sea

Z110 EGU2012-4161
A. Stadnitskaia, V. Liebetrout, A. Eisenhauer, and J.S. Sinninghe Damsté
Past methane seepage and linked deep-water anoxia are logged in methane-derived carbonates

Pollen-inferred quantitative reconstruction of the Holocene climate in the central Mediterranean area (Italy)

G. Jordà, J. Llasses, and D. Gomis

Can we trust Mediterranean hydrographic data products (MEDAR, EN3, Ishii) for climate studies?

M. Gómez, L. Gimeno, R. Nieto, A. Drumond, and L. Prieto

Variability of the moisture sources around the Mediterranean Basin during 1980-2000

C.M. Goodess, M.D. Agnew, D. Hemming, C. Giannakopoulos and the CIRCE RL11 Team

Integrated assessment in the Mediterranean: the CIRCE case studies

JD Ruiz Sinoga, JF Martinez Murillo, MA Gabarron Galeote, and JM Senciales Gonzalez

Analysis of dry periods using the DDSLR index in the Mediterranean southern Spain

G. Jordà, M. Marcos, M. Gómez, and D. Gomis

Wind wave climate in the Western Mediterranean under climate change scenarios

A. Martinez-Asensio, M. Marcos, G. Jordà, D. Gomis, and M. Gómez

Calibration of a wind wave hindcast (1958-2008) in the Western Mediterranean using buoy data.

M. Tanarhte, P. Hadjinicolaou, and J. Lelieveld

Intercomparison of temperature and precipitation datasets based on observations in the Mediterranean and the Middle-East

E. Romano, E. Volpi, and F. Stefanucci

Analysis of temperature trends, heat and cold waves in Central Italy (1952-2008)


Trends in summer tropical nights on the Iberian Peninsula and their connection with large-scale atmospheric circulation patterns

C. Pizzigalli, P. Lionello, Ahmed Hassan Fahmi, Ghada Al-Naber, Muhammad Shatanawi, Khaldoun Shatanawi, Zohra Lili Chabaane, Mohamed Wael Hamed Al Askhar, Mohamed Magdy Abdel Wahab, and Haifa Goma Ben Mailod

Precipitation climatology for the North African and Middle East areas of the Mediterranean Region using a collection of in situ observation

P. Lionello

The climate of the Venetian and North Adriatic region: variability, trends and future change

M. Reale and P. Lionello

Climate change over Venetia (north-east Italy)

K.M. Nissen, U. Ulbrich, G.C. Leckebusch, and J.G. Pinto

Mediterranean cyclones and wind storms in a changing climate

A. Bleta, P.T. Nastos, and A. Matzarakis

Assessment of bioclimatic conditions in Crete Island, Greece

R. Marcos, M. Turco, M.C. Llasat, and P. Quintana-Seguí

Application of a statistical downscaling method to detect inhomogeneities in a temperature time series

J. Kysely, L. Gaal, S. Begueria, R. Beranova, and J. I. Lopez-Moreno

Uncertainties of climate change scenarios of precipitation extremes in the Mediterranean based on ENSEMBLES RCMs
Z130  EGU2012-9351
M. Dubrovsky, P. Duce, B. Arca, and G. Pellizzaro
Multi-GCM Climate Projection for the Mediterranean and Related Impact on the Forest Fire Risk (with a stress on Sardinia)

Z131  EGU2012-11833
C.M Gouveia, R.M. Trigo, S.M. Begueria, and S Vicente-Serrano
Drought influence on vegetation behavior in Mediterranean basin

Z132  EGU2012-12272
C. Oikonomou, M. El-Maayar, and M.A. Lange
Investigating wheat yield response to climatic extremes in the Mediterranean region under current and projected future climatic conditions

Z133  EGU2012-4442
H. Feidas, P. Zanis, D. Melas, M. Vaitis, E. Anadranistakis, P. Symeonidis, and S. Pantelopoulos
The Geographic Climate Information System Project (GEOCLIMA): Overview and preliminary results

Z134  EGU2012-12999
F. Appiotti, M. Krzelj, F. Marincioni, and A. Russo
Climate change effects on environment (marine, atmospheric and terrestrial) and human perception in an Italian Region (Marche) and the nearby northern Adriatic Sea.

Z135  EGU2012-13844
Z. Bargaoui, Y. Tramblay, E. Lawin, and E. Servat
Precipitation variability and future projections for water resources management in Tunisia Northern Coastal basins

CL4.10 – Ice core science and paleo-climate – important for both the past and the future – Orals
Convener: D. Dahl-Jensen | Co-Conveners: S. Johnsen, J. White
Room: 15
Chairperson: Dorthe Dahl-Jensen and Jim White

08:30–08:45  EGU2012-3113
J. Jouzel
Modeling of water isotopes in polar regions and application to ice core studies

08:45–09:00  EGU2012-919
S.A. Marcott, E.J. Brook, T. Sowers, and M.K. Kalk
A Deglacial Record of Carbon Dioxide from the WAIS Divide Ice Core, Antarctica

09:00–09:15  EGU2012-4769
Combining water and gas isotopes measurements from the NEEM ice core to reconstruct abrupt temperature changes and reorganization of the hydrological cycle over a series of Dansgaard-Oeschger events

09:15–09:30  EGU2012-10419
E.J. Steig, J.W.C. White, B. Vaughn, P. Neff, S. Schoenemann, B. Markle, Q. Ding, T.J. Fudge, and K. Taylor
A high resolution stable isotope record from central West Antarctica covering the last 62,000 years

09:30–09:45  EGU2012-8539
T.J. Popp, J.W.C. White, V. Gkinis, B.M. Vinther, and S.J. Johnsen
High resolution water stable isotope profiles of abrupt climate transitions in Greenland ice with new observations from NEEM

09:45–10:00  EGU2012-12404
J. P. Steffensen and J-R Petit
Dust and chemical impurities in polar ice cores: Have we solved the riddle of their tight correlation to the stable isotopes?

CL4.10 – Ice core science and paleo-climate – important for both the past and the future – Posters
Convener: D. Dahl-Jensen | Co-Conveners: S. Johnsen, J. White
Hall Z | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: n.n.

Z136  EGU2012-3363
Ice-vapor equilibrium fractionation factor of hydrogen and oxygen isotopes: Experimental investigations and implications for stable water isotope studies
NP2.4/CL5.5 – Climate Sensitivity (co-organized) – Orals
Room: 17
Chairperson: Michel Crucifix

15:30–16:00 EGU2012-11899

J. Hansen and M. Sato
Paleoclimate Implications for Climate Sensitivity and Human-Made Climate Change

16:00–16:15 EGU2012-7796

D A Stainforth and L A Smith
Linearity, climate sensitivity and climate changes in the surface temperature field

16:15–16:30 EGU2012-13295

T.L. Edwards, J.C. Rougier, and M. Collins
Joint constraints on climate sensitivity in a coupled GCM using palaeoclimate reconstructions of the Mid-Holocene and Last Glacial Maximum

16:30–16:45 EGU2012-4800

R. Caballero and M. Huber
Climate transitions and state-dependent climate sensitivity in NCAR CAM3 simulations over a broad range of radiative forcing
A stochastic model for temperature variability and climate sensitivity ranging from months to tens-of-thousands of years.

South-France caves monitoring: present day cave air dynamics characterization, paleoclimatic and archaeological interests.

Long-term cave monitoring on the Edwards Plateau of Texas (USA) to advance speleothem paleoclimate proxies.

In-situ REE calibration as palaeohydrogeological proxies in stalagmites.

Calcite Farming at Hollow Ridge Cave: Calibrating Net Rainfall and Cave Microclimate to Dripwater and Calcite Chemical Variability.

Generation and dispersal of carbon dioxide in the caves and karst of Gibraltar.

Monitoring cave drips in a (partly) controlled hydrological system, Milandre cave, Switzerland.

Multiparametric surveillance of conservation measures at subterranean rock-art sites: case of Altamira cave.

Balance of pCO₂ in the carbonate-bearing unsaturated zone controlling mineral precipitation: Implications for geo-environmental analyses in caves.

Continuous multichannel monitoring of cave air carbon dioxide using a pumped non-dispersive infrared analyser.

Assessment of aerodynamic processes on subsurface in karst terrains by rapid multi-parametric surveys (case of Castanar Cave, Spain).

EGU2012-4859
E. Garcia-Anton, S. Cuezva, A. Fernandez-Cortes, S. Sanchez-Moral, and D. Benavente
Daily variations of CO2, d13CO2 and CH4 of cave air controlled by external weather conditions: example of rapid survey in Altamira cave (north of Spain)

EGU2012-6118
D. Tapete, F. Fratini, B. Mazzei, M. Camaiti, E. Cantisani, C. Riminesi, R. Manganelli Del Fà, O. Cuzman, and P. Tiano
Calcium carbonate crystallizations on hypogean mural paintings: a pilot study of monitoring and diagnostics in Roman catacombs

EGU2012-7910
M. Gasiorowski and H. Hercman
Monitoring of cave air temperature and humidity in the Nied?wiedzia Cave system (Sudetes, Poland) - a key to understanding tourists activity impact to cave environment

EGU2012-9604
J.U.L. Baldini and C.M. Sherwin
Using high-resolution monitoring data to identify the effects of cave and surface conditions on cave drip water hydrochemistry

EGU2012-10646
H. Ridley, J.U.L Baldini, and K.M Prufer
Monitoring tropical cave environmental parameters: Implications for palaeoclimate reconstruction

EGU2012-10680
D. Ballesteros, M. Jiménez-Sánchez, J. García-Sansegundo, M. Borregoero, and G. Sendra
Quantitatively structural control of the karst based on speleological cave survey data: Cabeza Llerososs massif (Picos de Europa, Spain)

EGU2012-11195
R. Kirk, D. Mattey, and C. Collister
Characteristics of annual laminae in speleothem from Grotte de Rolande, SW France and relationships to seasonal changes in the cave and surface environment.

EGU2012-11463
C. Thrush, D. Mattey, D. Lowry, D. Hofmann, and E. Anton-Garcia
Deciphering ENSO periodicity in an annually resolved speleothem from Fiji

EGU2012-11604
D. Scholz, M. Hansen, and W. Dreybrodt
Stable carbon and oxygen isotope fractionation processes during speleothem growth: systematic investigation in novel laboratory experiments

IG5/CL5.8/SSP5.3 – Stable isotopes as a tool in (paleo-)climate studies in different environments and by multi-proxy approaches (co-organized) – Orals
Room: 39
Chairperson: Rolf Siegwolf, Mihaela Melinte-Dobrinescu

13:30–13:45
EGU2012-10432
D. Sarris, R. Siegwolf, and Ch. Körner
Stable C and O isotope signals of drought in Mediterranean pines on inter- and intra-annual scales

13:45–14:00
EGU2012-6472
M. M. Savard, C. Bégin, J. Marion, and A. Smirnoff
Natural and Anthropogenic C and N isotopic Trends in Trees growing near oil-sands developments

14:00–14:15
EGU2012-6257
Evidence for long term cooling and short punctuated climate events at the Aptian-Albian boundary in the sub-tropical Atlantic (Mazagan Plateau, DSDP Dite 545)

14:15–14:30
EGU2012-11602
M.C. Melinte-Dobrinescu and A.-V. Bojar
Cretaceous biotic changes and isotope events in the Southern and Eastern Carpathians (Romania)

14:30–14:45
EGU2012-8668
Temperature and precipitation variations in the mid-Holocene based on combined evaluation of stable isotope compositions of speleothems and freshwater bivalve shells in Hungary

14:45–15:00
EGU2012-8210
Insights into peatland expansion and methane cycling on the East Antarctic continent in the early Eocene
A388  EGU2012-8908  
L. Kocsis, E. Gheerbrant, M. Mouflih, H. Cappetta, J. Yans, A. Ulianov, and M. Amaghzaz  
Tracing climatic conditions during the deposition of late Cretaceous-early Eocene phosphate beds in Morocco by geochemical compositions of biogenic apatite fossils

A389  EGU2012-7057  
P. Hofmann, R. Wiegand, L. Handley, T. Wagner, H. M. Talbot, and A. Mcanena  
Fluctuating sea surface temperatures in the subtropical North Atlantic during Oceanic Anoxic Event 1a at DSDP Site 398 and ODP Site 641

A390  EGU2012-4913  
P.J.N. Weber*, C. Baumgartner-Mora*, and P.O. Baumgartner*  
87Sr/86Sr-ratios, foraminiferal data and sedimentology of the Latest Miocene - Pliocene cyclic carbonates of La Désirade (Guadeloupe, France)

A391  EGU2012-10889  
C. Beltran, J. Backman, and M.A. Sicre  
Late Miocene nannofossil response to global climate change: A new record from the Eastern Equatorial Pacific (IODP Site 1338).

A392  EGU2012-8008  
M. Koch*, O. Friedrich, and P.A. Wilson  
Late Pliocene to early Pleistocene millennial-scale fluctuations in SST and stratification within the North Atlantic

A393  EGU2012-3467  
G.S. Kong, S.P. Kim, and H.S. Choi  
High-resolution paleoenvironmental records during the late Quaternary from the marginal seas of East Asia: the intrusion of open-ocean current

A394  EGU2012-324  
O. Rach, A. Brauer, H. Wilkes, and D. Sachse  
Atmospheric circulation shifts during the Younger Dryas in Western Europe

A395  EGU2012-2876  
F. Guenther, R. Witt, B. Xu, T. Yao, R. Mäusbacher, and G. Gleixner  
Hydrogen isotopes of biomarkers as palaeoclimate proxy of Lake Nam Co, Tibetan Plateau

A396  EGU2012-9143  
S. Gao, C. Voelker, and D. Wolf-Gladrow  
Application of a box model to investigate marine ?30Si distribution

A397  EGU2012-10545  
J.C.W Whalen, P.A.E. Pogge von Strandmann, and D.N. Schmidt  
The Mg isotope composition of foraminifers: a new proxy for palaeoseawater composition

A398  EGU2012-12862  
A.-V. Bojar, H.-P. Bojar, and W. Tufar  
Mg/Ca and isotopic high resolution record of deep-sea hydrothermal barnacles

A399  EGU2012-10810  
A. Per?oiu and A.-V. Bojar  
Palaeoclimate signal recorded by stable isotopes in cave ice: a modeling approach

A400  EGU2012-530  
Atmospheric water vapor monitoring above the Greenland Ice Sheet

A401  EGU2012-13727  
R.T.W. Siegwolf, D. Sarris, M. Saurer, and O.V. Sidorova  
When isotope signals in tree rings contradict our concepts and interpretations

A402  EGU2012-13742  

A403  EGU2012-11019  
Reconstruction of Drought Periods in South-Western France Based on the Isotopic Composition of Tree Rings and Speleothems
A404  EGU2012-8877  
S. Szymczak, M.M. Joachimski, A. Bräuning, T. Hetzer, and J. Kuhlemann  
A 500 year early summer temperature reconstruction for the western Mediterranean basin based on stable carbon isotopes from Pinus nigra ssp. laricio

A405  EGU2012-2820  
PM Wynn, NJ Loader, and IJ Fairchild  
Interrogating trees as archives of sulphur deposition

A406  EGU2012-14367  
T. Boettger, M. Haupt, and M. Friedrich  
Sensitivity of stable isotope ratios of tree-rings of Silver fir (Abies alba Mill.) in Franconia (Central Germany) to climate and environmental changes

A407  EGU2012-14226  
K. Krause, P. Cherubini, H. Bugmann, and P. Schleppi  
Growth enhancement of Norway spruce trees under long-term low-dose N addition is due to morphological rather than to physiological changes

A408  EGU2012-7071  
J. Sohn, M. Kohler, A. Gessler, and J. Bauhus  
Interactions of thinning and stem height on the drought response of radial stem growth and isotopic composition of Norway spruce (Picea abies)

A409  EGU2012-7237  
M. Harada, Y. Watanabe, T. Nakatsuka, S. Tazuru, Y. Horikawa, J. Sugiyama, T. Tsuda, and T. Tagami  
Establishment of alpha-cellulose extraction method and its application using tropical tree sungkai (Peronema canescens Jack) for reliable paleoclimate reconstruction in tropical areas

GM4.2 – Organic matter export across landscapes: Understanding the rates and controls (co-listed) – Orals  
Convener: R. Hilton | Co-Conveners: M. Evans  
Room: 21

08:30–08:45  EGU2012-8834  
O. Beyssac, M. Marocchi, L. Flukiger, V. Galy, F. Herman, S Cox, and C.C. Chen  
Tracing fossil particulate organic carbon from bedrocks to river and marine sediments: implications for the geological carbon cycle

08:45–09:00  EGU2012-2553  
C. Ramos-Scharron and C. Restrepo  
The transfer of modern organic Carbon by landslide activity in tropical montane ecosystems

09:00–09:15  EGU2012-9396  
C. Rixen and O. Korup  
Soil erosion and organic carbon export by wet snow avalanches

09:15–09:30  EGU2012-2458  
J.C. Smith, N. Hovius, A. Galy, A. Tye, and J. Turowski  
Particulate organic carbon export from soil and vegetation in temperate mountain regions

09:30–09:45  EGU2012-9798  
Seasonal dynamics of organic carbon in the Tana River Basin, Kenya

09:45–10:00  EGU2012-13331  
T. Eglinton, V. Galy, X. Feng, N. Drenzek, A. Dickens, C. Ponton, L. Glosan, E. Schefuss, B. Voss, J. Vonk, O. Gustafsson, D. Montlucon, and Y. Wu  
Climate controls on the residence time of terrestrial biospheric carbon in river basins

GM4.2 – Organic matter export across landscapes: Understanding the rates and controls (co-listed) – Posters  
Convener: R. Hilton | Co-Conveners: M. Evans  
Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XL128  EGU2012-4407  
L. Lombardo, T. Vanwalleghem, and J.A. Gomez  
Organic carbon fluxes in stemflow, throughfall and rainfall in an olive orchard

XL129  EGU2012-4232  
Distribution of soil organic carbon in two small agricultural Mediterranean catchments.
**XL130** EGU2012-6510
M. Glendell and **R.E. Brazier**
Controls on suspended sediment, particulate and dissolved organic carbon export from two adjacent catchments with contrasting land-uses, Exmoor UK.

**XL131** EGU2012-12415
**E. L. Shuttleworth**, M. G. Evans, J. J. Rothwell, and S. M. Hutchinson
Impacts of erosion and restoration on POC flux and pollutant mobilisation in the peatlands of the Peak District National Park, UK

**XL132** EGU2012-10760
**M. Moreno** and M. M. Castillo
Storage and transport of particulate organic matter in tropical headwater streams with different catchment land use

**XL133** EGU2012-7232
K. Bunte, **J.M Turowski**, N. Federspiel, K. Swingle, C. Rickli, and S. Abt
Coarse particulate organic matter transport and particle-size distribution in two mountain streams

**XL134** EGU2012-8156
**J. Bouchez**, V. Galy, J. Gaillardet, C. France-Lanord, R.G. Hilton, and L. Maurice
Transport of particulate organic carbon in the Amazon River: insights from river sediment depth-profiles

**XL135** EGU2012-4584
**R. G. Hilton**, A. Galy, N. Hovius, S. J. Kao, M. J. Horng, and H. Chen
Climatic and geomorphic controls on the erosion of biomass from subtropical mountain forest

**XL136** EGU2012-11086
**B. M. Voss**, B. Peucker-Ehrenbrink, T. I. Eglinton, and V. Galy
Do different components of terrestrial sources contribute to the riverine suspended load?

**XL137** EGU2012-5474
**G. Erkens**, M. Van der Meulen, and H. Middelkoop
The storage of carbon in Holocene deposits in the Netherlands

**XL138** EGU2012-10920
**C. Goulsbra**, M. Evans, and T. Allott
Oxidation rates of overbank POC deposition in an eroding peatland

**XL139** EGU2012-12455
**C. Goulsbra**, M. Evans, and T. Allott
Inferring rates of in-river POC-DOC transformation using radio carbon dating

**XL140** EGU2012-8380
Advancing understanding of the fluvial export of organic matter through high-resolution profiling of dissolved organic carbon.

**XL141** EGU2012-2624
Structure of dissolved organic matter across 500 boreal lakes analyzed by fluorescence spectroscopy

**XL142** EGU2012-12546
**G. Riise**, D. Hongve, S. Haaland, R. Müller, and S. Sobek
Key factors determining DOM and colour in boreal forest lakes

**GM4.3 – Sediment and carbon fluxes under human impact and climate changes (co-listed) – Orals**
Convener: T. Hoffmann | Co-Conveners: G. Erkens, G. Verstraeten
Room: 21
Chairperson: n.n.

10:30–10:45 EGU2012-3047
S. M. Mudd and **K. Yoo**
Influence of erosion rates on particle size and carbon export from upland landscapes

10:45–11:00 EGU2012-11695
**J. O. Kaplan** and T. Vanwalleghem
Anthropogenic soil erosion over the Holocene: Application of a new dynamic soils module for global vegetation models

11:00–11:15 EGU2012-13834
**K. Van Oost**, G. Verstraeten, B. Notebaert, N. Brothaerts, S. Doetterl, and F. Wiaux
Carbon emissions as a result of land use change and accelerated soil erosion: perspectives in time & space.

11:15–11:30 EGU2012-12571
**R. Aalto** and A. Auffdenkampe
Episodic Emplacement of Sediment + Carbon within Large Tropical River Basins
Brotherswater, English Lake District: a record of organic and inorganic sediment flux over the past two millennia

Delays in fluvial systems

Anthropogenic impacts on the global water cycle - a multi model approach.

Investigating the impact of correcting regional climate scenarios on the projected changes in river runoff

Quantifying uncertainty sources in hydrological climate impact projections

Understanding the main uncertainties in hydrological ensembles of future climate change predictions

Ensemble simulation and uncertainty estimation - Mountain soil moisture variability under climate change

Impact of soil properties for European climate simulations

Two simple concepts to assess the role of climate and land-use changes on streamflow

Detecting the hydrological impacts of forest cover change in tropical mountain areas: need for detrending time series of rainfall and streamflow data.

Designing forest thinning to compensate stream flow for climate change

The role of land cover variability on modelled land-atmosphere coupling

Climatic sensitivity of river temperature regimes within England and Wales
A73  EGU2012-770
J. Trümper and J. Schanze
Projection of land-use parameters for modelling hydrological change - concept and testing

A74  EGU2012-6260
J. Juston
Assessing catchment response to land use change with consideration of discharge uncertainty: case study in west Kenya

A75  EGU2012-8264
D. A. Rodríguez and J. Tomasella
Simulation of the impacts land use and land cover changes - LUCC on the hydrological response of the Ji-Parana Basin with MGB-INPE model

A76  EGU2012-8864
A. Drüszler, P. Vig, and K. Csirmaz
Meteorological Effects of Land Cover Changes in Hungary during the 20th Century

A77  EGU2012-13670
Investigating the influence of rice crop irrigation on streamflow in the Ibicui river basin using trend analyses

A78  EGU2012-9292
K. Fricke and O. Bubenzer
Modelling the effects of climate and land use change on the hydrological system of Urumqi, Northwest China

A79  EGU2012-9549
B. Guse, D. Sulc, B. Schmalz, and N. Fohrer
Combining abiotic and biotic models - Hydraulic modeling to fill the gap between catchment and hydro-dynamic models

A80  EGU2012-10446
J. Tecklenburg, F.F Hattermann, and S. Liersch
Investigation of Regional Drivers for Discharge Variability in the Blue Nile Basin under Climate Change Conditions

A81  EGU2012-11189
E. González-Sosa, C Mastachi-Loza, C Medina-frutos, and NM Ramos-Salinas
Modeling of Water balance in semiarid region of Mexico

A82  EGU2012-899
G. Sapirza, J. Jodar, H.V. Gupta, and J. Carrera
Stochastic simulation of daily rainfall fields conditioned on both regional and local Information

A83  EGU2012-1222
X.-L. Wang and P.-M. Zhai
Changes in China's Precipitation for Various Categories during 1957-2004

A84  EGU2012-2371
C. Kormann, T. Francke, G. Bürger, and A. Bronstert
Trend Analyses of Past and Future Precipitation and Runoff in Northern Tyrol, Austria

A85  EGU2012-5632
A. Kuentz, T. Mathevet, C. Perret, and V. Andréassian
Uncertainty estimation and reconstruction of historical streamflow records

A86  EGU2012-8626
H.E. Dahlke, S.W. Lyon, J.R. Stedinger, G. Rosqvist, and P. Jansson
Contrasting trends in hydrologic extremes for two sub-arctic catchments in northern Sweden - Does glacier melt matter?

A87  EGU2012-9914
M. Koprivšek, M. Brilly, A. Vidmar, M. Šraj, and A. Horvat
Analysis of mean annual discharge trends on the Mura River

A88  EGU2012-12314
Nonstationarity in hydro-climatology of Great Lakes

A89  EGU2012-12531
E. Ehsanzadeh, G. van der Kamp, and C. Spence
On the watershed response to land use/cover change and climate variability in the Prairies

A90  EGU2012-1825
M.G. Grillakis, A.G. Koutroulis, I.K. Tsanis, and U. Ulbrich
Improved bias correction for GCM precipitation data

A91  EGU2012-4815
S. Hagemann and the WATCH GHM Team
Projected hydrological changes in the 21st century and related uncertainties obtained from a multi-model ensemble

A92  EGU2012-6210
a. pastor, l. ludwig, h. biemans, e. stehfest, and p. kabat
Where will be allocated the new irrigated lands under global change?
S. Krakovska, V. Balabukh, L. Palamarchuk, G. Djukel, and N. Gnatiiuk

Analysis and projections of climate change impacts on flood risks in the Dniester river basin based on the ENSEMBLES RCM data

T. Y. Gan and E. Kerkhoven

Differences and sensitivities in potential hydrologic impact of climate change to regional-scale Athabasca and Fraser River basins of the leeward and windward sides of the Canadian Rocky Mountains respectively

Y. Yang

Mechanisms resulting in sharp decrease of runoff in Haihe Catchment of North China

A. Gaedeke, H. Hözel, H. Koch, and U. Grünewald

Assessing possibilities of reducing the uncertainty related to climate change impact studies

H. Hözel, A. Gädeke, H. Koch, and U. Grünewald

Assessment of climate change impacts on hydrological processes and patterns in the Spree River catchment

T. Vansteenkiste, N. Van Steenbergen, V. Ntegeka, and P. Willems

Intercomparison of runoff predictions by lumped and distributed models before and after climate change


Potential increase of flood hazards in Korea due to global warming from a high-resolution regional climate simulation

C. Teutschbein and J. Seibert

Validity of Differently Bias-Corrected Regional Climate Model Simulations for Streamflow Simulations under Changing Climate Conditions

S. Ham and S.-Y. Hong

Effects of freshwater inflow to the ocean on climate simulation using the coupled climate model

H. Kling, M. Preishuber, and M. Fuchs

Runoff conditions in the Zambezi basin under historic climate and possible future scenarios

JL Chiang and HC Yang

Climate change impact on river wetted perimeter

M. Honti, C. Stamm, and P. Reichert

Integrated uncertainty assessment of flow predictions in a Swiss catchment


Characterising the hydrological response to climate change of a remote tropical mountainous catchment: a multi-model approach

M. Reyers, K. Born, and J.G. Pinto

Application of a statistical-dynamical downscaling approach to simulate present and future regional precipitation regimes in Central-Asia

J.C. Stagl and F. F. Hattermann

Evaluation of Climate Change projections to assess the potential water budget in Central Europe considering climate model uncertainty

S. Boettcher, R. Dannowski, and C. Merz

Sustainable Water Resources Management of small catchments under climate change: New Approaches at the Fredersdorfer Mühlenfließ, Germany

G. Kraller, M. Warscher, H. Franz, T. Marke, U. Strasser, and H. Kunstmann

Water balance estimation in high Alpine terrain by combining distributed modeling and a neural network approach (Berchtesgaden Alps, Germany)

M. Sulis, C. Paniconi, M. Marrocù, D. Huard, and D. Chaumont

Impact of climate change on groundwater/surface water interactions projected by a multimodel ensemble
# A111

**X. Beuchat, B. Schaefli, M. Soutter, and A. Mermoud**  
A robust framework for probabilistic precipitations downscaling from an ensemble of climate predictions applied to Switzerland

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

**Convener: E. Guilyardi | Co-Conveners: M. J. McPhaden, A. Wittenberg, A. Fedorov, P. Braconnot**  
**Room: 17**  
**Chairperson: n.n.**

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<th>Time</th>
<th>Session ID</th>
<th>Title</th>
<th>Authors</th>
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<tr>
<td>08:45–09:00</td>
<td>EGU2012-8094</td>
<td>First assessment of ENSO in CMIP5</td>
<td>H. Bellenger, E. Guilyardi, M. Collins, S. Ferrett, W. Cai, and A. Wittenberg</td>
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<td>09:15–09:30</td>
<td>EGU2012-3439</td>
<td>A21st Century Shift in the Relationship between ENSO SST Anomalies and Upper Ocean Heat Content</td>
<td>M. J. McPhaden</td>
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<td>09:30–09:45</td>
<td>EGU2012-7414</td>
<td>Investigating the different &quot;flavours&quot; of ENSO using the Linearised Ocean Atmosphere Model, LOAM</td>
<td>W.H.G Roberts</td>
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## NP2.1 – ENSO: Dynamics, Predictability and Modelling (co-listed) – Posters

**Convener: E. Guilyardi | Co-Conveners: M. J. McPhaden, A. Wittenberg, A. Fedorov, P. Braconnot**  
**Hall X/Y | Display Time 08:00–19:30**  
**Author in Attendance: 17:30–19:00**  
**Chairperson: n.n.**

| XY369 | EGU2012-12211 | Low frequency modulation of the stability in a conceptual model of the equatorial Pacific: an estimate of the most influential changes in ENSO parameters over the recent decades | S. Thual, B. Dewitte, S.-I. An, S. Illig, and N. Ayoub                                      |
| XY370 | EGU2012-1201  | Role of the Indo-Pacific Interbasin Coupling in Predicting Asymmetric ENSO Transition and Duration | M. Ohba and M. Watanabe                                                                    |
| XY371 | EGU2012-11636 | Understanding coupled model errors in the tropical Pacific using hindcasts | B. Vannière, E. Guilyardi, T. Toniazzo, and S. Woolnough                                   |
| XY372 | EGU2012-1718  | Impact of Assimilating Salinity on ENSO Variability and Seasonal Forecast Skill in a Coupled Model | m. zhao, h. hendon, y.h. yin, and o. Alves                                                   |
| XY374 | EGU2012-2883  | Analysis of ENSO related multi source SST for the east pacific Nino 1.2 region | J. Stoll, K. Trachte, and J. Bendix                                                          |
| XY375 | EGU2012-3824  | Effects of westerly wind bursts on El Niño: a new perspective | D. Chen and T. Lian                                                                         |
| XY376 | EGU2012-6728  | Behaviors of nonlinearities modulating the El Nino events induced by optimal precursory disturbances | W. Duan, Y. Yu, and H. Xu                                                                   |
XY377  EGU2012-6874
H.-Y. Son, J.-Y. Park, and J.-S. Kug
Winter Precipitation variability over East Asia associated with ENSO

XY378  EGU2012-7035
M. Ohba, H. Shiogama, T. Yokohata, and M. Watanabe
Phase-dependent Impact of Strong Tropical Volcanic Eruption on predicting ENSO

XY379  EGU2012-8944
S. Ineson and T. Graham
ENSO in the HadGEM2-ES CMIP5 centennial simulations

XY380  EGU2012-10485
A. Babonneix, L. Gourdeau, F. Durand, C. E. Menkes, and N. Djath
Impact of ENSO variability on the Pacific Equatorial Undercurrent (EUC) sources: A modeling approach depending on the horizontal resolution

XY381  EGU2012-13576
B. Rodríguez de Fonseca, E. Mohino, T. Losada, M. Martín-Rey, and I. Polo
Multidecadal Modulation of Tropical Atlantic impact on ENSO

XY382  EGU2012-3088
H. Ding, N. Keenlyside, and M. Latif
Potential of Equatorial Atlantic Variability to Enhance El Niño Prediction
Thursday, 26 April

**BG6.2 – Calcification in marine organisms: ocean-acidification and proxy-development studies (including Vladimir Ivanovich Vernadsky Medal Lecture) (co-listed) – Orals**

Convener: LJ de Nooijer | Co-Conveners: K. G. Schulz, G.-J. Reichart, A. Meibom

**Room: 23**

Chairperson: LJ de Nooijer

08:30–08:45 EGU2012-1070


Effects of ocean acidification on the calcification of otoliths of larval Atlantic cod, Gadus morhua L.

08:45–09:00 EGU2012-2240

**V. Saderne and M. Wahl**

Effect of Ocean acidification on growth, calcification and reproduction of calcifying and non-calcifying epibions of brown algae

09:00–09:15 EGU2012-2575

**L. Jonkers, P. Jimenez-Amat, and G.-J. A. Brummer**

Size-dependent seasonality of fluxes, stable isotopes and trace element composition of the planktonic foraminifera Neogloboquadrina pachyderma s. and Globigerina bulloides in the Irminger Sea

09:15–09:30 EGU2012-3889

**J. Halfar, P. Chan, W. Adey, S. Hetzinger, B. Williams, R. Steneck, and P. Lebednik**

Century-scale variability of Coralline Algal Calcification Rates in the North Pacific and North Atlantic

09:30–09:45 EGU2012-4674

**R. Andrenson, H. Anlauf, L. Mackinder, D. Iglesias-Rodriguez, J. LaRoche, and B. Lenhard**

Transcriptome analysis of Emiliana huxleyi cells grown under different conditions using high-throughput sequencing data

09:45–10:00 EGU2012-6576

**H. Poigner, D. Monien, P. Monien, M. Kriews, H.-J. Brumsack, D. Wilhelms-Dick, and D. Abele**

Element ratios between digestive gland and gill tissues of the Antarctic bivalve Laternula elliptica as a proxy for element uptake from different environmental sources

**COFFEE BREAK**

Chairperson: K Schulz

10:30–10:45 EGU2012-6933

**T. Toyofuku, H. Nomaki, M. Tsuchiya, and H. Kitzato**

Foraminiferal cellular Calcium and pH distribution by laboratory observation

10:45–11:00 EGU2012-6959

**S. Mau, F. J. R. Meysman, R. Schoon, A. Bissett, and D. de Beer**

Microphytobenthic induced calcification - A modelling approach

11:00–11:15 EGU2012-7462

**C.E. Mueller, D. van Oevelen, and J. J. Middelburg**

Influence of Eunicella norwegica on feeding and calcification in the coral Lophelia pertusa

11:15–11:30 EGU2012-7817


Calcification and inorganic carbon uptake in the coccolithophore Emiliana huxleyi

11:30–11:45 EGU2012-8514

**D.E. Jacob, R. Wirth, A.L. Soldati, and U. Wehrmeister**

Bivalves build their shells from amorphous calcium carbonate

11:45–12:00 EGU2012-8521

**K.A Koho and G-J Reichart**

Benthic foraminiferal trace metal uptake: a field calibration from the Arabia Sea Oxygen Minimum Zone

**LUNCH BREAK**

Chairperson: GJ Reichart
13:30–13:45 EGU2012-9281
M. Y. Chang, A. J. Geffen, R. D. M. Nash, and C. Clemmesen
The Regional Patterns of Chemical Composition in the Otolith Core of Larval Fish

13:45–14:00 EGU2012-11407
S. Loucaides, A. Poulton, R. Bellerby, and T. Tyrrell
Coccolithophore community composition and calcification rates in the Norwegian and Greenland seas as a function of carbonate chemistry and other environmental parameters.

14:00–15:00 EGU2012-14452
J.-P. Gattuso
Precipitation and dissolution of calcium carbonate: key processes bridging the bio- and geosciences
(Vladimir Ivanovich Vernadsky Medal Lecture)

BG6.2 – Calcification in marine organisms: ocean-acidification and proxy-development studies (including Vladimir Ivanovich Vernadsky Medal Lecture) (co-listed) – Posters
Convener: LJ de Nooijer | Co-Conveners: K. G. Schulz, G.-J. Reichart, A. Meibom
Poster Area BG | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: LJ de Nooijer

BG35 EGU2012-3310
H. Stoll, L.M. Mejia-Ramirez, K. Isensee, A. Mendez-Vicente, and J. Pisonero
Diatom biomineralization reflected in diatom B/Si

BG36 EGU2012-3497
C. Cleroux, P. deMenocal, J. Arbuszewski, and B. Linsley
Reconstruct the past thermocline circulation in the Atlantic: calcification depths and Mg/Ca-temperature calibrations for 6 deep-dwelling planktonic foraminifera

BG37 EGU2012-3719
L. Jonkers, L. de Nooijer, G.J. Reichart, and R. Zahn
The effect of encrustation on the trace element composition of Neogloboquadrina dutertrei, implications for reconstructing past sea water temperature

BG38 EGU2012-4274
The role of biomineral in the transport of POC from the surface ocean

BG39 EGU2012-4340
S. Lee
Biocatalytic CO2 sequestration based on shell regeneration

BG40 EGU2012-5012
F. Bagusche, S. Pouvreau, C. Trueman, S. Long, and C. Hauton
Impacts of ocean acidification on gene expression and biomineralisation in the Pacific oyster Crassostrea gigas Thunberg, 1793

BG41 EGU2012-5680
LJ de Nooijer, R. Tjallingii, GJ Brummer, and GJ Reichart
Seasonality in the Arabian Sea over glacial-interglacial cycles

BG42 EGU2012-7505
X.L You and Q. Li
Spheroidal dolomite texture as proxy for microbially mediated dolomite

BG43 EGU2012-9191
D.E. Jacob and U. Wehrmeister
Evidence for variable crystallinity in bivalve shells

BG44 EGU2012-9754
M. Hart, L. Pettit, D. Wall-Palmer, C. Smart, J. Hall-Spencer, A. Medina-Sanchez, R.M. Prol Ledesma, R. Rodolfo-Metalpa, and P. Collins
Investigation of the calcification response of foraminifera and pteropods to high CO2 environments in the Pleistocene, Paleogene and Cretaceous

BG45 EGU2012-11062
M. Wall, G. M. Schmidt, S. Khokkiatiwong, and C. Richter
Coral calcification and reef development under natural disturbances

BG46 EGU2012-11553
V. Saderne, M. Wahl, and P.M.J. Herman
Extreme variations of pCO2 and pH in a macrophyte meadow of the Baltic Sea in summer: evidence of the effect of photosynthesis and local upwelling.

BG47 EGU2012-12167
W. Feldmeijer, B. Metcalfe, M. de Vringer, G.-J. Brummer, and M. Prins
CL1.5 – Climate response to orbital forcing (including Milutin Milankovic Medal Lecture) – Orals
Room: 15
Chairperson: Alan Haywood, Aisling Dolan

13:30–13:45 EGU2012-4867
A. Ganopolski and R. Calov
Simulation and understanding the nature of Quaternary glacial cycles

13:45–14:00 EGU2012-4950
M.-F. Loutre, T. Fichefet, H. Goosse, P.-Y. Barriot, Y. Sallaz-Damaz, A. Timmermann, A. Laurian, and A. Barthélemy
The 6 and 130 kyr BP climates as simulated by an updated version of LOVECLIM1.2

14:00–14:15 EGU2012-7387
W.H.G Roberts and P.J. Valdes
The tropical Pacific climate response to the changing forcing over the last glacial cycle

14:15–14:30 EGU2012-10876
T. Rodrigues, A. H. L. Voelker, F. Naughton, J. O. Grimalt, and F. A. Abrantes
Past climate variability in the Iberian Margin during Marine Isotope Stages 15-9 (570 to 300 ka): Suborbital glacial variability and interglacial stability

14:30–14:45 EGU2012-12548
S Kender, C Ravelo, H Asahi, J Becker, I Hall, M Leng, M Kaminski, T Radi, and I Aiello
Bering Sea deep water ventilation over the last 2 Ma, evidence from foraminiferal assemblages and stable isotopes

14:45–15:00 EGU2012-11052
D. Bell, S. Jung, D. Kroon, D. Hodell, and L. Lourens
Towards understanding orbital scale climate dynamics in the early Pliocene warm world

Chairperson: Alan Haywood, Aisling Dolan

15:30–16:30 EGU2012-14453
W.H. Berger
Milankovitch theory - hits and misses (Milutin Milankovitch Medal Lecture)

16:30–16:45 EGU2012-11621
A.C. Fowler, R.E.M. Rickaby, and E.W. Wolff
Modelling paleoclimate with a simple box model

16:45–17:00 EGU2012-13635
A Abe-Ouchi, F Saito, K Kawamura, and M.E. Raymo
Multiple steady states of Northern Hemisphere ice sheets and the timing of glacial cycles

CL1.5 – Climate response to orbital forcing (including Milutin Milankovic Medal Lecture) – Posters
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Alan Haywood, Aisling Dolan

XY110 EGU2012-1387
A. W. Omta
Difference between the glacial cycles of Antarctic temperature and greenhouse gases

XY111 EGU2012-3946
S. Kim, K. Takahashi, Y. Kanematsu, H. Asahi, and B.K. Khim
Surface water productivity in the Bering Sea and the subarctic North Pacific in response to global climate cooling during the last 2.32 Myrs
XY112  EGU2012-4360
N. Bounceur, P. Araya-Melo, and M. Crucifix
Global sensitivity analysis of GCMs to astronomical forcing, CO2 and ice volume

XY113  EGU2012-4589
C. Zeeden and T.A. Rivera
Determining phase relations of proxy data using the eccentricity-precession pattern

XY114  EGU2012-5531
E. Gasson, D. Lunt, D. Pollard, and M. Siddall
Orbital interpolation methods for coupling GCMs to ice sheet models and potential impact on ice sheet hysteresis

XY115  EGU2012-9806
A. D. Häuselmann, D. Fleitmann, H. Cheng, L.R. Edwards, and M. Fischer
Evidence of an early Termination II at 133 ka in a Swiss high alpine stalagmite

XY116  EGU2012-12355
H. Beddow, A. Slujs, D. Liebrand, B. Wade, A. Holbourn, P. Bown, and L. J. Lourens
Glaciation, orbital forcing and carbon cycle changes at the Oligocene/Miocene boundary

XY117  EGU2012-1385
A. W. Omta, G. A. K. van Voorn, R. E. M. Rickaby, and M. J. Follows
On the potential role of marine calcifiers in glacial-interglacial dynamics

XY118  EGU2012-3274
M. Tigchelaar and A. Timmermann
Understanding precessional variations in tropical precipitation

XY119  EGU2012-386
P. Bajo, R. Drysdale, J. Woodhead, J. Hellstrom, Y. Perrette, G. Zanchetta, and C. Spötl
A stalagmite from Corchia cave (Italy) - an archive of palaeoclimate information on three Terminations during the Middle Pleistocene Transition

XY120  EGU2012-648
F. Colleoni, S. Masina, A. Negri, and A. Marzocchi
Plio-Pleistocene high-low latitude climate interplay: a Mediterranean point of view

XY121  EGU2012-3327
O.E. Romero, M. Mohtadi, P. Helmke, and D. Hebbeln
High Interglacial Diatom Paleoproductivity in the Western Indo-Pacific Warm Pool During the Last Glacial Cycle

XY122  EGU2012-4931
C. Zeeden, J. de Jonge, F.J. Hilgen, and L. Lourens
Phase relations between orbital forcing and terrestrial response in the equatorial Atlantic over the last 10 Ma

XY123  EGU2012-11491
F. Parrenin and D. Paillard
Timing and amplitude of glacial cycles from a conceptual model

XY124  EGU2012-12443
R. Zech
The permafrost glacial hypothesis: Is permafrost carbon the black box between insolation forcing and global climate?

XY125  EGU2012-13786
B. Zhou and P Zhao
Modeling variations of summer upper-tropospheric temperature and associated climate over the Asian-Pacific region during the mid-Holocene

CL1.10 – 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: H. Renssen | Co-Conveners: D. Dahl-Jensen, H. Fischer
Room: 16
Chairperson: H. Renssen

08:30–08:45  EGU2012-12136
G.J. Tye, A.P. Palmer, I. Candy, P. Coxon, and M. Hardiman
Investigating annually-resolved natural climate variability during MIS 11 using lacustrine records

08:45–09:00  EGU2012-375
J. Dabkowski, N. Limondin-Lozouet, P. Antoine, A. Marca-Bell, and J. Andrews
Were the MIS 11 and MIS 5e warmer and/or wetter than the Holocene? Test comparison of Interglacial intensities using stable isotope data from Northern France tufa deposits.

09:00–09:15  EGU2012-10898
A. de Vernal, B. Fréchette, C. Hillaire-Marcel, N. van Nieuwenhove, and S. Retailleau
The last interglacial in eastern Canada and the northwest North Atlantic: further evidence for warmer climate and ocean conditions than during the Holocene
EGU General Assembly 2012

09:15–09:30 EGU2012-1029

S. Schoenemann, Q Ding, E Steig, and A Schauer

Ice Core Measurements and GCM Simulation of the Spatial Distribution and Glacial-Interglacial Change of 17O-excess in Antarctica

09:30–09:45 EGU2012-10699


Holocene climate variability in south-western France

09:45–10:00 EGU2012-9080

T. Laepple and P. Huybers

How variable is the Holocene?

COFFEE BREAK

Chairperson: H. Fischer

10:30–10:45 EGU2012-8391

M. Sarnthein and H. Sadatzki

Planktic ?18O records in the northern South China Sea: MIS 5.5 vs MIS 1

10:45–11:00 EGU2012-5919

H.A. Bauch

Deglacial subsurface injections of Atlantic water into the Nordic Seas and its effect on interglacial climate development

11:00–11:15 EGU2012-5058

N. Merz, C.C. Raible, and T.F. Stocker

Atmospheric circulation in the early Holocene: Sensitivity of the North Atlantic winter climate to moderate changes in the ice-sheet configuration

11:15–11:30 EGU2012-6020

T. Bruecher, V. Brovkin, M. Cuntz, and C. Reick

Modeled vs. reconstructed ?13C variability within interglacials

11:30–11:45 EGU2012-8910


The Holocene climatic optimum temperature signal from the NGRIP record. A study based on the water isotope diffusion rates as estimated from discrete high-resolution ?18O data.

11:45–12:00 EGU2012-3624

P. Zennaro, C. Barbante, N. Kehrwald, R. Zangrando, A. Gambaro, and J. Gabrieli

Late Holocene fire activity recorded in a Greenland ice core

CL1.10 – 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: H. Renssen | Co-Conveners: D. Dahl-Jensen, H. Fischer

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: D. Dahl-Jensen

XY126 EGU2012-155

J. Nitychoruk, K. Bi?ka, H. Ruppert, and A. Tudryn

Short-term climate changes in the Holsteinian Interglacial - EGU2012-132

XY127 EGU2012-376

J. Dabkowski, J. Andrews, P. Antoine, N. Limondin-Lozouet, and A. Marca-Bell

Eemian seasonal temperature variations recorded by very high-resolution analyses of a MIS 5e stromatolite from Caours (Somme Basin, Northern France): combining petrography and stable isotopes.

XY128 EGU2012-2124

V. Ollivier, P. Roiron, S. Nahapetyan, S. Joannin, and C. Chataigner

Tufa and travertine of the Lesser Caucasus: a light on the Quaternary palaeoenvironment of the Circumcaspiian regions

XY129 EGU2012-2461

EW Wolff

What is an interglacial?

XY130 EGU2012-5832

A. Mairesse, P. Mathiot, H. Goosse, S. Dubinkina, and Y. Sallaz-Damaz

How does data assimilation in the Northern Hemisphere affect the representation of Holocene climate?
XY131  EGU2012-6250
H. Renssen, H. Seppä, X. Crosta, H. Goosse, and D.M. Roche
Global characterization of the Holocene Thermal Maximum

XY132  EGU2012-7285
Y. Milker, M. Kucera, M. Prange, R. Rachmayani, and M. Schulz
Diachronous timing of the MIS11 thermal optimum revealed by a global compilation of sea-surface temperature records

XY133  EGU2012-8348
J. Sherriff, D. Schreve, I. Candy, and A. Palmer
The terrestrial response to climatic instability during the latter stages of Marine Isotope Stage 11: Examples from Britain

XY134  EGU2012-8613
S. Lauterbach, A. Brauer, T. Litt, and G. Schettler
Re-evaluation of the Bispingen palaeolake record - a revised chronology for the Eemian in Northern Germany

XY135  EGU2012-8705
P. Bakker, H. Renssen, and C.J. Van Meerbeeck
Did Greenland Ice Sheet melting weaken the AMOC during the early part of the last interglacial? A model analysis of the uncertainties.

XY136  EGU2012-10803
M. Blaschek and H. Renssen
The sensitivity of Arctic sea ice production to shelf flooding during the early Holocene: a modelling study

XY137  EGU2012-10858
S. Gomes, F. Naughton, T. Rodrigues, T. Drago, M. Sanchez-Goñi, and C. Freitas
Mid-late Holocene climatic changes in the Southwestern Iberian shelf

XY138  EGU2012-10927
T. Jenk, M. Rubino, D. Etheridge, M. Bigler, and T. Blunier
Greenland CO2 and ?13C of CO2 - assigning the contamination

XY139  EGU2012-11190
K. Tachikawa, L. Vidal, and C. Sonzogni
Thermal history of the Western Pacific Warm Pool as an indicator of global temperature

XY140  EGU2012-12958
A. Gogou, I. Bouloubassi, K.-C. Emeis, M. Triantaphyllou, G. Katsouras, G. Rousakis, and V. Lykousis
Holocene climate variability and environmental changes in the NE Mediterranean Sea along a N-S transect

XY141  EGU2012-13043
An annual layer counted EDML time scale covering the past 16700 years

XY142  EGU2012-13236
C. Kissel, A. Van Toer, E. Michel, and E. Cortijo
Variations in the Strength of the North Atlantic Bottom water during Holocene.

XY143  EGU2012-13825
A. El Ouahabi, B. Martrat, J. F. Lopez, and J. O. Grimalt
PIG2LIG-4FUTURE: a database

CL2.3 – Urban climate, urban heat island and urban biometeorology – Orals
Convener: K. Kourtidis | Co-Conveners: K. de Ridder, T. Prieto-Lopez
Room: 13
Chairperson: Koen DeRidder

08:30–08:45  EGU2012-149
M. Demuzere, A. Coutts, N.P.M. van Lipzig, and K. Oleson
Offline evaluation of the Community Land Model - Urban for Toulouse (France) and Melbourne (Australia)

08:45–09:00  EGU2012-11473
N. Blond, M. Kohler, D. Mauree, S. H. Sajjad, and A. Clappier
Development of a new canopy model to improve urban meteorology modeling

09:00–09:15  EGU2012-14394
A combined remote sensing and modeling based approach to identify sustainable pathways for urban and peri-urban agriculture in China

09:15–09:30  EGU2012-5429
N. Müller and W. Kuttler
Assessment of human thermal comfort and mitigation measures in different urban climatotopes
CL2.3 – Urban climate, urban heat island and urban biometeorology – Posters
Convener: K. Kourtidis | Co-Conveners: K. de Ridder, T. Prieto-Lopez
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Tatiana Prieto-Lopez

XY145 EGU2012-1773
E. Plavcová, H. Davidkovová, and J. Kyselý
Do sudden air temperature and pressure changes affect cardiovascular morbidity and mortality?

XY146 EGU2012-2006
I. Keramitsoglou and C. T. Kiranoudis
Fully automated extraction and analysis of surface Urban Heat Island patterns from moderate resolution satellite images

XY147 EGU2012-2228
Y. Ezber, Z Boybeyi, O.L. Sen, and M. Karaca
INVESTIGATION of LOCAL FLOW FEATURES in ISTANBUL via HIGH RESOLUTION ATMOSPHERIC SIMULATIONS

XY148 EGU2012-2684
M. Zueva-Aloise, J. Nemec, B. Frueh, and R. Boehm
Future climate scenarios of urban heat stress in Vienna

XY149 EGU2012-9854
S. Sodoudi, I. Langer, and U. Cubasch
Micro Climate Simulation in new Town ‘Hashtgerd’

XY150 EGU2012-10546
M. Xie and Y. G. Li
Understanding of urban thermal environment in Hong Kong by data analysis and modeling

XY151 EGU2012-11498
D. Founda, A. Saliverou, D. Rizou, and H. Flocas
Long term variability of sunshine hours in Athens and its relationship with air temperature

XY152 EGU2012-11904
A. Hammerle, M. Heinl, and G. Leitinger
Cooling Town - a hot topic

XY153 EGU2012-11937
M. Madelin, G. Beltrando, and A. Sakhy
Intensity and delimitation of the night Urban Surface Heat Island over the Paris metropolitan area

XY154 EGU2012-12021
D. Founda, F. Pierrès, P.T. Nastos, and M. Petarakis
Evolution of the urban heat island at a large coastal urban area of Mediterranean

XY155 EGU2012-12458
R. Pongracz, J. Bartholy, E. Lelovics, ZS. Dezo, and I. Dobi
Differences between satellite- and ground-based urban heat island effect - Case study for the Budapest agglomeration area

XY156 EGU2012-12835
C. Ceppi, P. Balena, P. Loconte, and F. Mancini
Urban Heat Island in the city of Bari (Italy) and its relationship with morphological features

XY157 EGU2012-12880
J. Nemec, M. Zueva-Aloise, and M. Kossmann
Application of an urban climate model to several Austrian cities located in complex topography

XY158 EGU2012-5403
S. Cohen, L. Shashua-Bar, O. Potchter, Y. Yaakov, P. Bar-Kutiel, and J. Tanny
Sap flow measurement in a street and park of a hot and arid city

XY159 EGU2012-14143
A. Bokwa
Urban heat island in Krakow, Poland: Land use versus land form interaction

XY160 EGU2012-4165
P. Dobrovolný, L. ?ezni?ková, and L. Krahula
Spatial and temporal variability of urban heat island intensity in Brno (Czech Republic)
XY161  EGU2012-5396  
A. Goldbach and W. Kuttler  
Influence of evapotranspiration on thermal comfort in central European cities

XY162  EGU2012-9772  
K. Menberg, P. Blum, K. Zhu, and P. Bayer  
Urban heat islands in the subsurface of German cities

XY163  EGU2012-2543  
P. H. Lin, K. C. Mei, and Y. C. Chen  
Preliminary observation result of urban boundary layer at Taipei 101 Skyscraper

XY164  EGU2012-7869  
M. Bakkali, M. Davies, and JP. Steadman  
Developing an Integrated Approach for Local Urban Climate Models in London from Neighbourhood to Street Scale

AS4.5/BG2.17/CL2.6 – Vegetation-Atmosphere Interactions: From Emission to Atmospheric Particles and Climate (co-organized) – Orals  
Convener: B. Bonn | Co-Conveners: M. Boy, S. M. Noe  
Room: 14  
Chairperson: Boris Bonn, Steffen M. Noe

08:30–08:45  EGU2012-12992  
Untangling the primary drivers of pinyon monoterpenes production and emissions under predicted drought

08:45–09:00  EGU2012-754  
Towards a better understanding of isoprene emissions and chemistry above tropical forests with the TM5 model

09:00–09:15  EGU2012-4410  
S. Bourtsoukidis, A. Dittmann, S. Jacobi, and B. Bonn  
Driving forces of individual BVOC emissions from a spruce tree in Central Germany; results from a dynamic enclosure study.

09:15–09:30  EGU2012-7949  
I. Bamberger, L. Hörttnagl, T. Ruuskanen, R. Schnitzhofer, M. Müller, M. Graus, T. Karl, G. Wohlfahrt, and A. Hansel  
Deposition of terpenes to vegetation - a paradigm shift towards bidirectional VOC exchange?

09:30–09:45  EGU2012-847  
A HRMS study of oligomer formation through aqueous phase photooxidation of methylvinyl-ketone and methacrolein

09:45–10:00  EGU2012-3934  
H. G. Takahashi, H-J. Kim, K. Tanaka, K. Takata, K. Saito, and T. Yasunari  
Sensitivity study on the impacts of biogenic VOC on the Asian monsoon climate in dry and wet seasons using MIROC5

AS4.5/BG2.17/CL2.6 – Vegetation-Atmosphere Interactions: From Emission to Atmospheric Particles and Climate (co-organized) – Posters

Convener: B. Bonn | Co-Conveners: M. Boy, S. M. Noe

Hall X/Y | Display Time 08:00–19:30  
Author in Attendance: 10:30–12:00  
Chairperson: Steffen M. Noe, Boris Bonn

XY56  EGU2012-8889  
M. Beck and T. Hoffmann  
Formation and characterization of dimeric compounds in Secondary Organic Aerosol

XY57  EGU2012-1073  
T. Rusu, P. I. Moraru, M. L. Sopiteanu, A. I. Pop, and H. Cacovean  
Climate Monitoring and Recommendations on the Optimum Sowing Period for the Main Crops in the Transylvanian Plain, Romania

XY58  EGU2012-1198  
M. Li, X. Huang, J. Li, and Y. Song  
Estimation of biogenic volatile organic compound (BVOC) emissions from the terrestrial ecosystem in China using real-time remote sensing data
XY59  EGU2012-1944
E. Chalaya, V. Slepyh, A. Babyakin, and N. Povolotckaia
The seasonal dynamics of bacteriostatic character of oak forests

XY60  EGU2012-2783
B. Illes and A. Anda
Field effects of cadmium contamination in the radiation characteristics of maize

XY61  EGU2012-7186
J. Regnery, T Dindorf, L Hacker, S Andres, E Kleist, J Wildt, and J Kesselmeier
Development and application of an analytical method for the determination of total atmospheric biogenic non-methane organic carbon

XY62  EGU2012-8678
R. J. Jakob and T. Hoffmann
Development of a chiral separation method for the enantiomers of two atmospheric oxidation products of α-pinene

XY63  EGU2012-9247
M. J. D. Mann, M. Kundel, and T. Hoffmann
Online Quantification of gaseous Amines via Aerosol Mass Spectrometry

XY64  EGU2012-10196
P. Veres, J. Auld, and J. Williams

XY65  EGU2012-10376
M. Walser, I. Bamberger, L. Hörtog, G. Wohlfahrt, and A. Hansel
Drought induced methanol emission from grassland

XY66  EGU2012-10544
Aerosol and cloud condensation nuclei formation at Mt. Kleiner Feldberg, Germany

XY67  EGU2012-2771
B. Illes and A. Anda
Changes in radiative properties of soot contaminated maize canopy

CL2.7 – Earth radiation budget, radiative forcing and climate change – Orals
Convener: M. Wild | Co-Conveners: R. Philipona, P. Stackhouse
Room: 15
Chairperson: Martin Wild, Rolf Philipona

08:30–08:45  EGU2012-1886
R. Cahalan, P. Pilewskie, and T. Woods
Free Flyer Total and Spectral Solar Irradiance Sensor (TSIS) and Climate Services Mission

08:45–09:00  EGU2012-5194
P. Pilewskie, T. Woods, and R. Cahalan
Solar Spectral Irradiance and Climate

09:00–09:15  EGU2012-8591
A. Voigt, B. Stevens, J. Bader, and T. Mauritsen
The hemispheric distribution of reflected shortwave radiation in observations and aquaplanet climates

09:15–09:30  EGU2012-11113
M. Previdi, K. L. Smith, and L. M. Polvani
Estimating the Influence of the Stratospheric Processes on the Antarctic Atmospheric Energy Budget

09:30–09:45  EGU2012-2971
Simulation of dimming and brightening in Europe from 1958 to 2001 using a regional climate model

09:45–10:00  EGU2012-5222
D. Folini and M. Wild
Surface solar radiation and hydrological cycle in 20th century China: sensitivity studies with ECHAM5-HAM

COFFEE BREAK

Chairperson: Martin Wild, Rolf Philipona

10:30–11:00  EGU2012-11872
J. Hansen, K. von Schuckmann, M. Sato, and P. Kharecha
Earth's Energy Imbalance and Implications
11:00–11:15 EGU2012-9868
J. C. Chiu and W. J. Wiscombe
Earth’s Radiation Imbalance from a Constellation of 66 Iridium Satellites

11:15–11:30 EGU2012-7689
M. Wild
Earth radiation budget from a surface perspective and its representation in CMIP5 models

11:30–11:45 EGU2012-6623
X.L. Huang, H.W. Chuang, Y. Ming, and G.L. Potter
A constraint for ice cloud feedback over the tropical Pacific in future climate change

11:45–12:00 EGU2012-4344
Heating of Earth’s climate continues in the 2000s based upon satellite and ocean observations

CL2.7 – Earth radiation budget, radiative forcing and climate change – Posters
Convener: M. Wild | Co-Conveners: R. Philipona, P. Stackhouse
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Martin Wild, Rolf Philipona

XY165 EGU2012-1598
C. Lacagnina and F. Selten
Cloud properties in the present-day tropical climate: EC-EARTH model biases

XY166 EGU2012-6680
S.-H. Shin
Model Evaluation for Low-Level Cloud Feedback

XY167 EGU2012-5025
A. Rihelah, T. Manninen, K. Andersson, and V. Laine
The GAC-SAL: A new 27-year surface albedo data record from AVHRR

XY168 EGU2012-4975
P. Thejll, C. Flynn, H. Schwarz, H. Gleisner, M. Owner-Petersen, A. Darudi, and T. Andersen
First results from new Earthshine telescope on Mauna Loa

XY169 EGU2012-1867
G. Wen, R. Cahalan, D. Rind, J. Jonas, P. Pilewskie, and J. Harder
Modeling Climate Responses to Spectral Solar Forcing on Centennial and Decadal Time Scales

XY170 EGU2012-3170
Assessment for global longwave radiative fluxes estimated by GEWEX Surface Radiative Budget (SRB) project and the Calipso-CloudSat-CERES-MODIS (CCCM).

XY171 EGU2012-3501
K. Wang
From Dimming to Brightening: Uncertainty of Measurements

XY172 EGU2012-4770
Q. You, A. Sanchez-Lorenzo, M. Wild, D. Folini, and K. Fraedrich
Surface solar radiation in the Tibetan Plateau from observations, reanalysis and model simulations

XY173 EGU2012-13300
F. C. Cooper, S. Fueglistaler, and J. Du
Global variations of atmospheric relative humidity as observed by AIRS

XY174 EGU2012-6515
H. K. Bangalth, G. Stenchikov, M. Zampieri, R. Bantges, and H. Brindley
Aerosol Radiative Forcing and Regional Climate Impact over Middle East and North Africa

XY175 EGU2012-13518
A. di Sarra, C. Di Biagio, D. Meloni, F. Monteleone, G. Pace, S. Pugnaghi, and D. Sferlazzo
The intense Saharan dust event of 25-26 March 2010 in the Mediterranean: shortwave and longwave radiative effects

XY176 EGU2012-8556
B. H. Samset and G. Myhre
Vertical profiles of aerosol radiative forcing - a comparison of AEROCOM phase 2 model submissions

XY177 EGU2012-12389
G. Alexandri, A.K. Georgoulas, C. Meleti, K. Kourtidis, and D. Balis
Investigation of the aerosol effect on the variability of the shortwave radiation over Europe with the use of ground based and satellite measurements

XY178 EGU2012-7262
R. Philipona and A. Kräuchi
Measuring solar- and greenhouse radiation profiles in the atmosphere using upper-air radiosondes
XY179  EGU2012-7295  R. Philipona  
Greenhouse warming and solar brightening in and around the Alps

XY180  EGU2012-7673  J. Trentmann, S. Brinckmann, R.W. Müller, and D. Dee  
Homogeneity Analysis of Gridded Data Sets of the Surface Solar Radiation

XY181  EGU2012-11046  E.J.M. van den Besselaar, A. Sanchez-Lorenzo, M. Wild, and A.M.G. Klein Tank  
Possible role of the dimming/brightening in observed temperatures across Europe since the second half of the 20th century

XY182  EGU2012-4332  A. Sanchez-Lorenzo and M. Wild  
Variability and trends of reconstructed surface radiation in Switzerland since late 19th century

XY183  EGU2012-5920  A. Sanchez-Lorenzo, J. Calbó, and M. Wild  
New surface solar radiation and evaporation datasets in Spain: in search of a better understating of the dimming/brightening

XY184  EGU2012-5066  D. Folini and M. Wild  
Surface solar radiation in 20th century Europe: dimming and brightening as seen by ECHAM5-HAM

Solar absorption estimated from surface radiation measurements and collocated satellite products

XY186  EGU2012-7927  M. Wild  
Enlightening Global Dimming and Brightening

XY187  EGU2012-8051  M. Wild and E. Schmucki  
Assessment of global dimming and brightening in IPCC-AR4/CMIP3 models and ERA40

XY188  EGU2012-8328  M. Chiacchio, M. Wild, and B. Liepert  
Global inspection of cloud feedbacks to radiative forcings from a satellite perspective

XY189  EGU2012-13395  M. Chiacchio, E. Arabini, M. Wild, and D. Folini  
A new gridded surface solar radiation dataset over Europe from the Global Energy Balance Archive: update

XY190  EGU2012-14479  A. Roesch, M. Wild, and C. Ammann  
Global dimming and brightening - evidence and agricultural implications

XY191  EGU2012-9583  G. Stanhill, R. Rosa, and S. Cohen  
The roles of water vapor, rainfall and solar radiation in determining air temperature change measured at Bet Dagan, Israel between 1964 and 2010

Investigation of the effect of contrails on direct and diffuse irradiances

XY193  EGU2012-9705  Dr. Olefs and Dr. Schoener  
A new solar radiation model for research and applications in Austria

XY194  EGU2012-11834  H. Löwe and N. Helbig  
Quasi-analytical treatment of spatially averaged radiation transfer in complex terrain

XY195  EGU2012-13883  R. Becker and K. Behrens  
Homogenization of surface shortwave radiation data using satellite cloud cover and clear sky simulations

Features and causes of recent surface solar radiation dimming and brightening patterns
A139  EGU2012-585
H.-L. Yu, S.-J. Yang, and Y.-C. Lin
A climate-based spatiotemporal prediction for dengue fever epidemics: a case study in southern Taiwan

A140  EGU2012-12919
M. Bray and D. Han
Comparative study on Climate Change Policies in the EU and China

A141  EGU2012-1979
Presence and viability of V. Cholerae in the waters of rural Bangladesh (Matlab area)

A142  EGU2012-3607
M.V. Podimata, E.S. Bekri, and P.C. Yannopoulos
Proposing buffer zones and simple technical solutions for safeguarding river water quality and public health

A143  EGU2012-3990
A S Akanda and A S Jutla
Hydroclimatic drivers, Water-borne Diseases, and Population Vulnerability in Bengal Delta

A144  EGU2012-6046
W. Wagner and R.A. Kidd
The Use of Near-Real-Time Global ASCAT Soil Moisture Observations for Monitoring of Water Hazards

A145  EGU2012-4710
J. Derx, A.H. Farnleitner, M. Zessner, and A.P. Blaschke
Water temperature effects on virus and DOC transport during riverbank infiltration

A146  EGU2012-8731
E. Bertuzzo, L. Mari, L. Righetto, R. Casagrandi, M. Gatto, I. Rodriguez-Iturbe, and A. Rinaldo
An epidemic model for the future progression of the current Haiti cholera epidemic

A147  EGU2012-7831
L. Baltesiu, M.T. Gomoiu, R. Mudura, G. Nicolescu, and V. Purcarea-Ciulacu
Contributions to integrative knowledge of West Nile virus reported in Romania - methods and tools for managing health-environment relationship at different spatial and temporal scales

A148  EGU2012-6507
J. Pilz, M. Mohsin, and A. Gebhardt
A bivariate pseudo Gamma distribution with application to acid rain data

A149  EGU2012-7639
S. F. Tseng, B. M. Hsu, K. H. Huang, H. Y. Hsiao, P. M. Kao, S. M. Shen, H. F. Tsai, and J. S. Chen
Detection and Identification of Salmonella spp. in Surface Water by Molecular Technology in Taiwan

A150  EGU2012-7551
H. F. Tsai, B. M. Hsu, K. H. Huang, C. Y. She, P. M. Kao, S. M. Shen, S. F. Tseng, and J. S. Chen
Detection and Identification of Free-living Amoeba from Environmental Water in Taiwan by PCR Method

A151  EGU2012-7696
S. Burak and R. Meddeb
Natural disaster vulnerability and human-induced pressure assessment in small islands developing states: A case study in the Union of the Comoros

HS7.4/AS4.17/CL2.10 – Climate, Hydrology and Water Infrastructure (co-organized) – Orals
Room: 33
Chairperson: n.n.

13:30–13:45  EGU2012-14002
Z. W. Kundzewicz
Changes in flood risk in Europe - Holistic perspective

13:45–14:00  EGU2012-698
C. Chaudhuri, R Srivastava, and S N Tripathi
Development of a Dynamic Downscaling strategy for Ganga Basin and Investigation of the Hydrological Pattern

14:00–14:15  EGU2012-10854
J. Dahne, Dr. C. Donnelly, Dr. D. Gustavsson, and J. Södling
Using Discharge data and hydrological modelling to evaluate precipitation data

14:15–14:30  EGU2012-14357
M. Kallache
Assessing extreme values for water management purposes in the context of climate change
14:30–14:45 EGU2012-11319
**A. Jobst, J. Schmid, R. Ludwig, and M. Muerth**
Impacts of climate change on the water management system on the alpine Upper Isar river with regards to hydro power potential and residual flow

14:45–15:00 EGU2012-984
**C. Arregoitia and M.P. Mesa**
Impact of climatic conditions on the design of a water treatment plant

Chairperson: n.n.

15:30–15:45 EGU2012-4377
**R.P. Allan, D.A. Lavers, C.L. Liu, and M. Zahn**
Current and future changes in precipitation and its extremes

15:45–16:00 EGU2012-11871
**S.B. Guerreiro, C.G. Kilby, and F. Serinaldi**
Analysis of Rainfall Changes in Transnational Basins in Portugal and Spain

16:00–16:15 EGU2012-5270
**R. J. van der Ent** and H. H. G. Savenije
Oceanic versus continental sources of precipitation

16:15–16:30 EGU2012-8261
**Y. Guo**
Long-term Free-Atmosphere absolute Humidity Trends in China Derived from Homogenized In situ Radiosonde Dew Point Temperature Series

16:30–16:45 EGU2012-956
**E. Steirou** and D. Koutsoyiannis
Investigation of methods for hydroclimatic data homogenization

16:45–17:00 EGU2012-4731
**F. Johnson and A. Sharma**
On long-term persistence in GCM rainfall simulations: Implications for water resources planning and design

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**CL4.5/OS1.8 – Global and regional sea level rise and variability: from past to future (co-organized) – Orals**
Convener: S. Jevrejeva | Co-Conveners: A. Cazenave, A. Grinsted
Room: 16
Chairperson: Grinsted

13:30–13:45 EGU2012-102
**H. Palanisamy, B. Meyssignac, D. Peng, A. Cazenave, and M. Becker**
Regional sea level variability in the Caribbean and South China Sea over 60 years from 1950-2009

13:45–14:00 EGU2012-2347
**J. Williams** and C. W. Hughes
Coherence of off-shore steric height and island sea level.

14:00–14:15 EGU2012-2672
**A.B.A. Slangen, R.S.W. van de Wal, and L.L.A. Vermeersen**
Can we explain regional relative sea-level variations for the period 1961-2003?

14:15–14:30 EGU2012-3348
**G. Woppelmann and M. Marcos**
Coastal sea level rise in southern Europe and the nonclimate contribution of vertical land motion

14:30–14:45 EGU2012-3554
**E. Giarolla** and R. Matano
Low-Frequency Variability of the Southern Ocean Circulation

14:45–15:00 EGU2012-5612
**F. M. Calafat** and D. Chambers
Mechanisms of decadal sea level variability in the Eastern North Atlantic and the Mediterranean Sea

Chairperson: Cazenave

15:30–15:45 EGU2012-6029
**M. Geyer** and D. Salas y Melia
An assessment of the contribution of the Greenland ice sheet to future sea level rise

15:45–16:00 EGU2012-7273
**D. Volkov** and F. Landerer
The Genesis of Sea Level Variability in the Barents Sea

16:00–16:15 EGU2012-7510
**T. Kuhlbrodt** and J. M. Gregory
The spatial structure of simulated ocean heat uptake in the CMIP3 and CMIP5 climate models
16:15–16:30  EGU2012-8632  
K. S. Madsen and T. Schmith  
Decadal sea level variations in the North Atlantic and Arctic Oceans

16:30–16:45  EGU2012-9155  
M. Carson, A. Köhl, and D. Stammer  
Low-frequency sea surface height variability from long control runs of coupled models

16:45–17:00  EGU2012-9802  
The role of Argo steric sea level within the global sea level budget

CL4.5/OS1.8 – Global and regional sea level rise and variability: from past to future (co-organized) – Posters
Convener: S. Jevrejeva | Co-Conveners: A. Cazenave, A. Grinsted  
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00  
Chairperson: Jevrejeva

XY197  EGU2012-2146  
E.P.H. Bregman, I.Kant Baltic Federal State University, Kaliningrad, Russia; Utrecht University, the Netherlands and O.A. Druzhinina, I.Kant Baltic Federal State University, Kaliningrad, Russia  
Post-glacial coast development and human settling of the North European Ice Marginal Landscape (IML)

XY198  EGU2012-3077  
P. Meyssignac, O. Henry, P. Prandi, A. Cazenave, and D. Stammer  
Past sea level reconstruction over the Arctic Ocean since the mid-1950s

XY199  EGU2012-3304  
R. Torres and M. Tsimpis  
Seasonal sea level cycle in the Caribbean Sea

XY200  EGU2012-3305  
R. Torres and M. Tsimpis  
Sea level trends and interannual variability in the Caribbean Sea

XY201  EGU2012-3831  
S. Jevrejeva, J. Moore, and A. Grinsted  
Trends and acceleration in regional sea levels

XY202  EGU2012-3699  
Estimating ENSO influence on the global mean sea level during 1993-2010

XY203  EGU2012-3874  
S. Jevrejeva, J. Moore, and A. Grinsted  
About the difference between sea level projections by 2100 using semi-empirical and process based models.

XY204  EGU2012-4764  
M. Benavent, J. Arnoso, and E. J. Vélez  
Tides at the east coast of Lanzarote Island

XY205  EGU2012-5062  
R. V. Donner, R. Ehrcke, S. M. Barbosa, J. Wagner, J. F. Donges, and J. Kurths  
Spatial patterns of linear and nonparametric long-term trends in Baltic sea-level variability

XY206  EGU2012-5493  
M. Wenzel and J. Schroeter  
Regional and global sea level change since 1900 estimated from tide gauges and altimetry

XY207  EGU2012-6050  
M. Hewelt, B. Mizi?ski, and T. Niedzielski  
Implementing algorithms for modelling and prediction of sea level change using threshold models

XY208  EGU2012-6286  
G. Chepurin and J. Carton  
Sea level Atlantic-to-Arctic: an examination of the altimeter record

XY209  EGU2012-6811  
E. C. Pavlis, K. Evans, P. Milas, D. Paradissis, B. A. Massinas, and X. Frantzis  
Aegean Sea Level Network: Eastern Mediterranean Altimeter Calibration Network - eMACnet

XY210  EGU2012-6331  
J.J. Martinez Benjamin, J. Gili, R. Lopez, A. Tapia, E. Bosch, B. Perez, and F. Pros  
Monitoring Sea Level by Tide Gauges and GPS at Barcelona and Estartit Harbours

XY211  EGU2012-7671  
G. Metreveli, N. Tsiptsivadze, K. Tavartqiladze, G. Dokhnadze, L. Lagidze, and N. Motsonelidze  
Characteristic Features of Sea Level Series Analysis in the World Ocean Current Climatic Eustasy Research

XY212  EGU2012-6746  
T. Suzuki and M. Ishii  
Decadal to inter-decadal sea level changes in the North Pacific
XY213  EGU2012-10078  
A. Hibbert  
The Semiannual Oscillation of Southern Ocean Sea Level  

XY214  EGU2012-6765  
A. Fadil, P. Denys, and R. Tenzer  
Sea Level Rise In New Zealand: Vertical Land Motion from GPS, and Combined Satellite Altimetry And Tide Gauge Sea Level Records  

XY215  EGU2012-10420  
The Permanent Service for Mean Sea Level: A review of recent updates  

XY216  EGU2012-14377  
M. Ablain, Y. Faugere, G. Larnicol, N. Picot, A. Cazenave, and J. Benveniste  
Improvement of global and regional mean sea level derived from satellite altimetry multi missions  

XY217  EGU2012-7704  
L. Scarascia and P. Lionello  
Links between Sea Level in the northern Adriatic sea and large scale patterns  

XY218  EGU2012-12935  
Y. Cheng and O.B. Andersen  
Sea level annual cycle in sea level from tide gauges, altimetry and ocean models in the Polar Seas  

XY219  EGU2012-14142  
M. Beenstock, E. Frank, D. Felsenstein, and Y. Rengewertz  
Tide Gauge Location and the Measurement of Global Sea Level Rise  

XY220  EGU2012-13526  
S. Esselborn  
Patterns of Sea Level Variability in the North Atlantic  

XY221  EGU2012-12100  
A. Bonaduce and N. Pinardi  
Low frequency Sea Level Variability: correlation between altimetry and tide gauges in the Mediterranean Sea  

XY222  EGU2012-11534  
S. Morucci, R. Inghilesi, and A. Orazi  
Analysis of Long-Term Sea Level Variation in the Italian Seas  

XY223  EGU2012-1536  
h. chen, P. Tkalich, and P. Malanotte-Rizzoli  
The forced and free response of the South China Sea to the large scale monsoon system  

XY224  EGU2012-2746  
P. L. Svendsen, O. B. Andersen, and A. A. Nielsen  
Sea level reconstruction from satellite altimetry and tide gauge data  

XY225  EGU2012-11013  
A. Ollivier, G. Valladeau, J.F. Legeais, Y. Faugere, N. Picot, and P. Femenias  
Towards an improved altimeter time series for Envisat climate applications  

XY226  EGU2012-3726  
D. Gomis and G. Jordà  
Inconsistencies in sea level pressure trends between different atmospheric products. Impact on sea level trend estimation  

XY227  EGU2012-8688  
T. Schmith, S. Johansen, and P. Thejll  
Statistical analysis of global surface temperature and sea level using cointegration methods  

XY228  EGU2012-11364  
B.D. Hamlington, R.R. Leben, and K.-Y. Kim  
Improving Sea Level Reconstructions Using Non-Sea Level Measurements  

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**AS4.13/CL4.7 – Aeolian dust, initiator, player, and recorder of environmental change (co-organized) – Orals**

Convener: P. Knippertz | Co-Conveners: J.-B. Stuut  
**Room: 11**

Chairperson: n.n.  

10:30–10:45  EGU2012-10844  
N. Huneeus and the AeroCom Team  
Global dust model intercomparison in AeroCom phase I  

10:45–11:00  EGU2012-2213  
M. Astitha, M. Abdel Kader, A. Pozzer, and J. Lelieveld  
Assessment of two physical parameterization schemes for desert dust emissions in an atmospheric chemistry general circulation model
I. Tegen, K. Schepanski, and B. Heinold
Saharan dust source activation: Comparing two years regional modelling results and satellite observations

B. Heinold, P. Knippertz, S. Fiedler, J. H. Marsham, and I. Tegen
The Role of Deep Convection and Low-Level Jets Forcing Dust Emissions in West Africa: A High-Resolution Regional Dust Modelling Study

A Robust Satellite Technique (RST) for detection and monitoring of dust storms

A multi-observational Characterisation of Dust Emission from Sources within complex Terrain

LUNCH BREAK

Chairperson: n.n.

A. Ansmann
Lessons learned from the SAMUM-1 and SAMUM-2 field campaigns and future activities

Fennec - The Saharan Climate System: an overview

An overview of the June 2011 Fennec surface-based observations in the central Sahara: New insights into dust uplift and transport

C. Kocha, C. Flamant, F. Marnas, J.P. Chaboureau, D. Parker, J. Marsham, P. Knippertz, and L. Garcia-Carreras
How a dusty cold pool can change the diurnal evolution of the Saharan Atmospheric Boundary Layer

CL Ryder, EJ Highwood, P Rosenberg, J Trembath, M Bart, J Brooke, J Dorsey, K Turnbull, A Dean, I Crawford, R Cotton, J McQuaid, and R Washington
Microphysical and Optical Properties of Saharan Dust from Airborne Measurements during the Fennec 2011 Campaign

Chairperson: n.n.

H. Zheng
Production of Asian dust: tectonics vs climate

A. Bird, T Stevens, A Carter, T P Watson, P Vermeesch, H Lu, S Andò, E Garzanti, M A Cottam, I Sevastjanova, and M Rittner
Genetic linkage between the Yellow River and the Chinese Loess Plateau

A. Bory, W. Abouchami, S. Galer, A. Svensson, and P. Biscaye
Chinese mineral dust and anthropogenic aerosol inter-continental transport: a Greenland perspective

P. De Deckker
Multidisciplinary studies of the dust storm that affected Sydney in September 2009

S. Cowie, P. Knippertz, and K. Schepanski
A Climatology of Dust-Emission Events over North Africa Based on 27 Years of Surface Observations
Reconstruction of Holocene and LGM atmospheric dust aerosol concentrations from paleoclimatic archives

Inorganic trace element content of aerosols at puy de Dôme, France

Updated dust-iron dissolution mechanism: Effects of organic acids, photolysis, and dust mineralogy

Evaluation of a Mineral Dust Simulation in the Atmospheric-Chemistry General Circulation Model-EMAC

Improving Air Pollution Modeling Over The Po Valley Using Saharan Dust Transport Forecasts

Saharan dust contribution to PM levels: The EC LIFE+ DIAPASON project

Size distribution of PM at Cape Verde - Santiago Island

An analysis of Saharan desert dust over Mediterranean Basin

Vertical distribution of the Saharan Air Layer from 5 years of CALIPSO observations

Satellite based Observations of Saharan Dust Source Areas - Comparison and Variability

The Desert Storms Project - Towards an Improved Representation of Meteorological Processes in Models of Mineral Dust Emission

Is a change in roughness length the cause of the recent decrease in Sahelian dust emission?

A climatology of Nocturnal Low-level Jets over North-Africa and implications for simulating mineral dust emission

The Representation of Nocturnal Low-Level Jets in Meso-Scale Atmospheric Models and its Relevance for Dust Emission
<table>
<thead>
<tr>
<th>XY84</th>
<th>EGU2012-10533</th>
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<tbody>
<tr>
<td><strong>B. Heinold</strong>, P. Knippertz, S. Cowie, S. Fiedler, and K. Schepanski</td>
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<tr>
<td>The Low-Level Jet Phenomenon in North-African Deserts: An Idealized Large Eddy Simulation Study</td>
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<tr>
<th>XY85</th>
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<tr>
<td><strong>A. Roberts</strong> and P Knippertz</td>
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<tr>
<td>The Formation and Behaviour of a large Saharan Haboob</td>
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<th>XY86</th>
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<tr>
<td>The French component of the FENNEC Saharan Climate project 2011 Special Observing Period</td>
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<th>XY87</th>
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<tr>
<td>Verification of mesoscale dust forecasts over the Sahara during FENNEC 2011</td>
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<tr>
<th>XY88</th>
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<tr>
<td><strong>P. Chazette</strong>, P. Royer, F. Marnas, C. Flamant, P. Doira, C. Grenier, and J. Sanak</td>
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<td>N2-Raman lidar for dust aerosol survey over the southern Spain within the frame of FENNEC</td>
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<th>XY89</th>
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<tr>
<td><strong>F. Marnas</strong>, P. Chazette, C. Flamant, P. Royer, H. Sodemann, and Y. Derimian</td>
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<tr>
<td>Characterization of Saharan dust properties transported towards Europe in the frame of the FENNEC project: a case study</td>
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<tr>
<th>XY90</th>
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<tr>
<td>H. Sodemann, <strong>M. Lai</strong>, P. Knippertz, M. Bart, F. Marenco, J.B. McQuaid, P. Rosenberg, and C. Ryder</td>
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<td>Validation of a Lagrangian dust transport model with data from the Fennec/LADUNEX field campaign</td>
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<th>XY91</th>
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<tr>
<td>C. E. Birch, <strong>J. H. Marsham</strong>, D. J. Parker, and G. M. Devine</td>
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<td>The effect of orography and surface albedo on stratification in the summertime Saharan boundary layer: Dynamics and implications for dust transport</td>
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<th>XY92</th>
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<tr>
<td>WRF sensitivity analysis of the diurnal cycle of Saharan planetary boundary layer</td>
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<th>XY93</th>
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<tr>
<td>Understanding the central west Saharan summertime dust hotspot: Identification and classification of active dust emissions and associated processes from Caliop analysis</td>
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<tr>
<td>Atmospheric dust emission mechanisms at the summer global dust maximum: observations from Bordj Mokhtar, Algeria</td>
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<td><strong>S. Engelstaedter</strong>, R. Washington, C. Allen, C. Flamant, J.-P. Chaboureau, C. Kocha, and C. Lavaysse</td>
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<td>Understanding the Role of the Saharan Heat Low in Modifying Atmospheric Dust Distributions - Observations From Two Research Aircraft Flying Simultaneously Over Western Africa</td>
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<tr>
<td><strong>J. Brooke</strong>, M. Bart, J. Trembath, J.B. McQuaid, B.J. Brooks, and S. Osborne</td>
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<td>Coarse mode aerosol measurement using a Low Turbulence Inlet</td>
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<tr>
<td>Aging of mineral dust during transport from the Sahara into the Cape Verde area - results from airborne measurements during SAMUM</td>
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<tr>
<td><strong>C. Flamant</strong>, F. Abdi Vishkaee, J. Cuesta, H. Khalesifard, L. Oolman, and P. Flamant</td>
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<td>Observation of dust emission and transport over Iraq and northwest Iran associated with winter Shamal</td>
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<tr>
<td><strong>H. Ágústsson</strong> and H. Ólafsson</td>
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<td>The 13 September 2011 storm of resuspended volcanic ash</td>
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<tr>
<td><strong>S. Jónsson</strong> and H. Ólafsson</td>
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<td>The Reykjavík storm of resuspended ash</td>
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<th>XY101</th>
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<tr>
<td>Importance of Biological Loess Crusts for Loess Formation in Semi-Arid Environments</td>
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XY102 EGU2012-6147
M. Shahgedanova, S. Kutuzov, K. White, G. Nosenko, and M. Woodage
Climatology of dust deposition events on Garabashi Glacier, Mt Elbrus, Caucasus, developed from snow pits using remote sensing, climate models and sedimentological analysis

XY103 EGU2012-5677
J.E. Bullard, J.M. Prospero, and R. Hodgkins
High latitude dust over the North Atlantic: inputs from Icelandic proglacial dust storms

XY104 EGU2012-12041
Iberulites deposition on soils of Granada (South Spain)

XY105 EGU2012-7491
G. Stauch, F. Lehmkuhl, A. Hilgers, and H. Zhao
Holocene aeolian sediments on the NE Tibetan Plateau

XY106 EGU2012-1293
Holocene regional gradients of dust provenance and flux between Talos Dome and Dome C, East Antarctica.

XY107 EGU2012-2030
D.-D. Rousseau, P. Antoine, M. Fuchs, C. Hatté, F. Lagroix, G. Küla, A. Sima, and M. Ghil
Major dust events in Europe during the last interglacial s. l. period.

XY108 EGU2012-10630
J.-B. Stuut, F. Temmesfeld, D. Hebbeln, and P. Dedecker
Late Quaternary aridity changes in the winter-rain areas on the Southern Hemisphere: inferences from the marine sediment archive

XY109 EGU2012-10291
C. Skonieczny, A. Bory, V. Bout-Roumazeilles, F. Grousset, B. Malaizé, P. Martinez, I. Billy, E. Caron, L. Debeauvais, and J. Carrons
A 1.2 Ma unique record of the aeolian terrigenous signal off West Africa

CL4.9/AS1.4 – Synoptic climatology – methods and applications (co-organized) – Orals
Convener: C. Beck | Co-Conveners: A. Philipp, J. Jacobitz
Room: 13
Chairperson: Andreas Philipp, Christoph Beck

10:30–10:45 EGU2012-11582
P. Bernardara, P. Brigode, J. Gailhard, F. Garavaglia, E. Paquet, and P. Ribstein
Comparison of a new rainfall-based weather patterns classification with 76 COST733 weather type classifications over Austria

10:45–11:00 EGU2012-4754
S. Radanovic, J.-P. Vidal, E. Sauquet, A. Ben Daoud, and G. Bontron
Optimising predictor domains for spatially coherent precipitation downscaling

11:00–11:15 EGU2012-3149
PM Sousa, R Trigo, MG Pereira, D Rasilla, and C. Gouveia
Modelling wildfire activity in Iberia with different Atmospheric Circulation WTs

11:15–11:30 EGU2012-217
N. Cortesi, R. Trigo, J.C González-Hidalgo, and A. Ramos
High resolution reconstruction of monthly autumn and winter precipitation of Iberian Peninsula for last 150 years.

11:30–11:45 EGU2012-4492
M. Hofstätter and B. Chimani
Circulation Type Classifications and their nexus to Van Bebber's storm track Vb

11:45–12:00 EGU2012-3432
A. Martínez, A. Baquero-Bernal, and C. Abril
Weather regimes over Colombia, South America, during the JJA using Self-Organizing Maps

CL4.9/AS1.4 – Synoptic climatology – methods and applications (co-organized) – Posters
Convener: C. Beck | Co-Conveners: A. Philipp, J. Jacobitz
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Christoph Beck, Andreas Philipp

XY229 EGU2012-12667
H. W. Rust, M. Vrac, M. Lengaigne, and B. Sultan
Circulation patterns and their differences - A probabilistic point of view
XY230  EGU2012-6259  
G. Masato and D. Brayshaw  
Clustered GWL types: methodology and applications

XY231  EGU2012-172  
C. Lennard  
Changes in the synoptic drivers of extreme rainfall in South Africa

XY232  EGU2012-4171  
H. Baltaci, T. Kindap, A. Unal, and M. Karaca  
Analysis of Synoptic Weather Types and Its Influence on Precipitation in the Marmara Region (NW Turkey)

XY233  EGU2012-1632  
P. Froidevaux, O. Martius, and R. Weingartner  
Characterisation of flood events in Switzerland based on weather patterns

XY234  EGU2012-7680  
C. S. Photiadou, B. J. J. M. van den Hurk, A. H. Weerts, and A. J. van Delden  
Dominant circulation patterns for the Rhine basin determined by a high-resolution precipitation data set.

XY235  EGU2012-8029  
P. Brigode, Z. Micovic, P. Bernardara, J. Gailhard, E. Paquet, F. Garavaglia, and P. Ribstein  
Link between rainfall-based weather patterns classification over British-Columbia and El Niño Southern Oscillations

XY236  EGU2012-978  
J.M. Arraut and P. Satyamurty  
The Argentinean Col, Separatrices, Frontogenesis and Strong Rainfall in Subtropical South America

XY237  EGU2012-3342  
V. Stefanescu, S. Stefan, and F. Georgescu  
GWT18 air circulation types linked to heavy precipitation in Romania between 1980 and 2009

XY238  EGU2012-13428  
L. Durán, B. Rodríguez-Fonseca, E. Sánchez-Sánchez, and C. Yagüe  
Weather types and precipitation at the Iberian Central System

XY239  EGU2012-2144  
E. Tyrlis and J. Lelieveld  
Aspects of a climatology and dynamics of the strong Etesians

XY240  EGU2012-14227  
M Menendez, P Camus, FJ Mendez, and IJ Losada  
A weather type method to study surface ocean variables

XY241  EGU2012-3472  
S. Andrei and S. Stefan  
Climatologically aspects of Bucharest's UHI in connection with synoptic scale atmospheric circulation patterns

XY242  EGU2012-12971  
C. Weitnauer, C. Beck, and J. Jacobel  
Local PM10 concentrations in Augsburg (Germany) and their connection to large scale circulation types

XY243  EGU2012-6822  
S. Parsons, A. J. McDonald, and J. Renwick  
Future Weather Patterns in New Zealand using Synoptic Climatology: Kidson Types and a Simple Synoptic Classification System

XY244  EGU2012-9170  
A. Belleflamme, X. Fettweis, and M. Erpicum  
Are the CMIP5 GCMs able to simulate atmospheric blocking situations over Europe ?

XY245  EGU2012-13539  
Comparison of wind simulations in HadRM3P and WRF with ERA-Interim

XY246  EGU2012-5682  
H. Ries, C. Moseley, and A. Haensler  
REMO poor man's reanalysis

CL5.10 – Regional Climate Modeling, projections and impacts (including CORDEX) – Posters

Convener: F. Giorgi | Co-Conveners: R. Arritt, A. Zakey  
Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00  
Chairperson: Giorgi, Arritt, Zakey

XY247  EGU2012-1397  
D. Zhang, J. Winter, and E. Eltahir  
Coupling of a Dynamic Biosphere Model and a Regional Climate Model
XY248  EGU2012-1745
H. Ho, B. Rockel, H. Kapitza, and S. Valcke
A 2-way online coupled Regional Model for climate simulation over Baltic Sea and North Sea Regions

XY249  EGU2012-1753
E. Plavcová and J. Kyselý
Biases in the diurnal temperature range in Central Europe in an ensemble of regional climate models and their possible causes

XY250  EGU2012-1772
E. Plavcová and J. Kyselý
Atmospheric circulation in regional climate models over Central Europe: links to surface air temperature and the influence of driving data

XY251  EGU2012-2551
A new project on development and application of comprehensive downscaling methods over Hokkaido.

XY252  EGU2012-4356
S. Kotlarski, D. Lüthi, and C. Schär
The dependence of 21st century European climate change on surface elevation - An RCM ensemble analysis

XY253  EGU2012-4773
O. Gutjahr and G. Heinemann
Comparing bias correction methods for high-resolution COSMO-CLM daily precipitation fields

XY254  EGU2012-4475
J.-H. Park, S.G. Oh, M.S. Suh, and H.S Kang
Impact of boundary conditions on RegCM4 20-year-long precipitation simulations over CORDEX-East Asia domain

XY255  EGU2012-4096
P. Thejll, C. Fox Maule, and J. Hesselbjerg Christensen
When will climate scenario runs show a statistically significant change in drought indices?

XY256  EGU2012-3948
H. G. Takahashi, M. Hara, T. Yoshikane, and M. Fujita
A discrepancy in precipitable water among the major reanalyses over tropics and its effect on downscaling

XY257  EGU2012-5361
T. Tian, F. Boberg, O.B. Christensen, and J.H. Christensen
The importance of choosing interactive coupling on the atmosphere in the Baltic Sea region and in the North Sea-Baltic Sea transition

XY258  EGU2012-5542
C. Gallardo, V.E. Gil, E. Hagel, C. Tejeda, M. de Castro, E. Sánchez, and M.A. Gaertner
Assessment by the use of the Köppen-Trewartha classification of climate change in Europe throughout the 21st century from an ensemble of regional climate models.

XY259  EGU2012-7194
Development of new ensemble methods based on the performace skills of regional climate models over South Korea

XY260  EGU2012-6339
S. Mayer, S. Sobolowski, and S. Outten
Assessment of extreme precipitation over Northern Europe using WRF as a regional climate model within the RiskChange-project

XY261  EGU2012-8017
R Nogherotto, AM Tompkins, F Giorgi, and E Coppola
The new microphysic cloud scheme implemented in RegCM4

XY262  EGU2012-2968
E. M. Zubler, D. Lüthi, and C. Schär
Future of the hydrological cycle over Europe - Lessons learned from a surrogate climate change scenario

XY263  EGU2012-11874
K. Goergen, K. Houchi, J. Junk, P. Sinigoj, L. Pfister, and L. Hoffmann
Extreme events in a WRF regional climate model validation run for EURO-CORDEX

XY264  EGU2012-8902
A. Dell’Aquila, S. Calmanti, PM Ruti, MV Struglia, G. Pisacane, A Carillo, and G Sannino
Impacts of seasonal cycle fluctuations in an A1B scenario over the Euro-Mediterranean

XY265  EGU2012-10750
A. Martynov, R. Laprise, L. Sushama, K. Winger, and B. Dugas
Reanalysis-driven climate simulation over CORDEX North America domain using the Canadian Regional Climate Model, version 5: model performance evaluation.

XY266  EGU2012-6880
M. Hara, H. Kawase, X. Ma, Y Wakazuki, M. Fujita, and F. Kimura
Future change in seasonal march of snow water equivalent due to global climate change
XY267 EGU2012-2872
  C. Menz and Guanting Project Team
  Dynamical and statistical climate modelling in the CORDEX-easia domain

XY268 EGU2012-9446
  S. Shukla, B. Livneh, and D. Lettenmaier
  The relative value of MRED winter seasonal forecasts vs. statistically downscaled CFS forecasts for seasonal hydrological forecasting

XY269 EGU2012-8257
  J.J. Attema and G. Lenderink
  The influence of the North-Sea on coastal precipitation

XY270 EGU2012-8334
  F. Boberg and J. Christensen
  Confidence in Lowered Southern Europe Temperature Projections due to Model Deficiencies

XY271 EGU2012-8662
  M. León, Y. González, J.P. Díaz, F.J. Expósito, J.C. Pérez, and A. González
  Intercomparison of IPCC AR4 models with ERA-40 and NCEP/NCAR reanalysis within the AFRICA-CORDEX domain

XY272 EGU2012-10132
  A. Rios-Entenza and G. Miguez-Macho
  Spring precipitation in inland Iberia: land-atmosphere interactions and recycling and amplification processes.

XY273 EGU2012-13758
  HF Campos Velho, SR Freitas, RP Souto, AS Charao, S Ferraz, DR Roberti, N Streck, PO Navaux, N Maillard, W Collischonn, G Diniz, and B Radin
  Mesoscale Climate Evaluation Using Grid Computing

XY274 EGU2012-13538
  T. Halaenka and M. Belda
  RegCM3 vs. RegCM4 comparison for CORDEX in Africa and Europe

XY275 EGU2012-11507
  P. Nolan and P. Lynch
  Simulating Climate Change in Ireland

XY276 EGU2012-11221
  S. Wagner, P. Berg, G. Schaedler, and H. Kunstmann
  High resolution RCM simulations for Germany: validation and projected climate changes

XY277 EGU2012-13472
  B. Grassi, G. Redaelli, and G. Visconti
  Extreme climate events in the Mediterranean region during winter due to artctic sea-ice reduction

XY278 EGU2012-10226
  N. Salzmann, H. Machguth, and A. Linsbauer
  The Swiss Alpine Glacier's Response to the 2 °C air temperature target'

XY279 EGU2012-8744
  Regional climate simulations over Africa using WRF Model: Sensitivity to the dynamical downscaling methods.

XY280 EGU2012-8800
  Comparative analysis of cloud cover databases for CORDEX-AFRICA

XY281 EGU2012-13445
  E. Sanchez, P. Zaninelli, A. Carril, C. Menendez, and M. Dominguez
  Analysis of extreme climatic features over South America from CLARIS-LPB ensemble of regional climate models for future conditions

XY282 EGU2012-8949
  M. Chiacchio, F. Salomo, F. Giorgi, and P. Stackhouse
  Evaluating the global energy budget with a regional climate model over Europe

XY283 EGU2012-6386
  M. Llopart and R.P. da Rocha
  CLM Coupled in the RegCM4.1 Model: Sensitivity to the Cumulus Convective Schemes over the Amazon Rainforest

XY284 EGU2012-10807
  M. A. Gaertner, E. Sánchez, M. Domínguez, V. Gil, R. Romero, and C. Gallardo
  Analysis of the risk of tropical cyclones over the Mediterranean Sea with ENSEMBLES climate change scenarios

XY285 EGU2012-10912
  N. Lopez de la Franca and E. Sanchez
  Changes in the length of the seasons over the Iberian Peninsula for future conditions from ENSEMBLES regional climate models ensemble
Changes in the percentage of area under drought in Europe during this century

Validation of the annual cycle of extreme precipitation events across the UK in 14 regional climate models

Developing next generation high resolution DEcadal and Long Term climate projections for IrelAnd (DELTA)

Trend and frequency of drought over Ethiopia using observational and RegCM4 driven indices

Modelling soil-plant-atmosphere interactions by coupling the regional weather model WRF to mechanistic plant models

Characterization of wet and dry spells simulated by RegCM4 over the South America

Comparison of 21st century regional climate projections for the Carpathian Basin using ENSEMBLES outputs

Assessing the climate change impact on the hydrology of Spencer Creek watershed based on RCMS and an interpolated GCM

Regional climate projections for Saudi Arabia

Contribution of soil moisture in summer heat waves amplitude in MED-CORDEX simulations

Regional Climate Response to Volcanic Radiative Forcing in Middle East and North Africa

Systematic errors in regional climate model RegCM over Europe and sensitivity to variations in PBL parameterizations

Regional climate projection based on RCP scenarios in the CORDEX East Asia Domain Using RegCM4

Evaluation of Regional climate models: how much can we trust in gridded observational data sets?

Precipitation variability and extremes in ENSEMBLES RCM simulations over Portugal

A regional ocean model for the Southwest Pacific Ocean region to assess the risk of storms

Variations in temperature and precipitation during Indian summer monsoon simulated by RegCM3

Soil-atmosphere interactions, cloud feedback and land-sea contrast: their interactions and role in the uncertainties of regional climate projections over Europe.
CL5.13 – Climate Services - Underpinning Science – Orals
Convener: A. Dell'Aquila | Co-Conveners: R. van Oss, P. M. Ruti
Room: 13
Chairperson: P. M. Ruti

13:30–13:45  EGU2012-14214
F Lúcio
Global Framework for Climate Services (GFCS)

13:45–14:00  EGU2012-2588
S. Rösner
The WMO RA VI Regional Climate Centre Network - a support to users in Europe

14:00–14:15  EGU2012-9751
C.D. Hewitt and C. Buontempo
Climate services at the international level

14:15–14:30  EGU2012-6780
S. Zebiak, G. Brasseur, and Members of the CSP Coordinating Group
The Climate Services Partnership (CSP): Working Together to Improve Climate Services Worldwide

14:30–14:45  EGU2012-6658
G. Anderson
Climate Services for Development Planning and Implementation: A Framework for Assessing and Valuing Climate Services

14:45–15:00  EGU2012-7284
D Jacob, I. Kotova, and IMPACT2C Team
IMPACT2C: Quantifying projected impacts under 2°C warming

Chairperson: R. van Oss

15:30–15:45  EGU2012-4797
G. Brasseur, R. Braun, D. Jacob, M. Schaller, and R. Schwarze
The German Climate Service Center: Philosophy, First Achievements and Lessons Learnt

15:45–16:00  EGU2012-1118
C.M. Goddess and the CLIM-RUN Climate Expert (CET) and Stakeholder Expert (SET) Team
Facilitating a stakeholder-led approach to the development of Mediterranean climate services: co-ordinating the CLIM-RUN case studies

16:00–16:15  EGU2012-12515
C. Dubois and the CLIM-RUN Team
CLIM-RUN: Tourism case study over the French Alps

16:15–16:30  EGU2012-14318
A Feijt
Towards new Climate Scenarios for The Netherlands; connecting science and society

16:30–16:45  EGU2012-3308
S. Sobolowski, M. Mesquita, and K. Keay
Projected Changes in Northern Europe Storm and Precipitation Characteristics: Uncertainty and the Implications for Climate Services

16:45–17:00  EGU2012-4335
S. Parey, G. Galloy, and M. Nogaj
An example of model result correction to study the impact of climate change on electricity consumption

CL5.13 – Climate Services - Underpinning Science – Posters
Convener: A. Dell’Aquila | Co-Conveners: R. van Oss, P. M. Ruti
XY310  EGU2012-2076  
Service Center for Climate Change Adaptation in Agriculture - an initiative of the University of West Hungary

XY311  EGU2012-5149  
M. Per?ec Tadi?, K. Cindi?, M. Gaji?-?apka, and K. Zaninovi?  
Spatial differences in drought vulnerability

XY312  EGU2012-8154  
P. You and R. Vautard  
Extreme Events and Energy Providers: Science and Innovation

XY313  EGU2012-12735  
M. De Felice, A. Alessandri, and P.M. Ruti  
Energy demand forecasting by means of Statistical Modelling: Assessing Benefits of Climate Information

XY314  EGU2012-12490  
F. Kaspar, E. Penda, G. Müller-Westermeier, K. Zimmermann, and H. Mächel  
Monitoring of Climate Change in Germany - Data, products and services of Germany's National Climate Data Centre

XY315  EGU2012-13309  
Climate change impacts on forest fires: the stakeholders' perspective

XY316  EGU2012-10138  
S. Torresan, V. Gallina, V. Giannini, J. Rizzi, A. Zabeo, A. Critto, and A. Marcomini  
DESYCO: a Decision Support System to provide climate services for coastal stakeholders dealing with climate change impacts.

XY317  EGU2012-11047  
J. Ferreira, A. Rocha, J. M. Castanheira, and A. C. Carvalho  
Dynamical downscaling inter-comparison for high resolution climate reconstruction

XY318  EGU2012-11068  
M. Kolasinski, H. Loukos, and P.A. Michelangeli  
Territorial Climate Profiles: a methodological approach to provide local climate information for climate change adaptation

XY319  EGU2012-5898  
R. Schwarze, A. Navarra, D. Jacob, and G. Brasseur  
Developing Climate Services in Europe: The Challenges Ahead

XY320  EGU2012-7640  
Swiss Climate Change Scenarios: The CH2011 Initiative

XY321  EGU2012-9483  
P. Kutscher, J. Olsson, D. Havlik, and G. Gruber  
Future IDF curves for regional planning in Europe

XY322  EGU2012-10534  
S. Calmanti, J. Syroka, C. Jones, F. Carfagna, A. Dell'Aquila, P. Hoefsloot, S. Kaffaf, and G. Nikulin  
Model based climate information on drought risk in Africa

XY323  EGU2012-7988  
C. Huggel and the AndesPlus project Team  
Developing services for climate impact and adaptation baseline information and methodologies for the Andes

XY324  EGU2012-80  
Y. Kuleshov, M. Grandbois, and S. Kaniaha  
An Interface between Law and Science: The Climate Change Regime

XY325  EGU2012-2511  
J. O'Brien  
Climate services as practised in the southeast USA

XY326  EGU2012-13782  
T. Brown and D. Todey  
Regional and State Climate Services in the United States

XY327  EGU2012-2811  
A. Valved, I. Barstad, and S. Sobolowski  
Towards improving the reliability of future regional climate projections: A bias-correction method applied to precipitation over the west coast of Norway
EGU General Assembly 2012

XY328  EGU2012-5855
M. Sima, D. Micu, C. Dragota, V. Chendes, M. Micu, and D. Balteanu
Scientific services related to climate-induced natural hazards in the Vrancea Seismic Region, Romania

XY329  EGU2012-4180
B. Weber
A step towards realizing a pan-European Climate Service - Activities of the Climate Service Center in the ECLISE project

XY330  EGU2012-1221
M.T.H. van Vliet, J.R. Yearsley, F. Ludwig, S. Vögele, D.P. Lettenmaier, and P. Kabat
Climate Services for Thermoelectric Power in Europe and the U.S.

XY331  EGU2012-13542
S.F. Kew, F.M. Selten, and G. Lenderink
The joint threat of storm surges and high discharge for the Netherlands

BG6.3/CL5.14/SSP5.4 – Micropaleontology: a key to modern and ancient environments (co-organized) – Orals
Convener: K. Koho | Co-Conveners: F. Jorissen, A. Sluijs, C. Fontanier
Room: 23
Chairperson: n.n.

15:30–15:45  EGU2012-1663
M. Mojtahid, H. Howa, J. Garcia, F. Jorissen, E. Michel, M. Cremer, F. Eynaud, H. Gillet, and S. Terrien
High resolution Holocene record in the southeastern Bay of Biscay: use of benthic and planktic foraminifera as paleoenvironmental proxies

15:45–16:00  EGU2012-7732
K. Müller-Navarra, A. Lochte, and G. Schmiedl
Benthic foraminiferal response to trophic changes across the last glacial-Holocene transition in the abyssal eastern Mediterranean Sea

16:00–16:15  EGU2012-3326
O. Romero and X. Crosta
Millennial-scale variability of diatom paleoproductivity during the last 50 ka: an equator-to-subtropics comparison along western Africa

16:15–16:30  EGU2012-2729
P.K. Bijl, A.J.P. Houben, F. Sangiorgi, A.P.J. Ebbing, J. Pross, A. Sluijs, and H. Brinkhuis
Eocene-Miocene dinoflagellate cyst assemblages from the Wilkes Land margin, Antarctica (IODP Leg 318): tracing greenhouse and icehouse dynamics of the Southern Ocean

16:30–16:45  EGU2012-12055
C. Joachim and J. Mutterlose
Assemblage level and intraspecific response of calcareous nannofossils during early Eocene hyperthermal events.

16:45–17:00  EGU2012-749
Terrestrial ecosystem collapse associated to the K-Pg boundary and dinosaur extinction: palynological evidences

HS7.2/AS1.20/CL5.16/NH1.3/NP3.6 – Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized) – Posters
Hall A | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Roberto Deidda

A104  EGU2012-1147
G. Naumann, P. Barbosa, H. Carrao, A. Singleton, and J. Vogt
Monitoring drought conditions and their uncertainties in areas with sparse precipitation data. Evaluation of different precipitation datasets in Africa.

A105  EGU2012-2934
R.A.I. Wilcke, T.M Mendlik, and A.G. Gobiet
Physical Consistency of Multi-Parameter Error-Correction and Downscaling of Regional Climate Models

A106  EGU2012-3421
M. Siam, M. Nour, and A. Wagdy
A Comparison of Statistical Downscaling Approaches to study the Impacts of Climate Change on the Hydrological Cycle of Upper Blue Nile basin
<table>
<thead>
<tr>
<th>A107</th>
<th>EGU2012-3465</th>
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<tbody>
<tr>
<td>R. Remesan and T. Bellerby</td>
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<tr>
<td>Sensitivity and dependence of mesoscale downscaled prediction results on different parameterizations of convection and cloud microphysics</td>
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<tr>
<th>A108</th>
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<tr>
<td>H. Shariff, C Furl, and M Al-Zahrani</td>
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<tr>
<td>Rainfall Climatology over Asir Region, Saudi Arabia</td>
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<th>A109</th>
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<tr>
<td>J. B. Gilmore, J. P. Evans, and S. C. Sherwood</td>
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<td>The influence of physics parameterizations on precipitation extremes in the Newcastle east coast low of 2007</td>
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<tr>
<th>A110</th>
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<tbody>
<tr>
<td>E. Maeda, J. Arevalo, and C. Carmona-Moreno</td>
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<tr>
<td>Effects of time-series length and gauge network density on rainfall climatology estimates in Latin America</td>
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<tr>
<th>A111</th>
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<tr>
<td>Bias correction and Downscaling of GCM for basin scale simulation</td>
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<tr>
<td>E. Mair, G. Bertoldi, S. Della Chiesa, G. Niedrist, L. Egarter Vigl, and U. Tappeiner</td>
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<tr>
<td>An approach to improve precipitation estimation to model the water budget in Alpine catchments</td>
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<tr>
<td>L. Dobor, Z. Barca, Á. Havasi, and N. Fodor</td>
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<tr>
<td>Preparation of high resolution climate scenarios for agricultural impact analysis in Hungary</td>
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<tr>
<td>C. Dobler</td>
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<tr>
<td>Downscaling precipitation extremes in a complex Alpine catchment</td>
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<tbody>
<tr>
<td>S. Thober, L. Samaniego, and R. Kumar</td>
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<tr>
<td>Evaluation of Regional Climate Models: Extremes important for Hydrological Projections</td>
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<tr>
<td>Model-based Estimation of Maximum Precipitation for the 1997 Storm Event Over American River Watershed, California, USA</td>
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<tr>
<td>S.D. Blazkova, K.J. Beven, and M. Martinova</td>
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<td>Hazard and vulnerability to climate change of the Skalka dam in Czech Republic</td>
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<tr>
<td>R. Deidda, G. Mascaro, M. Hellies, L. Baldini, and S. Sebastianelli</td>
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<td>A systematic analysis of precipitation retrieved by a Polarimetric Doppler ground radar in Central Italy</td>
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<tr>
<td>A. Langousis and V. Kaleris</td>
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<tr>
<td>A statistical approach to resolve incompatibilities between measured runoff data and daily estimates of spatially averaged rainfall</td>
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<tr>
<td>Q. Zhang, H. Körmich, and K. Holmgren</td>
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<tr>
<td>How well do reanalyses represent the southern African precipitation?</td>
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<tr>
<td>I. Anders and K. Haslinger</td>
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<tr>
<td>Varying trends in precipitation and temperature at different elevations in the European Alps? - A regional climate modelling perspective with COSMO-CLM</td>
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<tr>
<td>R. Sasse, G. Schädler, H. Feldmann, and Ch. Kottmäier</td>
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<td>Generation of Regional Climate Ensembles Using Atmospheric Forcing Shifting</td>
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<tr>
<td>R. Haas, K. Born, A. Georgiadis, M. K. Karremann, and J. G. Pinto</td>
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<td>Statistical Downscaling of Large-Scale Wind Signatures Using a Two-Step Approach</td>
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<tr>
<td>H.L. Cloke, F. Pappenberger, T. Eckel, R. Buizza, and K. Bogner</td>
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<td>The probabilistic Forecast Convergence Score (pFCS)</td>
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<tr>
<td>P-E. Mellander, S.G. Gebrehiwot, A.I. Gårdenäs, W. Bewket, and K. Bishop</td>
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<td>Summer Rains in the Upper Blue Nile Basin: half a century of past and future spatiotemporal patterns</td>
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<tr>
<td>N. Salzmann, M. Rohrer, D. Acuna, P. Calanca, and C. Huggel</td>
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<td>Assessment of future regional precipitation pattern for an Andes region in Southern Peru</td>
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A127  EGU2012-11128
M. Piazza, J Boe, C Page, E. Sanchez-Gomez, and L Terray
21st century snowfall changes over the French Alps: the role of temperature

A128  EGU2012-11725
M. Gosset and R. Roca
Propagation of Rainfall Products uncertainties in hydrological applications: Studies in the framework of the Megha-Tropiques Satellite Mission

A129  EGU2012-11754
D. D'Onofrio, V. Artale, S. Calmanti, J. von Hardenberg, E. Palazzi, and A. Provenzale
Stochastic rainfall downscaling of the PROTHEUS regional climate model

A130  EGU2012-11831
M. Giorgio and R. Greco
Modelling of eternal and internal intermittence of rainfall data via a simple event based stochastic model

A131  EGU2012-12028
L.G. Lanza, M. Colli, and P. La Barbera
On the influence of rain gauge performance on extreme events statistics: the case of weighing gauges

A132  EGU2012-12045
M. Muerth, B. Gauvin St-Denis, R. Ludwig, and D. Chaumont
Analysis of the effects of correcting biases in RCM precipitation fields with the local intensity scaling method for a small alpine catchment

A133  EGU2012-13381
S Samadi, C Wilson, H Moradkhani, and S Gummeneni
Uncertainty analysis of statistically downscaled temperature and precipitation regimes in a semi arid catchment

A134  EGU2012-13397
E. Tan
An Investigation of Extreme Precipitation in Turkey

A135  EGU2012-13458
M.A. Campo, J.J. Lopez, and J.P. Rebole
Rainfall Stochastic models

A136  EGU2012-13562
J C Soto-Sandoval and A P Jacquin
Problems with the interpolation of precipitation amounts in mountainous catchments using traditional techniques

A137  EGU2012-13611
A. Maire, C. Fouchier, P. Arnaud, and Y. Aubert
Assessment of the daily areal reduction factor of precipitations with distributed rainfall data: a means of improvement of a prediction method of extremes events in France.

A138  EGU2012-14167
R. Deidda, G.N. Caroletti, V. Luccarini, M. Marrocu, M. Puliga, G. Pusceddu, and A. Speranza
An intercomparison and verification of outputs of several climate models on representative Mediterranean catchments

CR10.10 – Ice-sheet and climate interactions (co-listed) – Posters
Convener: P. Huybrechts | Co-Conveners: A. Ganopolski, T. Fichefet
Hall X/Y | Display Time 08:00–19:30
Author in Attendance: 17:30–19:00
Chairperson: Thierry Fichefet

XY389  EGU2012-9527
P. Cianfarra and M. Valt
Recent snow cover and temperature variability in the Italian Alps

XY390  EGU2012-3988
H. Motoyama, K. Suzuki, T. Yamanouchi, and K. Kawamura
Spatial and temporal variability of snow accumulation rate at East Antarctic ice sheet in 1993-2010

XY391  EGU2012-13066
A. Rhines and P. Huybers
Feedbacks Between Sea Ice Cover and Precipitation Sources: Physical Basis for a Time-Dependent $\delta^{18}$O-T Relationship

XY392  EGU2012-4262
M. Bugelmayer, D.M. Roche, and H. Renssen
The impact of ice shelf - iceberg coupling on the North Atlantic Ocean in a global climate model of intermediate complexity
XY393  EGU2012-5708
R. Calov, A. Robinson, and A. Ganopolski
Improved representation of ice discharge from the Greenland ice sheet into the surrounding ocean

XY394  EGU2012-7436
Impact of Greenland's topographic height on precipitation and snow accumulation

XY395  EGU2012-8592
M. S. Madsen, S. H. Svendsen, S. Yang, G. Adalgeirsdottir, and R. Mottram
Assessing Surface Mass Balance Schemes relevant for coupling of the PISM ice sheet model for Greenland to climate models

XY396  EGU2012-5044
P. Beghin, S. Charbit, C. Dumas, M. Kageyama, D.M. Roche, and C. Ritz
Impact of planetary waves on ice-sheet evolution throughout the last glacial - interglacial cycle

XY397  EGU2012-11560
A.C. Fowler, R.E.M. Rickaby, and E.W. Wolff
An explanation of the 100 kyr ice age cycle using a simple box model

XY398  EGU2012-315
MIS 7 and MIS 5 glacial inceptions: investigating the asynchronous build-up of Laurentide and Eurasian ice sheets

XY399  EGU2012-6277
F. Ziemen, C. Rodehacke, and U. Mikolajewicz
LGM ice sheets simulated with a complex fully coupled ice sheet - climate model

XY400  EGU2012-7475
W.H.G Roberts, A.J. Payne, and P.J. Valdes
Simulations of Heinrich Events using a fully coupled full complexity icesheet/global climate model (Glimmer/FAMOUS)

XY401  EGU2012-10148
C. Rodehacke, U Mikolajewicz, and M Vizcaino
Fully coupled ice sheet-earth system model: How does the Greenlandic ice sheet interact in a changing climate

XY402  EGU2012-12194
O. Rybak, J. Fürst, and P. Huybrechts
Simulation of the dynamical history of the northwestern Greenland ice sheet with a nested model for interpretation of the NEEM ice core record

OS1.2 – The North Atlantic: natural variability and global change (co-listed) – Orals
Convener: M. Rhein | Co-Conveners: R.J. Greatbatch
Room: 12
Chairperson: Richard Greatbatch

08:30–08:45  EGU2012-1770
M. Rhein, D. Kieke, and R. Steinfeldt
The Circulation of Newly Formed Deep Water in the Atlantic

08:45–09:00  EGU2012-4891
C. Mertens, M. Rhein, and F. R. Karbe
Transport variability in the western subpolar North Atlantic at 47°N

09:00–09:15  EGU2012-3096
C. S. Meinen and S. L. Garzoli
Physical mechanisms involved in Deep Western Boundary Current variability at 26.5°N

09:15–09:30  EGU2012-4160
D. Kieke, M. Rhein, I. Yashayaev, and B. Klein
Spreading of Labrador Sea Water in the vicinity of the Mid-Atlantic Ridge in the central subpolar North Atlantic

09:30–09:45  EGU2012-4879
F. Richter, D. Sidorenko, and J. Schroeter
On estimating the circulation in the North Atlantic from altimetry and ARGO data

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

COFFEE BREAK
EGU General Assembly 2012

Chairperson: Monika Rhein

10:30–10:45  EGU2012-1544
M. Latif, J. Ba, R. Greatbatch, S. Gulev, N. Keenlyside, T. Martin, and W. Park
Interannual, Decadal and Centennial Variability in the North Atlantic Sector

10:45–11:00  EGU2012-2398
A. A. Cimatoribus, M. den Toom, S. S. Drijfhout, and H. A. Dijkstra
Sensitivity of the Atlantic Meridional Overturning Circulation to South Atlantic freshwater anomalies.

11:00–11:15  EGU2012-871
L. C. Allison, E. Hawkins, T. Woollings, and L. Jackson
Mechanisms and impacts of decadal-scale fluctuation events in the Atlantic Meridional Overturning Circulation in unforced climate model simulations

11:15–11:30  EGU2012-5921
I. Medhaug, H.R. Langehaug, T. Eldevik, O.H. Otterå, T. Furevik, and M. Bentsen
Mechanisms for decadal scale variability in the North Atlantic Ocean circulation in the Bergen Climate Model

11:30–11:45  EGU2012-7661
E. Frajka-Williams, S. A. Cunningham, T. Kanzow, W. E. Johns, C. Meinen, H. L. Bryden, M. O. Baringer, and G. D. McCarthy
Dramatic Interannual Variability in the Atlantic Meridional Overturning Circulation (AMOC) at 26°N

11:45–12:00  EGU2012-4625
T. Kanzow, M. Lankhorst, E. Frajka-Williams, U. Send, S. A. Cunningham, R. Bingham, J. Karstensen, and C. W. Hughes
Meridional coherence and divergence of the Atlantic Meridional Overturning Circulation (AMOC)

LUNCH BREAK

Chairperson: Dagmar Kieke

13:30–13:45  EGU2012-8268
S. Josey and J. Grist
Exploring the surface forced variability of the North Atlantic circulation

13:45–14:00  EGU2012-1501
T. Woollings, J. M. Gregory, M. Reyers, J. G. Pinto, and D. J. Brayshaw
Ocean-atmosphere interaction in the Atlantic storm track response to climate change

14:00–14:15  EGU2012-2212
N. Barrier, A.M Tréguier, and C. Cassou
Impact of winter weather regimes on the North Atlantic oceanic circulation

14:15–14:30  EGU2012-1140
I. Manola and F. Selten
Differences in the wave guide characteristics of the jet stream in positive and negative phases of the NAO

14:30–14:45  EGU2012-2194
W. P. Sijp, J. M. Gregory, R. Tailleux, and P. Spence
The key role of the western boundary in linking the AMOC strength to the north-south pressure gradient.

14:45–15:00  EGU2012-5993
S. Eliopoulou, E. Frajka-Williams, C. Hughes, S. Olhede, and M. Lankhorst
Basin-wide response of the North Atlantic Meridional Overturning Circulation to wind stress forcing

Chairperson: Richard Greatbatch

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

15:45–16:00  EGU2012-7086
M. Walter, C. Mertens, M. Dengler, and M. Rhein
North Atlantic Current variability and associated mixing at the Mid-Atlantic Ridge

16:00–16:15  EGU2012-8752
S. Gregorio, T. Penduff, B. Barnier, J.-M. Molines, and J. Le Sommer
Low-frequency variability of the Atlantic MOC in the eddying regime: the intrinsic component.

16:15–16:30  EGU2012-9248
M. Li, C. Mertens, M. Walter, and M. Rhein
Spatial variation of diapycnal mixing from hydrographic surveys in the subpolar North Atlantic
16:30–16:45  EGU2012-2818
A. Marzocchi, J. J.-M. Hirschi, N. P. Holliday, S. A. Cunningham, S. Masina, and A. C. Coward
Establishment of the North Atlantic subpolar circulation in an eddy-resolving ocean model

16:45–17:00  EGU2012-1714
A.V. Fedorov and F. Sevellec
The leading, interdecadal mode of the Atlantic meridional overturning circulation in a hierarchy of ocean and coupled models

SSP4.4 – Late Cretaceous – Early Paleogene climate dynamics and time scales (co-listed) – Orals
Convener: S. J. Batenburg | Co-Conveners: M. Sprovieri, S. Voigt, A. S. Gale, T. Westerhold
Room: 41
Chairperson: n.n.

08:30–08:45  EGU2012-7870
I. Gilmour, D.W. Jolley, R.J. Daly, S.P. Kelley, and M.A. Gilmour
A complete high resolution record of the Dan-C2 hyperthermal event in the lacustrine sediments of the Boltysh Impact crater

08:45–09:00  EGU2012-7434
M. Koch* and O. Friedrich
Campanian-Maastrichtian intermediate- to deep-water changes in the high latitudes: benthic foraminiferal evidence

09:00–09:15  EGU2012-4150
L. Penasa, M. Franceschi, and N. Preto
Terrestrial laser scanning for high resolution cyclostratigraphy of chert in pelagic limestone series

09:15–09:30  EGU2012-2691
D. De Vleeschouwer, A. Montanari, and R. Coccioni
An anchored astronomical time-scale for the Turonian reference sections in the Umbria-Marche Basin, Italy

09:30–09:45  EGU2012-1880
F. Hilgen, J. Ogg, M. Schmitz, R.P. Speijer, and N. Vandenberghhe
Age calibration of the Paleogene time scale in GTS2012

09:45–10:00  EGU2012-481
J. Laskar, A. Farrès, and M. Gastineau
Stability of the long period terms in the La2011 astronomical solution.
Friday, 27 April

**CL1.3 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic – Orals**


**Room: 13**

Chairperson: J. S. Laberg

10:30–10:45  EGU2012-12615

**C. Escutia**, H. Brinkhuis, R. Dunbar, A. Klaus and the Carlota Escutia Team

From the greenhouse to the icehouse in the Antarctic Wilkes Land margin: IODP Expedition 318

10:45–11:00  EGU2012-10748

**D.J. Hill**, A.M. Dolan, T. van de Flierdt, and C. Cook

Evolution and variability of the East Antarctic Ice Sheet during the Pliocene: Ice-rafted debris provenance and model results

11:00–11:15  EGU2012-13750


Antarctic and Southern Ocean influences on Late Pliocene global cooling

11:15–11:30  EGU2012-12914

**J. Huuse** and M. Huuse

Pleistocene glaciation history of the Northern North Sea and Norwegian Channel documented by basin-scale 3D seismic analysis

11:30–11:45  EGU2012-8385

**T.A. Rydningen**, T.O. Vorren, J.S. Laberg, and V. Kolstad

The marine-based NW Fennoscandian Ice Sheet: glacial and deglacial dynamics as reconstructed from submarine landforms

11:45–12:00  EGU2012-209

**D. Winkelmann**, W. Jokat, L. Jensen, and H.-W. Schenke

Late Glacial Dynamics of the Greenland Ice Sheet on NE-Greenland

**CL1.3 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic – Posters**


Hall Z | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: M. Forwick

Z1  EGU2012-13340

**K. A. Hogan**, J. A. Dowdeswell, and C. Ó Cofaigh

Glacimarine sedimentary processes and depositional environments in Disko Bay, West Greenland

Z2  EGU2012-208

**D. Winkelmann**, W. Jokat, L. Jensen, and H.-W. Schenke

Late and Post-Glacial Dynamics in Kong Oscar Fjord, NE-Greenland

Z3  EGU2012-4755


Rapid response of Helheim Glacier, Greenland, to climate variability over the last century

Z4  EGU2012-5082

**J. S. Laberg**, M. Forwick, and K. Husum

A re-evaluation of the late Pliocene - Pleistocene behavior of the Scoresby Sund sector of the Greenland Ice Sheet

Z5  EGU2012-10893

**A. Mueller-Michaelis** and G. Uenzelmann-Neben

Seismic reflection data of the Eirik Drift: A first step to decipher the Neogene development of the Western Boundary Undercurrent (WBUC)

Z6  EGU2012-3382


More than just "brown layers": Manganese enrichments in Quaternary Arctic Ocean sediments
EGU General Assembly 2012

Z7  EGU2012-2384
New insights into late Neogene glacial dynamics, tectonics, and hydrocarbon migrations in the Atlantic-Arctic gateway region.

Z8  EGU2012-6595
S. Baranwal and J. Knies
Quaternary record of carbonate preservation and paleocenographic changes from the Yermak Plateau (Hole 912A)

Z9  EGU2012-5928
M. Forwick and T.O. Vorren
Submarine landslides in Spitsbergen fjords

Z10  EGU2012-8414
T.L. Rasmussen, M. Forwick, and A. Mackensen
Reconstruction of inflow of Atlantic Water to Isfjorden, Svalbard during the Holocene: correlation to climate and seasonality

Z11  EGU2012-13113
J. Huuse and M. Huuse
3D Seismic geomorphology of ice stream imprints the Northern North Sea since 1.1 Ma

Z12  EGU2012-10404
H.C. Hass, G. Kuhn, N. Wittenberg, and A. Wöll
Modern sedimentation in a rapidly warming fjord: Potter Cove, King George Island, Antarctica

Z13  EGU2012-13578
Holocene glacial retreat at the Walgreen Coast, West Antarctica

Z14  EGU2012-8765
C. Ohneiser and G. S. Wilson
Plio-Pleistocene evolution of the southern Victoria Land climate system as seen in New Harbor drill cores

Z15  EGU2012-10500
S. L. Greenwood, R. Gyllencreutz, M. Jakobsson, and J. B. Anderson
East and West Antarctic ice sheet roles in glaciation of the western Ross Sea continental margin

Z16  EGU2012-3297
Early to Middle Miocene vegetation and climate of Wilkes Land, Antarctica (IODP 318)

Z17  EGU2012-8404
L. Tauxe
Magnetostratigraphic calibration of the Early Eocene Climatic Optimum

SSP4.3/CL1.4 – Cenozoic greenhouse climates and carbon cycle dynamics (co-organized) – Orals
Convener: J. L. Toney | Co-Conveners: P. Bijl
Room: 41
Chairperson: Jaime Toney

08:30–08:45  EGU2012-11093
M. Huber
Eocene Paleoclimate: Incredible or Uncredible? Model data syntheses raise questions.

08:45–09:00  EGU2012-4147
P. Köhler, R. S. W. van de Wal, B de Boer, L. J. Lourens, R. Bintanja, T. Bickert, and G. Lohmann
A process-based understanding of the late Cenozoic carbon cycle

09:00–09:15  EGU2012-9053
H.A. Abels, W.C. Clyde, P.D. Gingerich, F.J. Hilgen, H.C. Fricke, G.J. Bowen, and L.J. Lourens
Terrestrial records of Eocene Thermal Maximum 2 (ETM2 / H1 / Elmo) and H2 in the Bighorn Basin (USA)

09:15–09:30  EGU2012-12774
S. Galeotti, R.M. DeConto, L. Lanci, M. Pagani, U. Rohl, T. Westerhold, and J.C. Zachos
Early Eocene hyperthermals record orbitally controlled changes in high latitude climates

09:30–09:45  EGU2012-13861
S. Bouilla, B. Galbrun, J. Laskar, and H. Pälike
Correlation of very long-term variations in Cenozoic δ13C record and eccentricity modulation cycles

09:45–10:00  EGU2012-10794
A high-resolution benthic stable-isotope record for the South Atlantic: implications for orbital scale changes in Late Paleocene-Early Eocene climate and circulation
A356   EGU2012-3191
O. Mohamed and H. Egger
Palynological study around the Paleocene/Eocene (P/E) boundary in the Untersberg section (Salzburg, Austria)

A357   EGU2012-3804
KF Kroeger and RH Funnell
Warm Eocene climate enhanced petroleum generation from Cretaceous source rocks - a potential climate feedback mechanism?

A358   EGU2012-5051
I. Moebius, O. Friedrich, and K.M. Edgar
Changes of benthic foraminiferal assemblages across the Middle Eocene climatic optimum (MECO) in the North Atlantic (OPD Site 1051, Blake Plateau)

A359   EGU2012-6061
G. Hoareau, N. Carry, D. Marquer, B. Vrielynck, D.J.J van Hinsbergen, F. Behar, and A.-V. Walter-Simonnet
Did India-Asia plate velocity increase and Neo-Tethys closure contribute to the Early Eocene Climatic Optimum?

A360   EGU2012-6657
Precise U-Pb dating of Cenozoic Caribbean reef carbonates: Linking the evolution of Cenozoic Caribbean reef carbonates to climatic and environmental changes.

A361   EGU2012-7221
H. Khozyem, T. Adatte, G. Keller, J.E. Spangenberg, S. Bajpai, B. Samant, and S. Mathur
Mammal Dispersion linked to The Paleocene Eocene Thermal Maximum (PETM): New Insights from India.

A362   EGU2012-8768
V. Lauretano, L.J. Lourens, J.C. Zachos, M. Polling, K. Littler, and A. Sluijs
Reconstruction of deep-sea temperatures across Early Eocene climate transition.

A363   EGU2012-9213
N. Hamon, P. Sepulchre, Y. Donnadieu, and G. Ramstein
Subtropical forest expansion in the middle Miocene Europe: pCO2, Antarctic ice volume and oceanic changes

A364   EGU2012-11381
G. Ramstein, P. Hopcroft, B. Ringeval, and N. Hamon
Quantifying the methane atmospheric concentration during the warm and wet climate of the Middle Miocene Climatic Optimum (17-15 Ma)

A365   EGU2012-13334
M. Ouberdous, A.-J. Henrot, M. Dury, T. Utescher, and L. Francois
Variational methods application for retrieving past climates and paleo vegetation maps

A366   EGU2012-13572
V. Lefebvre, Y. Donnadieu, Y. Godderis, and F. Fluteau
Unravelling the causes of the Cenozoic climatic evolution

CL2.2 – Seasons and phenology: Evidence from observations, reconstructions, measurements and models (co-sponsored by USA-NPN, PAGES & ILEAPS) – Orals
Room: 13
Chairperson: This Rutishauser, Elisabeth Koch

13:30–13:35 Introduction
13:35–13:50 EGU2012-3244
M. D. Schwartz
Long-term Assessment of Spring's Onset in North America

13:50–14:05 EGU2012-14229
E Kubin, J Poikolainen, J Karhu, and J Terhivuo
Phenological observations since the Linnean time in Finland

14:05–14:20 EGU2012-7581
Long-term variations in phenological phases and growing season indexes in the Czech Republic
CL2.2 – Seasons and phenology: Evidence from observations, reconstructions, measurements and models (co-sponsored by USA-NPN, PAGES & ILEAPS) – Posters
Hall Z | Display Time 08:00–17:00
Author in Attendance: 10:30–12:00
Chairperson: This Rutishauser, Elisabeth Koch

Z18

EGU2012-1411

A trial of cross-disciplinary classes at the university and the high school on the seasonal transition and the seasonal feeling from autumn to winter in East Asia (joint activity of meteorology with Japanese classical literature, music and art)

Z19

EGU2012-8031

The long distance transport (LDT) of Ambrosia pollen from the Pannonian Plain to Scandinavia

Z20

EGU2012-2523

**S. Fernández-Rodríguez**, C. Ambelas Skjøth, R. Tormo-Molina, R. Brandao, E. Caeiro, I. Silva-Palacios, Á. Gonzalo-Garijo, and **M. Smith**
Identification of potential sources of airborne Olea pollen in the Southwest Iberian Peninsula

Z21

EGU2012-2748

**E. Vincze**, M. Hunkár, and Z. Dunkel
Phenology of lilac (Syringa vulgaris) and elderberry (Sambucus nigra) as the indicator of spring warming

Z22

EGU2012-2807

**Y.S.H. Fu**, M. Campioli, G. Deckmyn, and I. A. Janssens
Sequential chilling-forcing models predict budburst phenology best in deciduous trees: results from a climate warming experiment

Z23

EGU2012-9274

**A. Thomas**, S. Corgne, O. Planchon, C. Bonnefoy, H. Quénol, and R. Lecerf
Phenological monitoring of vine using MODIS imagery in the vineyard of Saumur-Angers (Loire Valley area, France)

Z24

EGU2012-5465

**A. Caffarra**, D. Molitor, I. Pertot, P Singoy, and J Junk
Developing a phenological model for grapevine to assess future frost risk in Luxembourg

Z25

EGU2012-8279

PEP725 Pan European Phenological Database
B. Perrimond, S. Bigot, H. Quénol, T. Spielgelberger, and J. Baudry
Effects of climate change on phenology in two French LTER (Alps and Brittany) for the period 1998-2009

R. Lorenz, E.L. Davin, D.M. Lawrence, and S.I. Seneviratne
Phenology experiments in a regional climate model

P. Di Tommasi, S.M. Alfieri, A. Bonfante, A. Basile, F. De Lorenzi, and M. Menenti
Adaptation options to future climate of maize crop in Southern Italy examined using thermal sums

A. Lehoczky, B. Szabó, R. Pongrácz, and F. Szentkirályi
First flowering sensitivity analysis to climate on 19th century data: using phenophase as thermometer
M. Naranjo and C. Tortajada
Climate change and its impact on water infrastructure: the case of Alcala de Henares (Spain) and Mexico City (Mexico)

L. Wang, P.H.A.J.M. Van Gelder, and J.K. Vrijling
A preliminary analysis of climate change effect on long-term risk-based design of flood defense

M. Siena, A. Guadagnini, M. Riva, and S.P. Neuman
A Theoretical Model of Extended Power-Law Scaling

M. E. Topa, F. De Paola, M. Giugni, W. Kombe, and H. Touré
Probability density function (Pdf) of daily rainfall depths by means of superstatistics of hydro-climatic fluctuations for African test cities

M. M. Kvalevag, B. H. Samset, and G. Myhre
Hydrological sensitivity and global temperature change to greenhouse gases and aerosols in CESM

M. Bensi, V. Cardin, and M. Gačić
Thermohaline variability and mesoscale activities observed at the E2M3A deep site in the south Adriatic Sea

Carbon Flux to the Deep in three open sites of the Southern European Seas

I. Bouloubassi, A. Gogou, S. Stavrakakis, A. Sanchez-Vidal, and M. Grégoire
Downward biogenic fluxes in the SW Black Sea: dynamics of their compositional and temporal patterns

S. Karimova
Satellite observations of eddies in the Baltic, Black and Caspian seas

A. Pascual, J. Bouffard, S. Ruiz, B. Buongiorno Nardelli, and R. Escudier
Recent advances on mesoscale variability in the Western Mediterranean Sea: complementarity between satellite altimetry and other sensors

A. Peliz
Alboran jets, gyres and eddies in a 20-year high resolution simulation

Study of the exchange flow through the Strait of Gibraltar with the NEMOMED8 Ocean Circulation Model: model validation, interannual variability and trends.

C. Dubois, F. Sevault, and S. Somot
Impact of the heat and salt content in the Atlantic on the Western Mediterranean Deep Water masses formation
A. Elizalde and U. Mikolajewicz

Resolving explicitly the Black Sea in the Mediterranean Sea simulations using a fully coupled atmosphere-ocean model.

A. Theocharis, G. Krokos, and G. Korres

An internal mechanism driving decadal oscillations of the thermohaline circulation and properties in the Eastern Mediterranean

G. Mattia, M. Vichi, M. Zavatarelli, and P. Oddo


L. Velea, R. Bojariu, and T. Chronis

Evaluation of air-sea exchange over Black Sea from a regional climate simulation

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

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

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: S. Somot

XY365 EGU2012-901

V.V. Fomin, V.B. Zalesny, N.A. Diansky, and A.V. Gusev
Black and Azov Sea circulation numerical modelling on the basis of splitting technique

XY366 EGU2012-2606

I. Vilibic, S. Matijevic, and J. Sepic
Long-term changes in the middle Adriatic oceanographic properties

XY367 EGU2012-2809

Seasonal and Inter-annual signals in the Mediterranean Outflow observed in Espartel Sill (western Strait of Gibraltar) during the last decade

XY368 EGU2012-3036

P. Censi, M. Raso, F. Saiano, and P. Zuddas
HOW Zr/Hf AND Gd ANOMALY SIGNATURES CAN DEPICT SOLID-LIQUID INTERACTIONS IN SEAWATER

XY369 EGU2012-3655

Variability of the Black Sea from My Ocean Black Sea Monitoring and Forecasting Center Products

XY370 EGU2012-3972

V.S. Arkhipkin, E.A. Malyarenko, and G.V. Surkova
Analysis of storm waves on the Caspian Sea

XY371 EGU2012-4188

V. Dorofeyev, T. Oguz, G. Korotaev, and L. Sukhikh
Hindcast and Forecast of the Black Sea Ecosystem on the Basis of 3D Interdisciplinary Model

XY372 EGU2012-4244

D. Boutov and A. Peliz
Atmospheric forcing and Sea Surface Temperature response in the Gulf of Cadiz-Alboran Sea system in a 20 years simulation

XY373 EGU2012-4300

E. Clementi, M. Zavatarelli, P. Oddo, G. Volpe, S. Coletta, and V. Djurdjevic
Validation of a 3D coupled physical-biogeochemical model in the Adriatic Sea

XY374 EGU2012-4423

S. Ruiz, L. Renault, B. Garau, and J. Tintoré
Underwater glider observations and modeling of an abrupt mixing event in the upper ocean

XY375 EGU2012-4432

A.I. Kubryakov, G.K. Korotayev, F.-X. Thooren, O. Liungman, and C. Ambjorn
New tool for the Black Sea environmental safety: BlackSea Track Web

XY376 EGU2012-4751

G. Surkova, A. Kislov, and P. Koltermann
Large-scale atmospheric circulation and extreme wind events during the Black sea storms
Multi-level Association Rules and Directed Graphs for the Lagrangian Analysis of the Mediterranean Ocean Forecasting System (MFS)

Hydrological regime of the Black Sea waters: numerical modeling

Linear trends or regime shifts: statistical analysis of data and biogeochemical model simulations for the last 50 years in the Aegean Sea

Interannual variability of deep convection in the Gulf of Lions in a Atmosphere-Ocean Regional Climate Model for the Mediterranean area.

An Idealized Isopycnal 2-Layer Model of the Alboran Sea

Black Sea spectral bio-optical models based on satellite data and their applications for assessment of spatial and temporal variability in waters transparency, chlorophyll a content and primary production

Interannual variability of Dissolved Oxygen values around the Balearic Islands

Impact of climate change scenarios in the Mediterranean Sea from a regional ocean model

Coupling OGCM and Wave model through the drag coefficient

The WMDW path from its formation place to the Gibraltar gateway.

Spatial and temporal variability of R1 in the Bay of Koper (Gulf of Trieste)

Effect of explicit tides in an eddy resolving Mediterranean model with increased resolution at Gibraltar.

Interannual variability of Black Sea's hydrodynamics and connection to atmospheric patterns: model study.

Meteorological and Synoptic Aspects of the Novorossiysk Bora Forming and Evolution

Holocene sea ice in the main Arctic gateway

Holocene Atlantic Water temperature reconstruction in the Nordic Seas based on foraminiferal Mg/Ca ratios
09:00–09:15 EGU2012-10679

M. Blaschek and H. Renssen
The Influence of Greenland melt water on the temporal and spatial response of the Holocene Thermal Maximum in the Nordic Seas: a modelling study

09:15–09:30 EGU2012-11593

L. de Steur, E. Hansen, C. Mauritzen, and A. Beszczynska-Moeller
Transport of the East Greenland Current in Fram Strait

09:30–09:45 EGU2012-3640

I. A. Dmitrenko, S. A. Kirillov, V. V. Ivanov, U. Shauer, Y. Aksenov, B. A. de Cuevas, I. V. Polyakov, M. Janout, M. Makhotin, and V. S. Lien
Atlantic Water inflow into the Arctic Ocean through the St. Anna Trough

09:45–10:00 EGU2012-13807

P. E. Isachsen and O. A. Nast
The air-sea transformation and diapycnal overturning circulation within the Nordic Seas

COFFEE BREAK

Chairperson: G. Knorr, M. Ziegler

10:30–10:45 EGU2012-9810

T. W. N. Haine and K. Stewart
Arctic Freshwater Export: Prospects, Impacts, and Challenges

10:45–11:00 EGU2012-4543

V.S. Lien, F.V. Viikebø, and Ø. Skagseth
A mechanism for fluctuations between Atlantic inflow branches to the Arctic

11:00–11:15 EGU2012-7621

R Zahn and GATEWAYS project members
Saltwater transport through the Indian-Atlantic ocean gateway: Does it modulate the Atlantic MOC?

11:15–11:30 EGU2012-8978

M. Prange, V. Varma, and M. Schulz
Inter-ocean gateway flows during the present and last interglacial periods

11:30–11:45 EGU2012-7269

Millennial-scale ocean current intensity changes off southernmost Chile and implications for Drake Passage throughflow

11:45–12:00 EGU2012-9842

I. N. McCave, S.C. Crowhurst, C.-D. Hillenbrand, and G. Kuhn
Constant flow speed of the ACC through Drake Passage between glacial maximum and Holocene.

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

Hall Z | Display Time 08:00–17:00
Author in Attendance: 13:30–15:00

Chairperson: K. Husum, L. Jonkers

Z30 EGU2012-14476
S. Berben, K. Husum, and M. Hald
Sub-centennial Holocene fluctuations of surface water masses in the western Barents Sea

Z31 EGU2012-2714
Calibration and application of the IP25 biomarker for Arctic sea ice reconstructions

Z32 EGU2012-10651
F.J. Davies, H Goosse, and H Renssen
Simulating the natural variability of the freshwater budget of the Arctic ocean from the mid to late Holocene using LOVECLIM

Z33 EGU2012-1993
C. Dylmer, J. Giraud, E. Frédérique, A. de Vernal, J. Knies, K. Husum, and S. Belt
Northward advection of Atlantic Water in Fram strait during the late Holocene: a view from mixed layer proxies

Z34 EGU2012-6030
J.C. Faust, J. Knies, J. Giraud, and G. Milzer
Geochemical investigations of fjord surface sediments as basis for Holocene climate change studies in the Trondheimsfjord area
| Z35  | EGU2012-7635  | D.E. Groot, S. Aagaard Sørensen, K. Husum, and M. Hald  
|      |              | Holocene intermediate and bottom water mass reconstructions of the western Barents Sea  
| Z36  | EGU2012-2716  | A. Navarro Rodriguez, P. Cabedo Sanz, S. Belt, T. Brown, J. Knies, K. Husum, and J. Girardeau  
|      |              | Analysis of sea ice and phytoplankton biomarkers in marine sediments from the Nordic Seas - a calibration study  
| Z37  | EGU2012-2958  | I. Maior, M. Felix, J. Knies, and U. Mann  
|      |              | Historic surface water productivity changes in the Barents Sea  
|      |              | Benthic Foraminiferal Stable Isotope and Dinocyst Assemblages in Sediments of the Trondheimfjord Area (Mid-Norway): Proxies for Regional Oceanographic and Climate Changes?  
| Z39  | EGU2012-2962  | T. Pados and R. F. Spielhagen  
|      |              | Modern distribution of planktic foraminifers in the Fram Strait (Arctic Ocean) compared to sea floor species assemblages  
|      |              | Sedimentary record of postglacial variability in near-bottom currents, sediment supply and ice rafting on the continental shelf off SW Spitsbergen  
|      |              | Late Glacial and Holocene paleoceanography of the central and northern Greenland Sea based on foraminifera, stable isotopes and sediments  
| Z42  | EGU2012-4750  | K. Werner, R.F. Spielhagen, E. Kandiano, and H.C. Hass  
|      |              | Stepwise transition from deglacial/Early Holocene to modern-like conditions in the eastern Fram Strait, sub-Arctic north, inferred from planktic foraminifer fauna and sea surface temperatures  
| Z43  | EGU2012-11739 | K. Werner, M. Frank, C. Teschner, M. Zieringer, and R.F. Spielhagen  
|      |              | Holocene fluctuations of neodymium isotope ratios in eastern Fram Strait sediments - An indication for deepwater variability?  
| Z44  | EGU2012-5410  | G. Chepurin and J. Carton  
|      |              | Sub-arctic and Arctic sea surface temperature and its relation to ocean heat content 1982-2010  
| Z45  | EGU2012-7017  | F. Greil and A. Beszczyńska-Möller  
|      |              | Statistical analysis of oceanographic fields in Fram Strait  
| Z46  | EGU2012-7881  | B. I. Moat, S. A. Josey, B. Sinha, and J. P. Grist  
|      |              | Response of the Fram Strait transport to surface density forcing  
| Z47  | EGU2012-2617  | S.N. Moshonkin, A.V. Gusev, V.B. Zalesny, A.V. Bagno, and N.A. DIansky  
|      |              | Numerical modelling of the Atlantic Water inflow in Arctic Ocean and Beaufort Gyre fresh water content climatic variability  
| Z48  | EGU2012-5369  | C. Roth, E. Behrens, and A. Biastoch  
|      |              | The impact of the Atlantic-Arctic exchange on rising ocean bottom temperatures and the fate of gas hydrates  
| Z49  | EGU2012-1859  | U. Schauer, A. Beszczyńska-Möller, T. Krumpen, F. Greil, and E. Fahrbach  
|      |              | Warming of the Atlantic water in Fram Strait and its impact on the ice cover  
| Z50  | EGU2012-2816  | F. Wobus, G.I. Shapiro, J.M. Huthnance, and M.A.M. Maqueda  
|      |              | The piercing of the Atlantic Layer by a dense water cascade in an idealised modelling study inspired by the Storfjorden overflow  
|      |              | Quantifying the influence of Atlantic heat on Barents Sea ice variability and retreat  
| Z52  | EGU2012-3974  | N. Barrier, D. Ferreira, and J. Marshall  
|      |              | Impact of opening of the Central America Seaway on climate in a coupled atmosphere-ocean-sea-ice model  

Programme Group Programme CL 112
K. Braun, M. Bar-Matthews, A. Ayalon, C. Marean, A. I. R. Herries, R. Zahn, and A. Matthews
Influences of the Agulhas Current on South African terrestrial climate as inferred from speleothem stable
isotope records

C. Brierley and A Fedorov
Can inter-ocean gateways explain long-term cooling since the early Pliocene?

E. Khadun, J.v.d. Lubbe, T. Blanz, and R. Schneider
80 kyr record of palaeoceanographic conditions from southeastern Africa

G. Marino, R. Zahn, P. Ziveri, M. Ziegler, I.R. Hall, and H. Elderfield
Impact of the salt leakage through the Indian-Atlantic ocean gateway on the Atlantic MOC

M. Parari and R. Zahn
Do variations in Mozambique Channel hydrography impact the marine climatology of the Agulhas gateway
between the Indian Ocean and Atlantic?

C. Purcell, G. Knorr, I. Hall, and G. Lohmann
The influence of Agulhas Leakage dynamics on the Atlantic Meridional Overturning Circulation during
glacial-interglacial transitions

T. Qu and T.-L. Chiang
Northward intrusion of South Pacific intermediate water along the Philippine coast as seen from a global GCM

P. Scussolini and F.J.C. Peeters
Evolution of the southeast Atlantic thermocline during Marine Isotopic Stages 6-5: is it related to variations in
the Agulhas Leakage?

M. Simon, I.R. Hall, S. Barker, and M. Ziegler
Investigating the impact of millennial scale Agulhas Current System variability on global ocean circulation and
climate

J. Steinhardt, U. Fallet, R. Tjallingii, and G-J. A. Brummer
Core top particle component analysis from the southwestern Indian Ocean

M. Ziegler, I.R. Hall, P.J. Siret, and R. Zahn
Pleistocene ice-rafted debris events recorded at the Agulhas Plateau - indicators of intermittent Indian-Atlantic
gateway closure

S. F. M. Breitenbach, B. Plessen, F. Lechleitner, N. Marwan, J. F. Adkins, and G. H. Haug
The glacial Indian summer monsoon - precipitation changes during Heinrich and D-O events in NE India

N. Basavaiah and N. Juyal
Indian Summer Monsoon: A Reconstruction Based on Terrestrial Archive During the Last 30 ka from
Indian Subcontinent

H. Schulz, P. Munz, K. Pascher, A. Lückge, B. Gaye, and M. Kucera
Reconstruction of westerly and monsoonal atmospheric systems affecting climate of Central Asia: a view
from sediment records of the Eastern Mediterranean and the Northern Arabian Sea

P.D. Clift, D. Hu, P. Böning, S. Wan, and H. Brumsack
Deep-sea weathering and erosion records of monsoon variations in the northern South China Sea

K. Raghavan, T.P. Sabin, M. Mujumdar, and P. Priya
Extreme monsoon precipitation events over South Asia in a warming world
A. Menon, A. Levermann, and J. Schewe

Future increase of west African monsoon due to sea ice melt

CL4.4 – Modern and Palaeomonsoon – Posters

Hall Z | Display Time 08:00–17:00
Author in Attendance: 13:30–15:00
Chairperson: n.n.

Z64 EGU2012-187
Indian Summer Monsoon Variability and its Physical Mechanisms in the last Millennium

Z65 EGU2012-2480
J. Schewe, A. Levermann, and H. Cheng
A critical humidity threshold for monsoon transitions

Z66 EGU2012-5777
K. Rehfeld, N. Marwan, S. Breitenbach, and J. Kurths
Holocene monsoon variability as resolved in small complex networks from palaeodata

Z67 EGU2012-9974
S. Wild, G.C. Leckebusch, D.J. Befort, and U. Cubasch
South Asian Monsoon Variability and its Relation to Midlatitude Teleconnections

Z68 EGU2012-13093
M. P. Karami, A. Berger, N. Herold, and Q. Z. Yin
A climate model study of an intense Asian Monsoon in a La Niña-like climate of MIS-13

Z69 EGU2012-227
S. P. Prizomwala, N. Bhatt, A. M. Hirt, and W Winkler
High Resolution Mid to Late Holocene Paleoclimatic Reconstruction from the Mudflats of Gulf of Kachchh Coast, Western India

Z70 EGU2012-701
The last deglaciation in NE India reconstructed from a stalagmite from Mawmluh cave

Z71 EGU2012-927
Y Dixit, DA Hodell, and CA Petrie
Holocene monsoon variability inferred from palaeolake sediments in NW India.

Z72 EGU2012-2018
S. Prasad, N Basavaiah, A Anoop, B Plessen, P Menzel, B Gaye, A Brauer, M Wiesner, R Naumann, and N Nowaczyk
Holocene climate variability inferred from geochemical proxies in monsoonal Central India

Z73 EGU2012-4170
A. Böll and B. Gaye
A high resolution 2000 year record of monsoon variability in the Arabian Sea

Z74 EGU2012-4206
P. Menzel, B. Gaye, M. Wiesner, S. Prasad, N. Basavaiah, M. Stebich, A. Anoop, N. Riedel, and A. Brauer
Indications of human activity from amino acid and amino sugar analyses on Holocene sediments from lake Lonar, central India

Z75 EGU2012-4831
A. Dallmeyer, M. Claussen, Y. Wang, and U. Herischuh
Spatial differences in the Holocene precipitation change within the Asian monsoon region - a model data comparison

Z76 EGU2012-5238
A.T. Gourlan, C. Chauvel, and C. Voisin
É-Nd IN SEAWATER RECORDS OCEAN TEMPERATURE CHANGES WITH A TIME DELAY

Z77 EGU2012-6648
A. Anoop, S. Prasad, R. Krishnan, R. Naumann, P. Dulski, S. Gärber, N. Basavaiah, K. Deenadayalan, and A. Brauer
Extreme events and spatiotemporal changes in the westerlies and Indian summer monsoon during the early-mid Holocene in NW Himalayas

Z78 EGU2012-6660
X. Huang, H. Oberhansli, M. Mathis, S. Prasad, and H. von Suchodoletz
A Holocene lacustrine record of Lake Sonkul: hydro-climatic changes in central Asia and possible interactions between westerlies and Asian monsoon
EGU General Assembly 2012

Z79  EGU2012-8116
  W.E. Piller, M. Reuter, A.K. Kern, and M. Harzhauser
  Miocene climate seasonality in southern India - first direct evidence for a weak Indian monsoon during the Middle Miocene Climate Optimum

Z80  EGU2012-12692
  A 16 ka lacustrine 18O record from High Himalaya reflecting the Indian Monsoon variability

CL4.6/AS1.15/OS1.7 – Tropical Climate Variability and Teleconnections: past, present and future (co-organized) – Orals
Convener: B. Rodríguez de Fonseca | Co-Conveners: E. Mohino, T. Losada, J. Garcia-Serrano, F. Kucharski, I. Polo
Room: 16
Chairperson: Fred Kucharski and Belen Rodríguez

13:30–13:45  EGU2012-1524
  H. Tatebe, Y. Imada, M. Kimoto, and H. Hasumi
  South Pacific Ocean controls the phase reversal and periodicity of the decadal and bi-decadal ENSO-like variabilities

13:45–14:00  EGU2012-1875
  H. Dayan, J. Vialard, T. Izumo, M. Lengaigne, and P. Terray
  External interannual ENSO forcing: which regions outside equatorial Pacific may influence the evolution of ENSO?

14:00–14:15  EGU2012-2177
  C. Frauen and D. Dommenget
  Influences of the tropical Indian and Atlantic Oceans on the predictability of ENSO

14:45–15:00  EGU2012-6146
  T. Terray
  Modes of forced and internal decadal variability in the Tropics and ExtraTropics from CMIP5 models

15:30–15:45  EGU2012-10239
  B.-M. Joseph
  Predictability of rainy season onset and cessation in east Africa

15:45–16:00  EGU2012-10340
  P.A. Monerie, B. Fontaine, and P. Roucou
  Future changes in the African monsoon through a pool of CMIP5 models

16:00–16:15  EGU2012-12365
  Low-frequency Sahel rainfall variability and Atlantic Sea Surface Temperatures during the last century

16:15–16:30  EGU2012-12670
  B. Cook, J. Yoon, and N. Zeng
  Future Drying of the Southern Amazon Projected by IPCC Climate Models

16:30–16:45  EGU2012-7225
  B. Scherllin-Pirscher, C. Deser, S.-P. Ho, C. Chou, W. Randel, and Y.-W. Kuo
  Upper tropospheric and lower stratospheric ENSO signal derived from GPS radio occultation temperature

16:45–17:00  EGU2012-3869
  E. Lim, H. Hendon, and H. Rashid
  Dynamical forecast of low-frequency variability of the Southern Annular Mode

CL4.6/AS1.15/OS1.7 – Tropical Climate Variability and Teleconnections: past, present and future (co-organized) – Posters
Convener: B. Rodríguez de Fonseca | Co-Conveners: E. Mohino, T. Losada, J. Garcia-Serrano, F. Kucharski, I. Polo
Hall Z | Display Time 08:00–17:00
Author in Attendance: 10:30–12:00
Chairperson: Fred Kucharski and Irene Polo
**EGU General Assembly 2012**

**Z81**

A. Fischel, M.-S. Seidenkrantz, M. Kucera, and A. Kujipers

Holocene climate variability in the tropics - high resolution records from the Anegada-Jungfern Passage, NE-Caribbean

**Z82**

V. Khon, W. Park, M. Latif, I. Mokhov, and B. Schneider

The Hadley and Walker circulations and changes of the hydrological cycle during the Holocene and Eemian from climate model simulations

**Z83**

H.-G. Lim and S.-W Yeh

Volcanic effect on the tropical sea surface temperature in a millennium coupled model simulation

**Z84**

E. A. Sniffen, R. Farneti, S.P. Xie, E. Maroon, and D.M.W. Frierson

Could changes in the extratropical ocean circulation modify the mean tropical climate and ITCZ?

**Z85**

M. Fujita, M. Hara, and H. G. Takahashi

Diurnal cycle of precipitation over the eastern Indian Ocean off Sumatra Island during different IOD phases

**Z86**

R. Farneti, F. Kucharski, and F. Molteni

On the mechanisms of Interdecadal Pacific Oscillation-type variability

**Z87**

I. Polo, M. Martin-Rey, B. Rodríguez-Fonseca, C. R. Mechoso, and F. Kucharski

Processes in the Influence of Tropical Atlantic Sea Surface Temperatures on Pacific Ia Nina Onset

**Z88**

B. Rodríguez de Fonseca, I. Polo, T. Losada, E. Mohino, and R. Mechoso

Non stationary impact of the Equatorial Atlantic on the El Niño Southern Oscillation

**Z89**

T. Losada and B. Rodríguez-Fonseca

Atmospheric Response to Changes in the Atlantic Equatorial Mode and in the Background State of SST.

**Z90**

J. S. Turner, B M Harris, and E J Highwood

Monsoon collapse following tropical super-volcanic eruptions

**Z91**

T. Bayr and D. Dommenget

The Land-Sea Warming Contrast as the Driver of Tropical Sea Level Pressure Changes

**Z92**

F. Kucharski, N. Zeng, and E. Kalnay

A further assessment of vegetation feedback on decadal Sahel rainfall variability

**Z93**

D. Folini, D. Baumgartner, and M. Wild

20th century precipitation changes in the Sahel region: sensitivity studies with ECHAM5-HAM

**Z94**

C. Seiler

Climate Variability and Trends in Bolivia

**Z95**

A G Turner, M Joshi, E S Robertson, and S J Woolnough

The effect of Arabian Sea optical properties on SST biases and the South Asian summer monsoon in a coupled GCM

**Z96**

C. Williams, R. Allan, and D. Kniveton

Comparing atmosphere-land surface feedbacks from models within the tropics (CALM). Part 1: Evaluation of CMIP5 GCMs to simulate the land surface-atmosphere feedback

**Z97**


Spatial structure and potential predictability of summer precipitation in Ethiopia

**Z98**

F.S. Syed, H. Körnich, and M. Tjernström

On the fog variability over south Asia

**Z99**

V. Platonov, E. Semenov, and E. Sokolikhina

Extreme La-Nina 2010/11 and the vigorous flood at the north-east of Australia.

**Z100**

J. Collins, D. Roache, and J. Yoo

Assessment of the 2011 Atlantic Hurricane Season
Z101  EGU2012-2426
  E. Scoccimarro, S. Gualdi, and A. Navarra
  Hurricanes interaction with the Arctic Climate

Z102  EGU2012-3177
  P. Braesicke, S. H. Ooi, and A. A. Samah
  Borneo Vortices: A case study and its relation to climatology

Z103  EGU2012-5669
  J. Runge and J. Kurths
  A model-free definition of coupling strength for assessing the influence between climatic processes

Z104  EGU2012-6320
  M. Jacques-Coper and S. Brönnimann
  Summertime Climate Variability and Teleconnections over Southern South America during the 20th Century

Z105  EGU2012-6428
  I. Herceg Bulic
  ENSO impact on North Atlantic/European region in a changing climate

Z106  EGU2012-6698
  E.-C. Chang, S.-W. Yeh, S.-Y. Hong, J.-E. Kim, and R. Wu
  Analysis on a teleconnection patterns between tropical ocean SSTs and extratropics by using a global downscaled precipitation dataset

Z107  EGU2012-4590
  S.-M. Lim and S.-W. Yeh
  Possible link the tropical SST anomalies and Arctic Oscillation on the low-frequency timescales during the boreal winter

Z108  EGU2012-58
  On the relationship between the climate variability in middle-low latitudes of the Southern Hemisphere and central Antarctica over the past 360 years

CL4.8/BG2.22 – Climate Change: Carbon Cycle, Mortality, Growth, and Shift of Forests (co-organized) – Orals
Convener: F. D'Aprile | Co-Conveners: N. Tapper, D. Dunkerley
Room: 19
Chairperson: Fabrizio D'Aprile

15:30–15:45  EGU2012-13053
  O. Khabarova and I. Savin
  El Niño, global CO2 and forest growth

15:45–16:00  EGU2012-5548
  Modelling the risk of ecosystem disruption in Europe with a dynamic vegetation model

16:00–16:15  EGU2012-1612
  R. Schuster, B. Zeisler, and W. Oberhuber
  Impact of climate warming-induced increase in drought stress on successional dynamic of a coniferous forest within a dry inner Alpine environment

16:15–16:30  EGU2012-8151
  Simulating forest productivity along a neotropical elevational transect: temperature variation and carbon use efficiency

16:30–16:45  EGU2012-2302
  B. Schult, C. Leuschner, V. Horna, G. Moser, M. Köhler, O. van Straaten, and H. Barus
  Change in hydraulic properties and leaf traits in a tall rainforest tree species subjected to long-term throughfall exclusion in the perhumid tropics

16:45–17:00  EGU2012-1611
  J. Chu
  The impact of afforestation on projected climate in Australia during the 21st Century

17:00–17:15  EGU2012-13678
  A concept for extraction of habitat features from laser scanning and hyperspectral imaging for evaluation of Natura 2000 sites - the ChangeHabitats2 project approach

CL4.8/BG2.22 – Climate Change: Carbon Cycle, Mortality, Growth, and Shift of Forests (co-organized) – Posters
Convener: F. D'Aprile | Co-Conveners: N. Tapper, D. Dunkerley
Z109  EGU2012-425  
F. D’Aprile, N. Tapper, P. Baker, L. Bartolozzi, and A. Bottacci  
Changes in the relationships between climate and silver fir (Abies alba Mill.) growth during the 20th century in the Tuscan Apennine Alps (Middle Italy)

Z110  EGU2012-9592  
C. Irschick, S. Mayr, and G. Wohlfahrt  
The response of European tree species to drought: a meta-analysis

Z111  EGU2012-7897  
g. ceccherini and n. gobron  
Spatio-temporal patterns of natural vegetation dynamics for different land use and ecosystems over Europe 1997-2011

Z112  EGU2012-10953  
P. Sinigoj, K. Goergen, A. C. Vasconcelos, J. Junk, K. Houchi, L. Pfister, and L. Hoffmann  
A sensitivity study on the impacts of climate change on European tree species distribution based on ENSEMBLES RCMs

Z113  EGU2012-7822  
H. Müller-Haubold, D. Hertel, Ch. Leuschner, and D. Seidel  
Patterns of aboveground biomass allocation of mature beech forests change in response to water availability - a transect study in Northern Germany

Z114  EGU2012-726  
V. Popovic, D. Jokanovic, M. Sijacic-Nikolic, T. Cirkovic-Mitrovic, and V. Babic  
Impact of climatic factors on the growth rings width of Taxodium from Backa Palanka area (Taxodium distichum (L.)Rich.)

Z115  EGU2012-4933  
Growth strategy of Norway spruce under air elevated [CO2]

Z116  EGU2012-12847  
A. Giuggiola, A. Rigling, and M. Dobbertin  
Reduction of stand density as a management tool to mitigate the effect of drought

CL5.10 – Regional Climate Modeling, projections and impacts (including CORDEX) – Orals
Convener: F. Giorgi | Co-Conveners: R. Arritt, A. Zakey
Room: 15
Chairperson: Filippo Giorgi

08:30–08:45  EGU2012-3258  
M. S. Bukovsky and L. O. Mears  
The North American Regional Climate Change Assessment Program (NARCCAP): Overview of Climate Change Results

08:45–09:00  EGU2012-3269  
Y. Qian, B. Yang, G. Lin, R. Leung, and Y. Zhang  
Uncertainty Quantification and Parameter Tuning: A Case Study of Convective Parameterization Scheme in the WRF Regional Climate Model

09:00–09:15  EGU2012-2494  
D. Paquin and R. de Elia  
Occurrence of deep convective events over North America under a changing climate using Canadian RCM simulations.

09:15–09:30  EGU2012-3767  
R. Arritt and the The MRED Team  
Downscaled seasonal forecasts using an ensemble of regional models

09:30–09:45  EGU2012-2430  
G.T. Diro, S. Rauscher, F. Giorgi, and A. Tompkins  
Sensitivity of seasonal climate and diurnal precipitation over Central America to land surface and SST schemes in RegCM4

09:45–10:00  EGU2012-13836  
Simulations of Current Climate and Climate Change over the Tropical Americas

COFFEE BREAK
Chairperson: Ashraf Zakey

10:30–10:45  EGU2012-6460  
L. Sun  
Verification of the 10-year Dynamical Downscaling Forecasts over Northeast Brazil

10:45–11:00  EGU2012-10251  
C. Jones, G. Nikulin, and E. Kjellström  
Dynamical downscaling of CMIP5 GCM simulations over the Africa-CORDEX domain: Evaluating climate variability for the recent past

11:00–11:15  EGU2012-8047  
E. Kjellström, G. Nikulin, and C.G. Jones  
Future changes in the African temperature and precipitation climate in an ensemble of Africa-CORDEX regional climate model simulations

11:15–11:30  EGU2012-4939  
A. Hänssler, F. Saeed, and D. Jacob  
Dynamical downscaling of the most recent climate change projections over Africa using REMO

11:30–11:45  EGU2012-7529  
L. Mariotti, A. Mamgain, E. Coppola, F. Giorgi, and S.K. Dash  
CORDEX experiment over West Asia domain using the new Regional Climate Model RegCM4.2

11:45–12:00  EGU2012-5271  
E. Coppola and F. Giorgi  
A surrogate climate change experiment with the RegT-Band to investigate the increase of Hydroclimatic Intensity

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Chairperson: Ray Arritt

13:30–13:45  EGU2012-7197  
S. Wang and D. Lee  
Building Asian Climate Change Scenarios by Multi-Regional Climate Models Ensemble

13:45–14:00  EGU2012-1572  
W.-R. Huang and J. C. L. Chan  
Regional Climate Simulations of Summer Diurnal Rainfall Variations over East Asia and Southeast China

14:00–14:15  EGU2012-7093  
S. G. Oh, M. S. Suh, D. H. Cha, and H. S. Kang  
Impact of Boundary Conditions on Extreme Climate Simulation over South-Korea in the CORDEX-East Asia Domain Using RegCM4

14:15–14:30  EGU2012-9984  
New Development of the Online Integrated Climate-Chemistry model framework (RegCM-CHEM4)

14:30–14:45  EGU2012-2099  
C Caminade and AP Morse  
When will European countries exceed the 2°C temperature increase?

14:45–15:00  EGU2012-7136  
R. Lorenz, E.L. Davin, and S.I. Seneviratne  
Land-climate feedbacks and climate extremes in the regional climate model COSMO-CLM2

Chairperson: Filippo Giorgi

15:30–15:45  EGU2012-8211  
A. Gobiet, D. Jacob, and EURO-CORDEX Community  
A new generation of regional climate simulations for Europe: The EURO-CORDEX Initiative

15:45–16:00  EGU2012-6267  
C. Teichmann, D. Rechid, K. Sieck, and D. Jacob  
Evaluation of historical climate simulations from a global earth system model downscaled over the EURO-CORDEX domain

16:00–16:15  EGU2012-9791  
H. Feldmann, G. Schädler, and H.-J. Panitz  
Intensification of the regional scale variability of extreme precipitation derived from RCM simulations and observations

16:15–16:30  EGU2012-8065  
M. Suklitsch and A. Gobiet  
Exploring the diurnal cycle in convection resolving COSMO-CLM simulations
**EGU General Assembly 2012**

**BG6.3/CL5.14/SSP5.4 – Micropaleontology: a key to modern and ancient environments (co-organized) – Orals**

Convener: K. Koho | Co-Conveners: F. Jorissen, A. Sluijs, C. Fontanier

**Room: 23**

Chairperson: n.n.

**08:30–08:45** EGU2012-4722

N. Dijkstra, J. Junttila, K. Husum, J. Carroll, D. Kiltgaard-Kristensen, and M. Hald

Benthic foraminifera as indicators of pollution in high latitude marine environments

**08:45–09:00** EGU2012-3861

H. Kitazato, N. Ohkawara, A. Iwasaki, H. Nomaki, I. Akoumianaki, and H. Tokuyama

Live (Rose-bengal stained) foraminifera from deep-sea anoxic salt brine in the Eastern Mediterranean: toward understanding limit of life for single-celled eukaryotes (foraminifera)

**09:00–09:15** EGU2012-13508

R.J. Telford and M. Kucera

Consequences of the mismatch between the depth at which planktonic foraminifera live and the calibration depth of SST transfer functions

**09:15–09:30** EGU2012-11943

H. Takagi, K. Moriya, T. Ishimura, A. Suzuki, H. Kawahata, H. Hirano, and IODP Exp. 330 Scientists

Individual ontogenetic stable isotope records of Recent planktonic foraminifers: Testing for algal photosymbiosis

**09:30–09:45** EGU2012-5731

J.C. Wit, L.J. de Nooijer, R. Hennekam, G.J. de Lange, and G.J. Reichart

Foraminiferal Na/Ca as a tool to reconstruct salinity

**09:45–10:00** EGU2012-11727

T. Hesse, D. Wolf-Gladrow, J. Bijma, G. Lohmann, and R. Zeebe

Impact of vital effects and carbonate chemistry on ?13C in benthic foraminifera: model sensitivity experiments

**BG6.3/CL5.14/SSP5.4 – Micropaleontology: a key to modern and ancient environments (co-organized) – Posters**

Convener: K. Koho | Co-Conveners: F. Jorissen, A. Sluijs, C. Fontanier

**Poster Area BG | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: Koho/Jorissen

**BG68** EGU2012-4283

C. Lopes

Statistical considerations on the application of Micropaleontology in order to reconstruct past environments: a diatom case study.

**BG69** EGU2012-7899

M. Theodor, Y. Milker, A. Müller, and G. Schmiedl

Paleoecology of benthic foraminifera from Paleogene shelf environments: Example from the “Latdorf” transgression in northeastern Germany

**BG70** EGU2012-4068

M.A. Kaminski, S. Kender, A. Ciurej, and R. Balc

Pliocene-Pleistocene Benthic Foraminiferal assemblages in the Southern Bering Sea, (IODP Expedition 323).

**BG71** EGU2012-1066

A. Cortina, F.J Siervo, G. Filippelli, and J.A. Flores

The orbital control of the sea level and past climatic changes in the Gulf of Lions (off south of France) from 133 kyr to 400 kyr

**BG72** EGU2012-13830

J. M. Bouchal

High resolution taxonomic study of the late Eocene (~34 Ma) Florissant palynoflora, Colorado, USA

**BG73** EGU2012-9385


Microfossil response to the PETM at DSDP Site 401 (eastern North Atlantic)
BG74  EGU2012-2373
M. Saeidi Ortakand and S. Hasegawa
Biostratigraphy and paleoceanography of the Japan Sea in Joetsu Basin since 120 cal. kyr BP

BG75  EGU2012-5800
D. Theobalt and O. Mandic
Badenian planktonic foraminifera as climate proxies at the southern margin of the Central Paratethys
(Ugljevik, Bosnia and Herzegovina)

BG76  EGU2012-5401
K. Zameiczky, T.L. Rasmussen, K. Husum, and M. Hald
Climate changes and calcium carbonate dissolution of planktic foraminifera assemblages over the last 30,000 years in the Fram Strait

BG77  EGU2012-11662
S. lepure, T. Namiotko, A. Montanari, E. Brugiapaglia, M. Mainiero, S. Mariani, and M. Fiebig
A comparison of modern and fossil ostracods from Frasassi Cave system (northeastern Apennines, Italy) to infer past environmental conditions

BG78  EGU2012-7848
I. Hessler, M. Young, M. Mohtadi, A. Lückge, and H. Behling
The distribution of organic-walled dinoflagellate cysts in marine surface samples of the eastern Indian Ocean in relation to environmental conditions

BG79  EGU2012-6113
V.M.P. Bouchet, S. Hess, J.K. Dolven, and E. Alve
The use of fossil benthic foraminifera to define reference conditions for present-day marine waters

BG80  EGU2012-4744
N. Dijkstra, J. Junttila, K. Husum, J. Carroll, and M. Hald
Assessing environmental impact from gas and oil exploration in the SW Barents Sea using benthic foraminiferal assemblages

BG81  EGU2012-10288
E. Berton, L. Bertello, L. Capotondi, C. Bergami, F. Giglio, M. Ravaoli, C. Rossi, and A. Ferretti
Benthic foraminifera as indicators of hydrologic and environmental conditions in the Ross Sea (Antarctica)

BG82  EGU2012-11885
Total assemblages of benthic foraminifera from a mixed siliciclastic/carbonate inner shelf; preliminary results from the bays of Soline and Nin (Adriatic Sea, Croatia)

BG83  EGU2012-2203
F. Fiorini and S. W. Lokier
Recent benthic foraminiferal assemblages and sedimentary facies distribution from marginal marine environment of Abu Dhabi region (Arabian Gulf)

BG84  EGU2012-11503
Temperature calibration along the NW Iberian margin: multi-proxy approach

BG85  EGU2012-564
D. Evans and W. Müller
Foraminifera Mg/Ca palaeothermometry in a high CO2 world - appropriate correction for secular change in seawater chemistry

BG86  EGU2012-5045
T. Kuhnt, O Friedrich, G. Schmiedl, Y. Milker, A. Mackensen, and R. Schiebel
Relationship between the pore density in benthic foraminifera and bottom-water oxygen content

BG87  EGU2012-8203
K.A Koho, E Pina-Ochoa, E. Geslin, and N. Risgaard-Petersen
Vertical migration, nitrate uptake and denitrification: survival mechanisms of foraminifers (Globobulimina turgida) under low oxygen conditions

BG88  EGU2012-7745
A. Movellan, R. Schiebel, M.V. Zubkov, A. Smyth, H. Howa, and F. Jorissen
Quantification of individual foraminifer protein content using nano-spectrophotometry

BG89  EGU2012-5527
Polymorphic authigenic carbonates and foraminifera taphonomical characteristics of a paleoseep, Southwestern Taiwan

HS7.2/AS1.20/CL5.16/NH1.3/NP3.6 – Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized) – Orals
Room: 33
Chairperson: Roberto Deidda
08:30–08:45 EGU2012-1181
E. Morin
To know what we cannot know: Global mapping of minimal detectable absolute trends in annual precipitation

08:45–09:00 EGU2012-7261
H. J. D. Sørup, M. Sunyer, O. B. Christensen, K. Arnbjerg-Nielsen, and P. S. Mikkelsen
Extreme and mean rainfall differences in observational data used as reference in climate studies

09:00–09:15 EGU2012-4866
V. Thiemig, R. Rojas, V. Levizzani, and A. De Roo
Validation of satellite-based precipitation estimates over different African River Basins

09:15–09:30 EGU2012-8989
R. Roca, P Chambon, I jobard, and N. Viltard
Investigating the error budget of tropical rainfall accumulations derived from combined passive microwave and infrared satellite measurements

09:30–09:45 EGU2012-9730
T. Bellerby
Ensemble conditional precipitation simulation from spatiotemporally heterogeneous multiplatform satellite data sets.

09:45–10:00 EGU2012-1400
S. Dance and A. Seed
Characterizing Radar Raingauge Errors for NWP Assimilation

COFFEE BREAK

Chairperson: Tim Bellerby

10:30–10:45 EGU2012-8146
M.A. Sunyer, H.J.D. Sørup, H. Madsen, D. Rosbjerg, and K. Arnbjerg-Nielsen
Comparing Regional Climate Model output to observational data sets for extreme rainfall

10:45–11:00 EGU2012-8780
S.C. van Pelt, J.J. Beersma, T.A. Buishand, B.J.J.M. van den Hurk, and P. Kabat
Evaluation of the probability distribution of the future change in extreme precipitation

11:00–11:15 EGU2012-2728
G.G.S. Pegram and A. Bárdossy
Multiscale spatial recorrelation of RCM precipitation downscaling to correct predictions over large areas and small

11:15–11:30 EGU2012-1280
J. Chen, F. Brissette, and D. Chaumont
Uncertainty of empirical downscaling methods in quantifying the hydrological impact of climate change

11:30–11:45 EGU2012-13756
F.S. Mpelasoka, S. Charles, F.H. Chiew, G. Fu, and S. Beecham
Assessment of CMIP5 GCM daily predictor variables for statistical downscaling

11:45–12:00 EGU2012-8150
G. Mascaro, R. Deidda, and M. Hellies
Robust characterization of rainfall intermittency in Sardinia and identification of physical controls

LUNCH BREAK

Chairperson: Andreas Langousis

13:30–13:45 EGU2012-8190
G.T. Diro, A.M. Tompkins, and X. Bi
Dynamical downscaling of ECMWF ensemble seasonal forecast over East Africa with RegCM3

13:45–14:00 EGU2012-8417
A. Champion, K. Hodges, and L. Bengtsson
Dynamically Downscaling Precipitation from Extra-Tropical Cyclones

14:00–14:15 EGU2012-13440
E. Brisson, N.P.M. van Lipzig, and M. Demuzere
Downscaling precipitation at convection resolving scale using COSMO-CLM

14:15–14:30 EGU2012-4684
A. Sharma, F. Woldemeskel, R. Mehrotra, and B. Sivakumar
An error model for GCM precipitation and temperature simulations
14:30–14:45  EGU2012-13531

F Wetterhall, H. L. Cloke, Y He, J Freer, and F Pappenberger

Modelling climate impact on floods under future emission scenarios using an ensemble of climate model projections

Chairperson: Stefanie Vogl

15:30–15:45  EGU2012-12765

H. W. Rust, M. Vrac, M. Lengaigne, and B. Sultan

Towards downscaling precipitation for Senegal - An approach based on generalized linear models and weather types

15:45–16:00  EGU2012-5863

M. Milan and C. Simmer

A Sequential Ensemble Prediction System at Convection Permitting Scales

16:00–16:15  EGU2012-2843

D. Cane, S. Barbarino, L. Renier, and C. Ronchi

Regional Climate Models Downscaling in the Alpine Area with Multimodel SuperEnsemble

16:15–16:30  EGU2012-9829

S. Vogl, P. Laux, W. Qiu, G. Mao, and H. Kunstmann

Copula-based assimilation of radar and gauge information to derive bias corrected precipitation fields

16:30–16:45  EGU2012-10864

N. Addor, N. Salzmann, T. Ewen, and J. Seibert

Bias-correction conditioned on circulation patterns for ENSEMBLES precipitation simulations in mountainous regions

HS10.8/BG4.4 – Environmental and anthropogenic change affecting catchments and groundwater-dependent ecosystems (co-listed) – Orals


Room: 39

Chairperson: Stan Schymanski

13:30–13:45  EGU2012-9494

A. Montanari

Modelling hydrological systems under change: sociohydrology and sustainable development

13:45–14:00  EGU2012-3449

P. Kumar, V. Srinivasan, P. V. V. Le, and D. Drewry

Ecological Acclimation and Hydrologic Response: Problem Complexity and Modeling Challenges

14:00–14:15  EGU2012-1871

P. M. Rossi, P. Ala-aho, and A-K. Ronkanen

The role of peat double porosity on groundwater-surface water interaction in a drained fen

14:15–14:30  EGU2012-13429

T. G. Reichenauf, T. Krimly, and K. Schneider

Effects of dynamic agricultural decision making in an ecohydrological model

14:30–14:45  EGU2012-6047

R. Wilby

Evaluating environmental flows under climate variability and change

14:45–15:00  EGU2012-12952

U. Ehret, E. Zehe, V. Wulfmeyer, and K. Warrach

Bias Correction used for Climate Projections from Climate Models - A Critique

HS10.8/BG4.4 – Environmental and anthropogenic change affecting catchments and groundwater-dependent ecosystems (co-listed) – Posters


Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Simone Fatichi
A296  EGU2012-10825
S. Pande
On Budyko curve as a consequence of climate-soil-vegetation equilibrium hypothesis

A297  EGU2012-3337
X. Xu, D. Yang, and H. Yang
Impact of past climate variability and change on catchment ecohydrology in China

A298  EGU2012-14242
S. J. Schymanski, D. Or, M. L. Roderick, and M. Sivapalan
Prediction under change: invariant model parameters in a varying environment

A299  EGU2012-5637
G. Ceccherini and F. Castelli
Vegetation response to climate, eco-hydrological modeling at basin scale in water-limited ecosystems

A300  EGU2012-9983
J.Z. Coletti and M.R. Hipsey
Ecohydrological feedbacks mediate wetland habitat response to climate variability

A301  EGU2012-8131
G. Bertrand, J. Masini, N. Goldscheider, J.M. Gobat, and D. Hunkeler
Investigation of spatio-temporal variability of water uptake in a groundwater-dependent ecosystem using a stable isotope approach (?18O, ?2H): Plyn Forest, Switzerland

A302  EGU2012-12928
A. Sastre-Merlín, S. Martínez-Pérez, and E. Molina-Navarro
Groundwater in steppe environments: “El Hito” Lagoon wetland as a case of study (Cuenca; Spain)

A303  EGU2012-8229
Simón, Málá-Sz?nyi, and Weidinger
Investigation of groundwater dependent ecosystems in a complex hydraulic situation

A304  EGU2012-3721
U. Schneidewind, M. El-Rawy, P. De Becker, and O. Batelaan
Analysis and Rehabilitation of a Groundwater-Dependent Ecosystem in Belgium

A305  EGU2012-3708
S. Witczak, J. Kania, K. Rozanski, P. Wachniew, A. Zurek, and M. Dulinski
Environmental water requirements of groundwater dependent ecosystems: conflict between nature and man

A306  EGU2012-802
N. Welti, D. Lockington, T. Jakeman, and R. Hunt
Characterizing hot spots throughout the catchment

A307  EGU2012-12861
T. Graeff, G. Baroni, A. Bronstert, A. Hohlbein, and S. Oswald
Influence of climatic change on hydrological processes on coastal areas, a model study

A308  EGU2012-11257
G. Garner, D.M. Hannah, I.A. Malcolm, and J.P. Sadler
Inter-annual variability of stream temperature, micro-climate and heat exchange dynamics: a comparison of forest and moorland environments

A309  EGU2012-13432
K. Khamis, D.M Hannah, L.E Brown, and A.M Milner
Sub-seasonal river heat flux partitioning in an alpine, glacierized basin

A310  EGU2012-1367
N. Frasheri, N. Pano, A. Frasheri, G. Beqiraj, S. Bushati, and E. Taska
A review on anthropogenic impact to the Micro Prespa lake and its damages

A311  EGU2012-8652
C. Ikiel, DE Kilic, and A. Atalay Dutucu
General Ecological Characteristics Based on GIS Methods in Poyrazlar Lake, Turkey

A312  EGU2012-11926
T. V. Sapelko, K.V. Shemanaev, D.D. Kuznetsov, and N.V. Ignatieva
Relation of human and natural factors in the development of lakes according to a complex analysis of lake sediments

OS1.2 – The North Atlantic: natural variability and global change (co-listed) – Posters
Convener: M. Rhein | Co-Conveners: R.J. Greatbatch
Hall X/Y | Display Time 08:00–17:00
Author in Attendance: 10:30–12:00
Chairperson: Reiner Steinfeldt

XY311  EGU2012-1052
L.I. Carracedo, M. Garcia, H. Mercier, P. Conde, P. Lherminier, F.F. Pérez, and M. Gilcoto
Interannual variability of water masses transports across A25-OVIDE section (subpolar atlantic gyre)
XY312  EGU2012-1069
A.E. Vyazilova and A.V. Smirnov
Links between thermohaline anomalies in Northwest Atlantic and Nordic Seas

XY313  EGU2012-5128
C. Denker, D. Kieke, B. Klein, H. Klein, and M. Rhein
Water mass properties on their way over the Mid-Atlantic-Ridge through the Faraday Fracture Zone

XY314  EGU2012-4363
A. Smirnov and A. Korablev
Structure and long-term variability of oceanographic characteristics in the Nordic Seas derived from observed and gridded (DIVA software) datasets

XY315  EGU2012-5810
A. Rubchenia, A. Popov, A. Fedorova, and N. Lebedev
Interpretation of time series (salinity and temperature) layers in North Atlantic from 1950 to 2011

XY316  EGU2012-5570
E. Tzortzi, C.P. Gommenginger, S. Josey, and M.A. Srokosz
How does surface salinity and rain affect the North Atlantic ocean circulation?

XY317  EGU2012-4967
C. Mielke, E. Frajka-Williams, and J. Baehr
Observed and simulated seasonal variability of the AMOC at 26°N and 41°N

XY318  EGU2012-6122
O. Khmelnietskaya
Using the optimum multiparameter analysis to study the water masses of the North Atlantic

XY319  EGU2012-9770
E. Burrittlen, S.S. Drijfhout, and H.A. Dijkstra
Cause and effect of variations in the sinking of deep water in the MOC

XY320  EGU2012-12738
M.-j. Messias, A. J. Watson, P. J. Brown, and B.A. King
Evidence of Greenland Sea Water at 24 degrees N from the Greenland Sea Tracer Experiment

XY321  EGU2012-13372
M. G. Magaldi and T. W. N. Haine
Hydrostatic and non-hydrostatic simulations of the East Greenland Spill Jet

XY322  EGU2012-6282
L. Schneider, D. Kieke, K. Jochumsen, M. Rhein, D. Quadfasel, E. Varotsu, N. Serra, E. Colbourne, and I. Yashayaev
Export of Labrador Sea Water through Flemish Pass

XY323  EGU2012-4708
M. Korhonen, B. Rudels, U. Schauer, S. Pisarev, B. Rabe, and A. Wisotzki
Reduction of salinity and temperature observed in the Atlantic layer in the eastern Eurasian Basin of the Arctic Ocean in summer 2011

XY324  EGU2012-5218
C. Troupin and F. Machín
Negative wind anomalies generated a diminution of productivity in the North Atlantic in 2010

XY325  EGU2012-1953
A. Nummelin
Convection in the Greenland Sea in winter 2010-2011: Comparison between model and observations

XY326  EGU2012-5900
N. C. Wells

XY327  EGU2012-2127
N. Danailt, H. Mercier, P. Lherminier, A. Sarafanov, and A. Falina
The 2002-2010 mean circulation across the Greenland to Portugal A25-OVIDE section

XY328  EGU2012-1399
X. Zhao and J. Li
Winter-to-Winter Recurrence (WWR) of Air-Sea System in the Northern Hemisphere

XY329  EGU2012-7641
T. Martin, M. Latif, and A. Reintges
Uncertainties in freshwater and MOC predictions in the North Atlantic region

XY330  EGU2012-3099
W. Mueller, D. Matei, M. Bersch, J. Jungclaus, K. Lohmann, and J. Marotzke
A 20th-century reanalysis forced ocean model to recover North Atlantic climate variability from 1870-2007

XY331  EGU2012-11293
A. Born, T.F. Stocker, and A.B. Sande
Salt transport in the Irminger Current: a regional and a global model

XY332  EGU2012-9630
S.M. Olsen and T. Schmith
Greenland meltwater experiments
XY333  EGU2012-8828  D. V. Sein, M. Gröger, E. Maier-Reimer, and U. Mikolajewicz  Modeling anthropogenic Climate Change of the northwest European Shelves and the northeast Atlantic

XY334  EGU2012-7148  B. Filyushkin, S. Moshonkin, S. Myslenkov, and N. Kozhelupova  Simulation of interannual variability of overflow transport through the Denmark Strait

XY335  EGU2012-10826  Y.-O. Kwon and C. Frankignoul  Multi-decadal Variability of Atlantic Meridional Overturning Circulation in the Community Climate System Model 3

XY336  EGU2012-5594  A. Born, T.F. Stocker, C.C. Raible, and A. Levermann  Is the Atlantic subpolar gyre bistable in comprehensive coupled climate models?

XY337  EGU2012-5884  A. Megann, A. New, and A Blaker  Model representation of salinity anomalies and the stability of the North Atlantic overturning circulation

XY338  EGU2012-6093  M. Sonnewald, J. J.-M. Hirschi, and R. Marsh  Oceanic dominance of interannual subtropical North Atlantic heat content variability

XY339  EGU2012-6482  M. Brunetti, E. Fenu, and M. Beniston  Stability properties of the North Atlantic Ocean Circulation


XY341  EGU2012-3109  B. Tiedje, A. Köhl, and J. Baehr  North Atlantic heat transport and AMOC: Potential predictability in the subtropical and subpolar gyre


XY343  EGU2012-4886  K. Shimizu  Dynamics of long baroclinic Rossby waves along 26°N in the Atlantic

XY344  EGU2012-2192  W. P. Sijp  Characterising meridional overturning bistability as a dynamical system using a minimal set of state variables.

XY345  EGU2012-3129  E. D. da Costa and M Juckes  Structural Uncertainty in the Winter NAO index

XY346  EGU2012-5138  T. Christoudias, A. Pozzer, and J. Lelieveld  Influence of the North Atlantic Oscillation on air pollution transport

XY347  EGU2012-7364  J. de Laat and M. Crok  A late 20th century European climate shift

XY348  EGU2012-8421  M.V. Anisimov, V.I. Byshev, S.N. Moshonkin, V.G. Neiman, Ju.A. Romanov, I.V. Serykh, and V.B. Zalesny  On a Short-Term Climate Change in the North Atlantic Ocean

XY349  EGU2012-13175  V.A. Melnikov, L.V. Moskalenko, N.N. Golenko, and M.N. Golenko  Boreal Atmospheric circulation patterns on the basis of the world network weather station data

XY350  EGU2012-13435  J. A. Afael, M. Blanco-Durán, L. Gimeno, and L. de la Torre  Recovery of meteorological data for the observatory of A Guarda, Spain

SSP4.4 – Late Cretaceous – Early Paleogene climate dynamics and time scales (co-listed) – Posters
Convener: S. J. Batenburg | Co-Conveners: M. Sprovieri, S. Voigt, A. S. Gale, T. Westerhold
Hall A | Display Time 08:00–17:00
Author in Attendance: 15:30–17:00
Chairperson: n.n.
A367  EGU2012-4748
Testing the potential of bacterial branched tetraether membrane lipids as temperature proxy in peat and immature coal deposits

A368  EGU2012-4635
D.W. Jolley, R Daly, I Gilmour, M Gilmour, and S.P. Kelley
The Bollysh crater record of rapid vegetation change during the Dan-C2 hyperthermal event.

A369  EGU2012-8293
S. Neuhuber and M Wagreich
Mineralogical and geochemical records of the Upper Campanian Globotruncanita calcarata Zone- implications for the Penninic Ocean.

A370  EGU2012-6983
M. Wagreich, J. Hohenegger, and S. Neuhuber
Cyclostratigraphy and an astronomically calibrated duration of the Late Campanian Globotruncanita calcarata Zone

A371  EGU2012-7408
C. Jung, S. Voigt, O. Friedrich, and M. Frank
Late Campanian to Maastrichtian palaeoceanographic changes in the tropical Pacific

A372  EGU2012-7044
T. Adatte and G. Keller
New Evidence links Deccan Traps to the Cretaceous-Tertiary Boundary Mass Extinction

A373  EGU2012-5935
Paleoceanographic records in the Campanian-Maastrichtian Pelagic Succession, Mudurnu-Goynuk Basin, NW Turkey

A374  EGU2012-498
Astronomical tuning and carbon isotope stratigraphy of the Maastrichtian in Sopelana and Zumaia (Basque country, N-Spain)

A375  EGU2012-6185
S. J. Batenburg, A. Montanari, M. Sprovieri, F. J. Hilgen, R. Coccioni, and A. S. Gale
Astronomical tuning of black cherts in the Cenomanian Scaglia Bianca as precursors of the Bonarelli level (OAE2) at Furlo, Italy

A376  EGU2012-8551
M. Sprovieri, N. Sabatino, N. Pelosi, S. Batenburg, R. Coccioni, M. Iavarone, and S. Mazzola
Carbon cycles in Late Cretaceous time

SSP4.6 – Phanerozoic marginal and terrestrial palaeoenvironments as archives of biotic and climatic change: records and proxy developments (co-listed) – Orals
Room: 41
Chairperson: Stuart Robinson

13:30–13:45  EGU2012-4936
N. Wang, Y. Zong, and C. Brodie
An examination of organic molecular compounds of a lake sediment sequence to help explain organic carbon records of climate and environmental changes

13:45–14:00  EGU2012-11076
Y. Lu, Y. Hautevelle, and R. Michels
Improvements of palaeochemotaxonomy as a palaeofloristic proxy using artificial maturation of extant conifers

14:00–14:15  EGU2012-4599
M. Heldt, J. Mutterlose, U. Berner, and J. Erbacher
First high-resolution d13C-records across black shales of the Early Aptian Oceanic Anoxic Event 1a within the mid-latitudes of northwest Europe (Germany, Lower Saxony Basin)

14:15–14:30  EGU2012-12351
C.J. Wesseln, L. Mander, J.C. McElwain, and S.W. Punyasena
The preservation of pollen and spores across the Triassic-Jurassic transition in East Greenland

14:30–14:45  EGU2012-13755
P. E. Olsen, M. F. Schaller, D. V. Kent, and M. Et-Touhami
Was it the CO2 or the sulfur that did it? The mechanism of mass extinction of continental vertebrates at the end-Triassic extinction.
J.H. Whiteside and D. Grogan
Orbital Forcing of a Low-Latitude Lacustrine Ecosystem During the Middle Devonian: Implications for the Onset of the Middle Paleozoic Icehouse World

SSP4.6 – Phanerozoic marginal and terrestrial palaeoenvironments as archives of biotic and climatic change: records and proxy developments (co-listed) – Posters
Hall A | Display Time 08:00–17:00
Author in Attendance: 15:30–17:00
Chairperson: Stuart Robinson

A393 EGU2012-13424
Biofacies and faunal dynamics through the Sirius Passet Lagerstätte (lower Cambrian),

A394 EGU2012-1882
J. Vasi?kova, E. Lukâševiˇs, ?, Stinkulis, and I. Zupi?š
Upper Devonian vertebrate taphonomy and sedimentology from the Klunas fossil site, Tervete Formation, Latvia

A395 EGU2012-73
O. Kossoyava
Climatic - biotic continuum - a few examples from the Pennsylvanian - Early Permian

A396 EGU2012-284
A. Lukeneder and S. Lukeneder
The Orthoceltites beds - a case study on a Triassic mass-occurrence (Carnian, Taurus, Turkey)

A397 EGU2012-13185
L. Mander, W.M. Kürschner, and J.C. McElwain
Palynostratigraphy and vegetation history of the Triassic-Jurassic transition in East Greenland

A398 EGU2012-13359
M. Ruhl, C.V. Ullmann, W. Mette, and C. Korte
Carbon-cycle disturbances and environmental change preceding the end-Triassic mass extinction

A399 EGU2012-13928
J.H. Whiteside and M. El-Touhami
Excursions in Stable Carbon Isotopes at the End-Triassic Mass Extinction: Eastern North America and Morocco

A400 EGU2012-11358
Y. Hautevelle, Y. Lu, and R. Michels
Tracing of palaeoenvironmental changes during Jurassic in the Paris Basin: contributions of organic geochemistry

A401 EGU2012-7647
S.A. Robinson, A. Walker, and T.C. Atkinson
What was the oxygen-isotopic composition of Jurassic precipitation?

A402 EGU2012-5736
R. Navarrete, J.P Rodríguez, C.L. Liesa, and A.R. Soria
Preservation of dinosaur tracks beds in a synrift back-barrier system. Barremian Camarillas Formation, Galve sub-basin (northeast Spain)

A403 EGU2012-4228
U. Heimhofer, S. Burla, F. Oberli, C. Paulukat, J. L. Dinis, and H. Weissert
Sr isotope composition of low-Mg oyster shell calcite for stratigraphic assignment of Early Cretaceous near-shore deposits (Lusitanian Basin, Portugal)

A404 EGU2012-7263
C-isotope stratigraphy of plant-rich, non-marine sediments: towards an integrated record of mid-Cretaceous carbon cycling

A405 EGU2012-7162
G. Hofer, M. Wagreich, E. Draganits, S. Neuhuber, M.L. Grundtner, and M. Bottig
Geochemistry of Upper Cretaceous non-marine - marine cycles (Gosau Group, Austria)

A406 EGU2012-7360
Y. Weber, S. Voigt, J. Pross, T. Voigt, and J. Kley
Continental climate dynamics prior to uplift of the Northern Tien Shan - the Oligocene-Miocene succession of the Ili Basin, southeastern Kazakhstan
A407  EGU2012-4280
T. Matys Grygar, K. Mach, T. Novakova, and J. Laurin
Chemostratigraphy of lacustrine siliciclastics: how to process 200 m of monotonous mudstones (Most Basin, Czech Republic, Early Miocene)

A408  EGU2012-6401
N.S. Davies, J.C. Gosse, and N. Rybczynski
Cross-stratified Wood: Enigmatic Woody Debris Deposits in Warm-Polar Fluvial Sediments (Pliocene Beaufort Formation, Nunavut)

A409  EGU2012-8721
T. Laeppe and G. Lohmann
Core-top calibrations cannot detect seasonality of marine temperature proxies