

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

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## Monday, 23 April

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### AS1.10 – The global monsoon system: variability and dynamics (co-listed) – Orals

Convener: J. Li | Co-Convenors: Dr Turner, A. Bracco, P. Terray

**Room: 10**

Chairperson: n.n.

15:30–15:45	EGU2012-3078 <b>Y. Ming</b> , M. Bollasina, and V. Ramaswamy Anthropogenic aerosols and the weakening of the South Asian summer monsoon
15:45–16:00	EGU2012-5187 <b>D. Folini</b> , 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 <b>J. Zhu</b> , 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 <b>Y. Qian</b> , 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 <b>P. Knippertz</b> , A. H. Fink, R. Schuster, J. Trentmann, J. M. Schrage, and C. Yorke Ultra-Low Clouds over the Southern West African Monsoon Region
16:45–17:00	EGU2012-8256 <b>A G Turner</b> , B M Harris, and E J Highwood Monsoon collapse following tropical super-volcanic eruptions

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### AS1.10 – The global monsoon system: variability and dynamics (co-listed) – Posters

Convener: J. Li | Co-Convenors: 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 <b>C. Lin</b> , K. Yang, and J. Qin Observed surface and upper-air wind speed changes over China since 1960
XY51	EGU2012-1360 <b>R. Mahmood</b> and S. Li Asian Black Carbon Influence on East Asian Summer Monsoons
XY52	EGU2012-1398 <b>X. Kuang</b> Regional Differences in the Seasonal Variation of the upper-tropospheric Jet
XY53	EGU2012-1542 <b>L. Yao-dong</b> , 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 <b>F. Zheng</b> and J. Li Impact of Preceding Boreal Autumn Antarctic Ozone on Spring Precipitation over South China
XY55	EGU2012-3833 <b>Z. Liantong</b> Interdecadal Change in SST Anomalies Associated with Winter Rainfall over South China
XY56	EGU2012-3894 H. Hendon, <b>E. Lim</b> , and G. Liu The role of air-sea interaction for prediction of Australian summer monsoon rainfall
XY57	EGU2012-8994 <b>Y. Song</b> , 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 <b>A G Turner</b> and G Martin The role of peninsular India in the South Asian monsoon

XY59	EGU2012-10600 <b>S. Shen</b> and G. Leptoukh Analysis of Regional Scale Vegetation Variations and the Asian Monsoon Climate
XY60	EGU2012-10717 <b>D. Rizou</b> , H.A. Flocas, A. Bartzokas, and C.G. Helmis The influence of Indian summer monsoon on the climatic regime of Eastern Mediterranean
XY61	EGU2012-11886 <b>MA. Reeve</b> , Md. Abu Syed, PR. Hossain, G. Maainuddi, and N. Mamnun Community level perceptions of the monsoon onset, withdrawal and climatic trends in Bangladesh
XY62	EGU2012-13177 <b>MA. Reeve</b> and P-S. Chu Monsoon definition discrepancies in Bangladesh
XY63	EGU2012-13680 <b>M.E. Silva</b> and E.R.L. Silva Climatic variability between SST and river discharge at Amazon region
XY64	EGU2012-13950 <b>H Yang</b> , C Y Li, and J Pan Cause and Anomalous Characteristics of the South China Sea Monsoon Trough Producing Heavy Rainfall in South China
XY65	EGU2012-6768 <b>A. Duan</b> and M. Wang Persistent Weakening Trend in the Spring Sensible Heat Source over the Tibetan Plateau and its Impact on the Asian Summer Monsoon
XY66	EGU2012-7128 <b>Y Luo</b> , H Wang, R Zhang, W Qian, and Z Luo Comparison of Rainfall Characteristics and Convective Properties of Monsoon Precipitation Systems over South China and Yangtze-and-Huai River Basin
XY67	EGU2012-459 <b>W. Yuan</b> , R. Yu, M. Zhang, H. Chen, and J. Li Subseasonal characteristics of diurnal variation in summer monsoon rainfall over central eastern China
XY68	EGU2012-11200 <b>J. Chen</b> Bimodal Variability of East Asian Summer Monsoon Viewed as Atmospheric Hydrological Cycle
XY69	EGU2012-2301 <b>T. Spengler</b> and R.K. Smith The dynamics of heat lows in a uniform flow
XY70	EGU2012-8485 <b>A. Hannachi</b> Isomap nonlinearity analysis and bimodality of the Asian summer monsoon
XY71	EGU2012-3806 <b>J. W. Kim</b> Changes in East Asian Winter Monsoon associated with the combined effect of ENSO and PDO
XY72	EGU2012-3864 <b>Z. Lin</b> , R. Lu, and W. Zhou Change in early-summer meridional teleconnection over the western North Pacific and East Asia around the late 1970s
XY73	EGU2012-2590 <b>H. Liu</b> Low-level Jets over Southeast China: Rainy Season Climatology During Summer 2003
XY74	EGU2012-2383 <b>W. Chen</b> Impacts of the duration of El Niño decaying phases on the western North Pacific anticyclone anomalies
XY75	EGU2012-431 <b>C. Wenhaji Ndomeni</b> , C. Cagnazzo, S. Gualdi, S. Materia, A. Borrelli, and A. Navarra Analysis of the Representation of the West-African Climate in a set of CMCC Climate Model Simulations
XY76	EGU2012-1937 <b>J. Feng</b> and J. P. Li Influence of El Niño Modoki on Spring Rainfall
XY77	EGU2012-7811 <b>S.-Y. Lee</b> and <b>T.-Y. Koh</b> Teleconnection between Australian winter temperature and Indian summer monsoon rainfall

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**AS1.14 – Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-listed) – Orals**

Convener: G.C. Leckebusch | Co-Conveners: U. Ulbrich, J. G. Pinto

**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  
**R. Osinski**, P. Lorenz, T. Kruschke, M. Voigt, G. C. Leckebusch, U. Ulbrich, T. Hofherr, and E. Faust  
 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. Deroche**, M. Choux, F. Codron, and P. Yiou  
 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**

Convener: G.C. Leckebusch | Co-Conveners: U. Ulbrich, J. G. Pinto

**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 Intraseasonal 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

XY88	EGU2012-4258 <b>L. Xia</b> , F. Feser, M. Zahn, and H. von Storch A Study of Quasi-millennial Extratropical Cyclone Activity Using Tracking and Clustering Methods
XY89	EGU2012-5257 <b>S. Pfahl</b> and H. Wernli Quantifying the relevance of cyclones for precipitation extremes
XY90	EGU2012-8222 <b>S. L. Gray</b> and H. F. Dacre Quantifying the sensitivity of North Atlantic cyclone development to atmospheric precursor fields
XY91	EGU2012-7040 K.M. Nissen, U. Ulbrich, <b>G.C. Leckebusch</b> , and N. Becker Changes in Vb cyclone frequency and rainfall under anthropogenic climate change
XY92	EGU2012-12234 <b>G.C. Leckebusch</b> , X.L. Wang, S.F. Kew, J. Grieger, M. Schuster, U. Ulbrich, and S. Gulev and the IMILAST team Trends and interannual variability of extra-tropical cyclones derived from different diagnostic methods
XY93	EGU2012-8776 A. Comellas, <b>A. Parodi</b> , Z. Fuchs, and L. Molini Saturation fraction and gross moist stability in severely precipitating systems in the midlatitude Mediterranean environment
XY94	EGU2012-6837 <b>A. Troccoli</b> , F. Zambon, KI Hodges, and M Marani Storm surge frequency reduction in Venice under climate change

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**CL0 – Open Session on Climate: Past, Present and Future – Orals**

Convener: D.-D. Rousseau | Co-Conveners: M.-A. Sicre

**Room: 16**

Chairperson: A.M. Sicre - D.D. Rousseau

08:30–08:45	EGU2012-6235 <b>W. Gosnold</b> Repeat Temperature Measurements in Boreholes may Quantify Climate Forcing
08:45–09:00	EGU2012-11618 <b>N. Zeng</b> Biomass burial and storage to reduce atmospheric CO2
09:00–09:15	EGU2012-1546 <b>H. Xu</b> , J. Li, and J. Feng The Asymmetry Relationship between the Winter NAO and Precipitation in Southwest China
09:15–09:30	EGU2012-3058 <b>R.R. Kuechler</b> , B. Beckmann, L. Dupont, and E. Schefuß An apparent contradiction in plant-wax-specific isotopes: How can more rain favor aridity-adapted plants?
09:30–09:45	EGU2012-3247 <b>U. Heikkilä</b> and A. M. Smith Production rate and climate influences on the variability of 10Be deposition in Greenland and in Antarctica
09:45–10:00	EGU2012-7789 <b>N. Rimbu</b> , G. Lohmann, G. König-Langlo, C. Necula, and M. Ionita Intraseasonal to interannual oscillations of Antarctic climate as recorded at Neumayer polar station

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**COFFEE BREAK**

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Chairperson: D.D.Rousseau - A.M. Sicre

10:30–10:45	EGU2012-4465 <b>M. Bar-Matthews</b> Greening of the Sahara - a paleo perspective on the history of water in the Middle East and North Africa
10:45–11:00	EGU2012-11777 <b>F. Parrenin</b> Timing of Antarctic temperature and CO2 Changes across the last deglaciation
11:00–11:15	EGU2012-1095 <b>P. Morozova</b> 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  
**I. Hessler**, L. Dupont, D. Handiani, S. Steinke, J. Groeneveld, U. Merkel, and A. Paul  
 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  
**A.P. Karageorgis**, E.K. Tripsanas, T.D. Kanellopoulos, E. Koutsopoulou, I. Panagiotopoulos, W.R. Bryant, and N.C. Slowey  
 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

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**CL0 – Open Session on Climate: Past, Present and Future – Posters**

Convener: D.-D. Rousseau | Co-Conveners: M.-A. Sicre

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 15:30–17:00

Chairperson: A.M. Sicre - D.D. Rousseau

- 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 CO<sub>2</sub>
- 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. Ikebara, and R. Tada  
 Surface-water exchange between the East Sea/Japan Sea and neighboring seas during the last glacial and deglacial 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. Blíž?ák, P. Kajaba, J. Koš?álová, O. Bochní?ek, 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 <b>J. Nagy</b> , 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 <b>P. Berrisford</b> , P. Kallberg, 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 <b>S. Jung</b> and D. Kroon Quantifying rates of change in ocean conditions with implications for timing of sea level change
Z220	EGU2012-12823 <b>J Latham</b> , B Parkes, A. Gadian, and S Salter Controlled Hurricane Weakening Via Marine Cloud Brightening
Z221	EGU2012-3835 <b>T. Khodzher</b> Cryolithic zone and Arctic shelf under conditions of climate changes as exemplified by the Kara Sea basin
Z222	EGU2012-12581 <b>J. Weckström</b> , A. Korhola, M. Välimäki, H. Seppä, M. Luoto, E.-S. Tuittila, M. Leppäranta, K. Kahilainen, J. Saarinen, and H. Heikkilä Climate change on arctic environment, ecosystem services and society (CLICHE)
Z223	EGU2012-1959 <b>A. Stickler</b> , 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 <b>J. J. Barrett</b> , C. C. Day, R. N. E. Barton, A. Bouzougar, and G. M. Henderson Speleothem Reconstruction of Moroccan Climate: from the Strait to the Sahara

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

Convener: A. Voigt | Co-Conveners: D.S. Abbot, T. Bosak, F. Macdonald, Y. Donnadieu

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 13:30–15:00

Chairperson: Aiko Voigt, Dorian S. Abbot

Z1	EGU2012-125 <b>D.S. Abbot</b> , A. Voigt, M. Branson, D. Pollard, D. Koll, R.T. Pierrehumbert, G. Le Hir, D. Randall, and Y. Donnadieu SNOWMIP2: Comparing simulation of the deep Snowball and the nearly deglaciating Snowball among GCMs
Z2	EGU2012-960 <b>A. Voigt</b> and D. S. Abbot On the stability of low-latitude sea-ice edges in a comprehensive coupled climate model
Z3	EGU2012-1263 <b>F.A. Macdonald</b> , A.D. Rooney, F.O. Dudas, and D Selby Osmium and Strontium Isotope Tests of a Sturtian-Rapitan Snowball Earth
Z4	EGU2012-1571 <b>J. Yang</b> and Y. Hu Supergreenhouse Warming during the Snowball Earth Aftermath
Z5	EGU2012-4984 <b>A.T. Brasier</b> , A.P. Martin, A.R. Prave, V.A. Melezhik, D. Condon, and A.E. Fallick 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, <b>E.D. Waddington</b> , 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 <b>S. Warren</b> Albedo of cold sea ice with precipitated salt on the tropical ocean of Snowball Earth: field measurements and laboratory experiments
Z8	EGU2012-6756 <b>R. Dadic</b> , P. Mullen, M. Schneebeli, R.E. Brandt, M. Fitzpatrick, R. Carns, and S.G. Warren 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 <b>R. Boyle</b> A mechanism for Snowball Earth triggering animal evolution

Z10	EGU2012-9318 <b>I. Gyollai</b> , 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)
Z11	EGU2012-10277 <b>S.A. Kasemann</b> , A.R. Prave, A.E. Fallick, and K.-H. Hoffmann Calcium isotopes and environmental conditions in the aftermath of a Cryogenian glaciation
Z12	EGU2012-11137 <b>Y. Ashkenazy</b> , H. Gildor, M. Losch, D. Schrag, and E. Tziperman Ocean circulation under snowball earth conditions
Z13	EGU2012-12481 <b>M. Macouin</b> , R.I.F. Trindade, M. Ader, E. Font, L.C. Vieira, J.J. Alvaro, G. Jiang, B. Pokrovsky, and P. Affaton The Rock Magnetic Signature of the Neoproterozoic Glaciation's Aftermath

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**CL1.2 – Modelling paleoclimates from the Cretaceous to the Holocene: learning from numerical experiments and model-data comparisons – Oral presentations**

Convener: M. Kageyama | Co-Conveners: D. Lunt, A Paul, M. Kucera

**Room: 15**

Chairperson: Masa Kageyama

15:30–15:45	EGU2012-7601 <b>J. Blöhdorn</b> , W. Park, M. Latif, and S. Flögel Mid-Cretaceous Ocean Circulation in the Kiel Climate Model
15:45–16:00	EGU2012-4743 <b>R. Caballero</b> , M. Huber, and J. Hanley Transition to a climate state qualitatively different from modern in NCAR CCSM simulations of the Eocene
16:00–16:15	EGU2012-10692 <b>N. Sagoo</b> , PJ Valdes, and R Flecker Early Eocene perturbed parameter simulations: multiple methods of proxy-model comparison
16:15–16:30	EGU2012-3292 <b>U. Salzmann</b> , A.M. Dolan, A.M. Haywood, A. Abe-Ouchi, F. Bragg, W.-L. Chan, M.A. Chandler, D.J. Lunt, B. Otto-Bliesner, and N. Rosenbloom Assessing data and model uncertainties in modelling Pliocene warm terrestrial climates
16:30–16:45	EGU2012-6121 <b>G. Jung</b> , M. Prange, and M. Schulz Mountain uplift and the evolution of the African rainbelt in the late Neogene
16:45–17:00	EGU2012-9231 <b>T. Kleinen</b> and V. Brovkin The carbon cycle during recent interglacials

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**CL1.2 – Modelling paleoclimates from the Cretaceous to the Holocene: learning from numerical experiments and model-data comparisons – Posters**

Convener: M. Kageyama | Co-Conveners: D. Lunt, A Paul, M. Kucera

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

Z14	EGU2012-7117 <b>J. D. Annan</b> and J. C. Hargreaves How cold was the Last Glacial Maximum?
Z15	EGU2012-13101 <b>M. Kageyama</b> , P. Braconnot, L. Bopp, A. Caubel, M.-A. Foujols, E. Guilyardi, J. Lloyd, F. Lombard, V. Mariotti, O. Marti, T. Roy, and M.-N. Woillez Mid-Holocene and Last Glacial Maximum climate simulations with the IPSL model: new features with the IPSLCM-5A version
Z16	EGU2012-6857 <b>J. C. Hargreaves</b> , J.D. Annan, R. Ohgaito, A. Paul, and P. Bartlein Reliability and Skill of Climate Models.
Z17	EGU2012-13342 <b>T.L. Edwards</b> , J.C. Rougier, and M. Collins Assimilating palaeoclimate reconstructions into GCM simulations for climates of the Mid-Holocene and Last Glacial Maximum

Z18	EGU2012-5982 <b>J.-Y. Peterschmitt</b> , S. Denvil, M. Morgan, A. Bhardwaj and the PMIP 3 Participants Team The PMIP 3 Database
Z19	EGU2012-12803 <b>A Abe-Ouchi</b> , R Ohgaito, A Oka, M Chikamoto, JC Hargreaves, M Yoshimori, and A Timmerman Why climate models often fail to reproduce the Atlantic Meridional Overturning Circulation at the Last Glacial Maximum
Z20	EGU2012-12520 <b>D.M. Roche</b> and M. Kageyama PMIP-3 Last Glacial Maximum : sensitivity to ice-sheets boundary conditions in the iLOVECLIM climate model
Z21	EGU2012-12610 <b>I. Cvijanovic</b> , J. C. H. Chiang, P. L. Langen, and E. Kaas Global energy budget changes and the role of tropical SSTs in the southward ITCZ shifts
Z22	EGU2012-2857 <b>R. Banderas</b> , J. Álvarez-Solas, and M. Montoya Glacial abrupt climate change as a result of internal oscillations
Z23	EGU2012-9518 <b>M.-N. Woillez</b> , M. Kageyama, and G. Krinner Simulating the impact of abrupt AMOC changes on vegetation and carbon stocks with the ORCHIDEE/IPSL models
Z24	EGU2012-9871 <b>A M De Boer</b> , A J Watson, N R Edwards, and K I C Oliver A multi-variable box model approach to the ocean carbon cycle during the last glacial
Z25	EGU2012-13121 <b>N. Herold</b> , Q.Z. Yin, M.P. Karami, and A. Berger Modelling the warm interglacials: analogues of MIS1
Z26	EGU2012-12530 <b>C. Simmons</b> , L.A. Mysak, and H.D. Matthews The role of Antarctic Ice Shelves in Holocene CO <sub>2</sub> concentrations: A study using the University of Victoria Earth System Climate Model
Z27	EGU2012-13382 <b>B. Risebrobakken</b> , C. Andersson, E. L. McClymont, and L. Jensen The Nordic Seas in the Pliocene: A hot spot or not?
Z28	EGU2012-10653 <b>A.M. Haywood</b> , D.J. Hill, A.M. Dolan, U. Salzmann, H.J. Dowsett, M.M. Robinson, B. Otto-Bliesner, N. Rosenbloom, M.A. Chandler, D.J. Lunt, S.J. Pickering, and PlioMIP Participants Large scale features of the Pliocene climate: Results from the PlioMIP experiments
Z29	EGU2012-6436 <b>M. Willeit</b> and A. Ganopolski On the effect of orbital forcing on mid-Pliocene vegetation: results from an Earth system model of intermediate complexity.
Z30	EGU2012-9269 <b>C. Contoux</b> , A. Jost, P. Sepulchre, and G. Ramstein Modelling the mid-Pliocene Warm Period with the IPSLGCM: contribution to PlioMIP and feedback mechanisms from the presence of mega-lakes
Z31	EGU2012-9358 <b>G. Knorr</b> , M. Butzin, G. Lohmann, and A. Micheels A new mechanism for the global temperature rebound during the Mid Miocene climate transition
Z32	EGU2012-6119 <b>A. Goldner</b> , M. Huber, and R. Caballero Is Antarctic Glaciation an Important Component of Earth System Sensitivity?
Z33	EGU2012-11650 DA Carozza and <b>LA Mysak</b> Methane and environmental change during the Paleocene-Eocene thermal maximum (PETM): Modeling the PETM as a multistage event
Z34	EGU2012-12084 <b>J. Buzan</b> , A. Goldner, and M. Huber Comparison of heat stress metrics with modern, future, and past greenhouse climates

**CL1.8 – Paleoenvironmental, tectonic and human evolution across the Levant-Anatolia Regions – Orals**

Convener: F. Anselmetti | Co-Conveners: T. Litt, M. Stein

**Room: 13**

Chairperson: Thomas Litt

- 13:30–13:45 EGU2012-4505  
**T. Felis**, N. Rimbu, S. Al-Rousan, H. Kuhnert, G. Lohmann, M. Kölling, and J. Pätzold  
Sub-seasonally resolved coral records of northern Red Sea - eastern Mediterranean climate during the Holocene and the last interglacial
- 13:45–14:00 EGU2012-8794  
**D. Fleitmann**, H. Cheng, R.L. Edwards, S. Badertscher, and O. Tüysüz  
Late to middle Pleistocene climate variability recorded in stalagmites from Sofular Cave, Northern Turkey
- 14:00–14:15 EGU2012-3611  
**M. Stein** and Y. Kushnir  
Abrupt aridities in the Levant-Sahel linked with solar activities
- 14:15–14:30 EGU2012-4526  
**M. Stockhecke**, F. S. Anselmetti, M. Sturm, and the PALEOVAN scientific party  
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
- 14:30–14:45 EGU2012-7875  
**N. Pickarski**, G. Heumann, and T. Litt  
Long continental pollen record of the last ca. 500 ka in eastern Anatolia - First palynological results from Lake Van cores obtained in 2010
- 14:45–15:00 EGU2012-3131  
**K.M. Grant**, E.J. Rohling, C. Bronk Ramsey, M. Bar-Matthews, C. Satow, M. Medina-Elizalde, and A.P. Roberts  
New chronology for Red Sea sea-level record reveals phase relationship between changes in polar climate and ice volume

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#### **CL1.8 – Paleoenvironmental, tectonic and human evolution across the Levant-Anatolia Regions – Posters**

Convener: F. Anselmetti | Co-Conveners: T. Litt, M. Stein

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Moti Stein

- Z35 EGU2012-503  
**D. Cukur**, S. Krastel, D. Winkelmann, and T. Litt  
Structural and stratigraphic analysis of the Lake Van, Eastern Turkey: An integration of high resolution seismic and drilling data
- Z36 EGU2012-626  
**E. Damc?**, M.N Ça?atay, S. Krastel, N. Ö?retmen, D. Cukur, U.B. Ülgen, Z. Erdem, T. Litt, F.S. Anselmetti, and K.K. Eri?  
Lake Level Changes of Lake Van over the Last 400 ka: Evidence from Deltas in Seismic Reflection Data and ICDP Drilling
- Z37 EGU2012-5874  
**M. Sumita**, H.-U. Schmincke, and Paleovan scientific team  
Temporal framework of Lake Van sediments provided by single crystal 40Ar/39Ar dating of tephra layers
- Z38 EGU2012-5954  
**M. Sumita**, H.-U. Schmincke, and Paleovan scientific team  
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
- Z39 EGU2012-6402  
**O. Kwiecien**, M. Stockhecke, G. H. Haug, and R. Kipfer  
Glacial/interglacial and MIS3 climate variability recorded in Lake Van, eastern Anatolia
- Z40 EGU2012-4881  
**H. Baumgarten**, T. Wonik, and S. Hunze  
Paleogeophysical characterization of a climate archive based on downhole logging in the ICDP project PALEOVAN
- Z41 EGU2012-8666  
**M-E Randlett**, M. Stockhecke, O. Kwiecien, and C. Schubert  
Biomarker analysis in 500 kyrs sediment record of Lake Van - potential implications for paleoclimate in eastern Anatolia
- Z42 EGU2012-4681  
**Y. Tomonaga**, M.S. Brennwald, and R. Kipfer  
Noble gases in the sediment pore water as proxies for physical transport processes and past environmental conditions in Lake Van (Turkey)

Z43	EGU2012-6276 <b>F. Barlas Simsek</b> and M.N. Cagatay Late Holocene High Resolution Multi-Proxy Climate and Environmental Records From Lake Van, Eastern Turkey
Z44	EGU2012-5143 <b>I. Neugebauer</b> , A. Brauer, M.J. Schwab, U. Frank, and P. Dulski Micro-facies analyses of late Holocene sediments from the Ein Gedi site (Dead Sea)
Z45	EGU2012-3652 <b>A. Torfstein</b> , S.L. Goldstein, M. Stein, and Y. Enzel Abrupt changes in Levant precipitation during the last glacial from Dead Sea lake levels
Z46	EGU2012-7185 <b>E. Eckmeier</b> , R. Yeshurun, M. Weinstein-Evron, E. Mintz, and E. Boaretto Radiocarbon dating of the Early Natufian at el-Wad Terrace, Mount Carmel, Israel
Z47	EGU2012-7876 <b>V. Schiebel</b> , T. Litt, N. Nowaczyk, M. Stein, and V. Wennrich A new 10,000 year pollen record from Lake Kinneret (Israel) - first results
Z48	EGU2012-4110 <b>H. von Suchodoletz</b> , D. Faust, and M. Menz The Late Quaternary fluvial dynamics of the Marneuli depression in eastern Georgia
Z49	EGU2012-9131 <b>D Palchan</b> , M Stein, Y Erel, A Almogi-Labin, and S.L. Goldstein Fine detritus material in Red Sea cores as indicator of dust transport and regional climate conditions during MIS6/5 and MIS2/1 transitions
Z50	EGU2012-11825 <b>R. Reber</b> , N. Akçar, V. Yavuz, D. Tikhomirov, C. Vockenhuber, P.W. Kubik, and C. Schlüchter Paleoclimate in north-east Anatolia during the Quaternary deduced from glacial archives
Z51	EGU2012-10267 <b>B. Lazar</b> , M. Stein, A. Agnon, and Y. Shaked Freshwater on the route of hominids "out of Africa" during the last interglacial revealed by U-Th in northern Red Sea fossil reefs

**CL1.14 – Palaeoclimate records in lakes – Oral**

Convener: N. Fagel | Co-Conveners: M.-F. Loutre

**Room: 13**

Chairperson: Nathalie Fagel

15:30–15:45	EGU2012-12536 <b>N.D. Stansell</b> , 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 <b>M. Czymzik</b> , 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 <b>M. Mathis</b> , 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 <b>H. Niemann</b> , A. Stadnitskaia, S. B. Wirth, A. Gilli, F. S. Anselmetti, J. S. Sinninghe Damsté, S. Schouten, E. C. Hopmans, and M. F. Lehmann 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 <b>S.B. Wirth</b> , 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 <b>E. Dietze</b> , B. Wünnemann, K. Hartmann, B. Diekmann, S. Opitz, M. Paprotzki, M. Runge, S. Yang, and G. Lockot Windows into the past: On-shore high-stand sediments from lake Donggi Cona, NE Tibetan Plateau

**CL1.14 – Palaeoclimate records in lakes – Posters**

Convener: N. Fagel | Co-Conveners: M.-F. Loutre

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Marie-France 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  
**I.S. Kirichenko**, S.M. Zhmodik, N.A. Nemirovskaya, D.K. Belyanin, T.N. Svetlyakova, O.M. Khlistov, A.S. Zhmodik, and N.S. Karmanov  
 Micromapping of uranium and phosphorus in the lake Baikal sediments (Academicheskiy Ridge, St8; St11)
- Z54 EGU2012-329  
**O.N. Tumanov**, L.B. Nazarova, L.A. Frolova, and L.A. Pestryakova  
 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. Pienitz, 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 millennium environmental changes in Lake Bertrand sediments, Chilean Patagonia
- Z59 EGU2012-7602  
**I. Kalugin**, A. Darin, G. Tretyakov, 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  
**G.J. Tye**, J. Sherriff, A.P. Palmer, I. Candy, and D.C. Schreve  
 The expression of MIS 11 palaeoclimate in a lacustrine record: An annually resolved archive from Marks Tey, eastern England
- Z61 EGU2012-7519  
**N. Höbig**, E. Martinelli, S. Motella, A.M. Michetti, F. Livio, W. Tinner, K. Reicherter, and L. Castelletti  
 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. Hrvatovi?  
 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. Støren**, 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  
**F. Arnaud**, S. Révillon, C. Giguet-Covex, B. Wilhelm, J.-P. Jenny, M. Magny, U. Von Grafenstein, J. Poulenard, and E. Pleyon  
 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 km<sup>2</sup> 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**

Convener: V. Rath | Co-Conveners: J. Noetzli, F. González-Rouco, J.S. Safanda

**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. Vandenberghe, 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

**S.C. Steele-Dunne**, N. van de Giesen, J.H.A.M. Jansen, C. Hatch, J. Selker, S. Tyler, T. Ochsner, and M.H. Cosh

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. Lucaleau** 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**

Convener: V. Rath | Co-Conveners: J. Noetzli, F. González-Rouco, J.S. Safanda

**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 <b>P. D?de?ek</b> , 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 <b>V. Cermák</b> , J. Safanda, P. Dedecek, 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 <b>V. Rath</b> GUMNET - A new subsurface observatory in the Guadarrama Mountains, Spain
Z71	EGU2012-2754 <b>V. Rath</b> , 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 <b>G. Bouron</b> , 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 <b>Yu. Khachay</b> Geothermal evidences of pre-industrial ground temperature changes in the Urals and Eastern Europe
Z74	EGU2012-3707 <b>N. Andrés</b> , 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 <b>N. Andrés</b> , 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 <b>L.M. Tanarro</b> , 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 <b>A. Kellerer-Pirklbauer</b> , G. Winkler, and M. Pauritsch Widespread evidences of hoarfrost formation at a rock glacier in the Seckauer Tauern, Austria
Z78	EGU2012-11953 <b>E. Santolaria</b> 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 <b>M. B. Stevens</b> , H. Beltrami, and J. F. Gonzalez-Rouco New metrics for permafrost model validation
Z80	EGU2012-11182 D. Mottaghy, <b>V. Rath</b> , 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 <b>G. Matharoo</b> , H. Beltrami, V. Rath, and L. Tarasov Effects of long-term history on borehole paleoclimatology
Z82	EGU2012-12874 <b>V. Rath</b> , 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 <b>J. Noetzli</b> , 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 <b>M. Keuschning</b> , 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  
**J. Wallinga**, J. Den Ouden, A.C. Cunningham, P. Copini, A.J. Versendaal, U.G.W. Sass-Klaassen, G. Bos, A.M.A.J. Beerens, and M.J.P.M. Riksen  
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

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#### COFFEE BREAK

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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  
**S. Wastegård**, E.R. Gudmundsdóttir, E.M. Lind, and J. Olsen  
Towards a complete Holocene tephrochronology 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  $\delta^{18}\text{O}$
- 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

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#### LUNCH BREAK

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Chairperson: n.n.

- 13:30–13:45 EGU2012-13849  
**F. Parrenin**, D. Veres, A. Landais, L. Bazin, B. Lemieux-Dudon, H. Toye Mahamadou Kele, E. Wolff, and P. Martinerie  
A common and optimized age scale for Antarctic ice cores
- 13:45–14:00 EGU2012-7570  
**H. Toye Mahamadou Kele**, B. Lemieux-Dudon, and E. Blayo  
Toward unified ice core chronologies with the DatIce tool
- 14:00–14:15 EGU2012-7646  
**L. Bazin**, A. Landais, B. Lemieux-Dudon, H. Toyé Mahamadou Kele, T. Blunier, E. Capron, J. Chappellaz, H. Fischer, M. Leuenberger, V. Lipenkov, M.-F. Loutre, P. Martinerie, F. Parrenin, F. Prié, D. Raynaud, D. Veres, and E. Wolff  
Toward an integrated ice core chronology using relative and orbital tie-points

- 14:15–14:30 EGU2012-8309  
**K. Kawamura**, S. Aoki, T. Nakazawa, K. Suzuki, and F. Parrenin  
Accurate age scale of the Dome Fuji ice core, Antarctica from O<sub>2</sub>/N<sub>2</sub> ratio of trapped air
- 14:30–14:45 EGU2012-10293  
**J. Freitag**, S. Kipfstuhl, M. Hörhold, A. Wegner, F. Wilhelms, and M. Bigler  
Impurity controlled firn densification: a new model approach
- 14:45–15:00 EGU2012-3633  
**T.J. Fudge**, K. Taylor, K. McGwire, E. Brook, T. Sowers, E. Steig, J. White, B. Vaughn, R. Bay, J. McConnell, E. Waddington, H. Conway, G. Clow, K. Cuffey, J. Cole-Dai, D. Ferris, and J. Severinghaus  
A 62 ka record from the WAIS Divide ice core with annual resolution to 30 ka (so far)

**CL5.1/GM2.5 – Advances in Quaternary Geochronology (co-organized) – Posters**

Convener: T. Kiefer | Co-Conveners: G. Duller, I. Hajdas, A. Lang, F. Parrenin, EW Wolff

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- Z85 EGU2012-1331  
**S. Winkler**  
Addressing geomorphologic uncertainties with terrestrial cosmogenic nuclide dating (TCND) - examples from Holocene moraines in the Southern Alps of New Zealand
- Z86 EGU2012-6695  
**D. Fabel**, J. McKie, J. Graham, and S. Xu  
10Be production rate calibration in Scotland
- Z87 EGU2012-13717  
**E. J. Rhodes**, B. J. Roder, M. J. Lawson, J. F. Dolan, S. F. McGill, and L. McAuliffe  
Isothermal thermoluminescence dating of K-feldspar from sediments to determine fault slip rates: development and assessment
- Z88 EGU2012-1822  
**S. Savi**, K. Norton, F. Schlunegger, V. Picotti, F. Brardinoni, N. Akçar, and P.W. Kubik  
How does sediment mixing affect 10Be concentrations in alluvial sediments? A case study from a small catchment of the Alps, Zielbach, Alto Adige, Italy
- Z89 EGU2012-7867  
**A. Claude**, S. Ivy-Ochs, F. Kober, M. Antognini, and P.W. Kubik  
Geomorphology and landscape evolution at the Chironico landslide (Leventina)
- Z90 EGU2012-8356  
**C. Wirsig**, S. Ivy-Ochs, N. Akcar, V. Alfimov, C. Kämpfer, and C. Schlüchter  
COMBINING COSMOGENIC BE, C, AL AND CL - Quantifying depth of glacial erosion and timing of deglaciation
- Z91 EGU2012-12360  
F. Kober, **K. Hippe**, S. Ivy-Ochs, J. Zasadni, R. Wieler, L. Wacker, P.W. Kubik, and C. Schlüchter  
The Lateglacial deglaciation history of the high Alpine Gotthard Pass, Switzerland, based on cosmogenic 10Be and in situ 14C
- Z92 EGU2012-14022  
**F. Kober**, K. Hippe, B. Salcher, S. Ivy-Ochs, P.W. Kubik, and L.. Wacker  
Mass wasting processes and their control on denudation rates, Matter-Valley, Switzerland
- Z93 EGU2012-14023  
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
- Z94 EGU2012-10266  
**S. E. Lowick**  
A comparison of the OSL response of quartz and polymineral fine grains to alpha and beta radiation
- Z95 EGU2012-7840  
**K. Beerten**, N. Vandersmissen, K. Deforce, and N. Vandenberghe  
Chronology of landscape evolution during the last centuries in the Campine area, Northern Belgium: integrating geomorphological, palaeobotanical, historical and pollution archives
- Z96 EGU2012-14168  
**B. Mauz**, M. Vacchi, and R. Nathan  
Using optical dating of beachrock for sea-level reconstruction
- Z97 EGU2012-14169  
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, <b>M. Jain</b> , K.J. Thomsen, and R. Sohbati Extending the luminescence dating age range using feldspar
Z99	EGU2012-1737 <b>A. Kunz</b> , D. Pflanz, F. Krüger, T. Weniger, and B. Urban OSL-dating of fluvial deposits of the Middle Elbe River Flood Plains using different statistical approaches
Z100	EGU2012-7880 <b>L. Bickel</b> , J. Lomax, and M. Fiebig Fluvial terrace gravels of the "Hochterrasse" (N-Alpine Foreland, Austria): luminescence characteristics of quartz and feldspar
Z101	EGU2012-6342 <b>R. Mertz-Kraus</b> , 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 <b>I. Hajdas</b> , S.F.M. Breitenbach, M. Gierga, G.H. Haug, J.F. Adkins, C. Biechele, G. Bonani, M. Maurer, and L. Wacker <sup>14</sup> C in a stalagmite from NE India: preliminary results of dating near the limit of radiocarbon time scale
Z103	EGU2012-9008 A. Birkholz, M. Gierga, <b>I. Hajdas</b> , R. Smittenberg, L. Wacker, and S.M. Bernasconi Compound-specific Radiocarbon dating - a tool for dating lake sediments?
Z104	EGU2012-13135 <b>B. Machalett</b> , 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 <b>N. Marwan</b> , K. Rehfeld, B. Goswami, S. F. M. Breitenbach, and J. Kurths Age models and their uncertainties
Z106	EGU2012-11229 <b>M. Severi</b> , 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 <b>M. Winstrup</b> , 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 <b>D. Raynaud</b> , 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 $\delta\text{O}_2/\text{N}_2$ records on local summer insolation.
Z109	EGU2012-5223 <b>F. Parrenin</b> , J.R. Petit, V. Masson-Delmotte, E. Wolff, I. Basile-Doelsch, J. Jouzel, V. Lipenkov, S. Rasmussen, J. Schwander, M. Severi, R. Udisti, D. Veres, and B. Vinther Volcanic synchronisation between the EPICA Dome C and Vostok ice cores (Antarctica) 0-145 kyr BP
Z110	EGU2012-5265 <b>F. Parrenin</b> , S. Barker, T. Blunier, J. Chappellaz, V. Masson-Delmotte, J. Jouzel, A. Landais, J. Schwander, and D. Veres On the Delta-depth along the EPICA Dome C ice core
Z111	EGU2012-14158 <b>F. Parrenin</b> and V. Masson-Delmotte An Antarctic temperature stack, 0-800 kyr BP
Z112	EGU2012-7179 <b>A. Svensson</b> , M. Bigler, H. Fischer, S. J. Johnsen, S. Kipfstuhl, F. Parrenin, S. O. Rasmussen, J. P. Steffensen, B. M. Vinther, and A. Wegner Direct linking of Greenland and Antarctic ice cores at the Toba eruption (74 ka BP)
Z113	EGU2012-8629 <b>R. C. A. Hindmarsh</b> and C.M. Ritz How deep do you need to drill through ice to measure the geothermal heat flux?
Z114	EGU2012-10143 <b>S. Weißbach</b> , A. Wegner, J. Freitag, and S. Kipfstuhl The influence of impurities on the densification of firn - a case study from North Greenland
Z115	EGU2012-14153 <b>J. R. Petit</b> , F. Parrenin, and B. Delmonte A chemical pacemaker to refine chronology for the deep East Antarctic ice cores

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

Author in Attendance: 17:30–19:00

Chairperson: Mickael Chekroun

- 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**, Gy. 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

**CL5.3/HS6.7 – Climate Data Bias-Correction and Homogenization and Climate Trends and Variability Assessment (co-organized) – Orals**

Convener: X. L. Wang | Co-Conveners: E. Aguilar, W. Dorigo, P. Stepanek, M. Schroeder, R. de Jeu, Dr. Fernández Prieto, Z. Su, P. van Oevelen, R. Roebele

**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  
**E. Rustemeier**, A. Kapala, H. Mäichel, A. Meyer-Christoffer, U. Schneider, M. Ziese, V. Venema, A. Becker, and C. Simmer  
 An automatic method to homogenize trends in long-term monthly precipitation series

Chairperson: n.n.

- 15:30–15:45 EGU2012-89  
**R. Brázdil**, P. Zahradní?ek, P. Pišoft, P. Št?pánek, M. B?ílinová, and P. Dobrovolný  
 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  
**M. R. P. Sapiano**, W. K. Berg, D. McKague, and C. D. Kummerow  
 A Fundamental Climate Data Record of Intercalibrated Brightness Temperature Data from SSM/I and SSMIS
- 16:15–16:30 EGU2012-10561  
**M. Lockhoff**, M. Stengel, A. Kniffka, F. Kaspar, and K.-G. Karlsson  
 Evaluation of 28 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**

Convener: X. L. Wang | Co-Conveners: E. Aguilar, W. Dorigo, P. Stepanek, M. Schroeder, R. de Jeu, Dr. Fernández Prieto, Z. Su, P. van Oevelen, R. Roebeling

**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. Kravovska  
 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 <b>M. Rienzner</b> and C. Gandolfi Changepoint detection in case of step change and inhomogeneous segments (platform-like inhomogeneities)
Z124	EGU2012-5770 <b>A. K. Stips</b> and M. J. Lilover Recent climate change: Steady linear process or abrupt transition?
Z125	EGU2012-7911 <b>G. Marougianni</b> , D. Melas, I. Kioutsioukis, H. Feidas, P. Zanis, and E. Anandranistikis Trend analysis of air temperature and precipitation time series over Greece: 1955-2010
Z126	EGU2012-6849 <b>A. Troccoli</b> Long-term wind speed trends over Australia
Z127	EGU2012-9310 <b>R. Wartenburger</b> , 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 <b>Y. Kuleshov</b> , 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 <b>T.Y. Lee</b> , J.C. Huang, P.W. Perng, C.P. Tung, and S.J. Kao An Improved Stream Temperature Model for Continuous Simulation and Its Application to Formosan Landlocked Salmon's Habitat Assessment
Z130	EGU2012-14325 <b>A. Lin</b> and <b>X. L. Wang</b> An algorithm for blending multiple satellite precipitation estimates with in situ precipitation measurements in Canada
Z131	EGU2012-12140 <b>P. van Oevelen</b> , C. Kummerow, and J. Schulz GEWEX Contributions to Long Term Global Data Sets
Z132	EGU2012-11815 <b>W. Dorigo</b> , R.A.M. De Jeu, W. Wagner, R.M. Parinussa, Y.Y. Liu, and D. Fernández-Prieto Evaluating trends and anomalies of a multi-sensor soil moisture climate data record
Z133	EGU2012-5706 <b>R.A.M. de Jeu</b> , R.M. Parinussa, W.A. Dorigo, W.W. Wagner, Y.Y. Liu, and D. Fernandez-Prieto Validation of long term satellite soil moisture records using tree ring data
Z134	EGU2012-3887 <b>X. Guo</b> Satellite measurements of air density and ozone distributions in the mesosphere using ultraviolet limb-scan technique
Z135	EGU2012-4841 <b>MB Borsche</b> and AL Loew Estimation of land surface heat fluxes from remote sensing data - an uncertainty assessment
Z136	EGU2012-10951 <b>M. Zribi</b> , R. Amri, Z. Lili-Chabaane, W. Wagner, S. Hasenauer, B. Duchemin, G. Boulet, and B. Mougenot Analysis of drought events in a North Africa semi-arid region, Using SPOT-VEGETATION and C band scatterometer satellite Data
Z137	EGU2012-2915 <b>U. Eden</b> , J Timmermans, R van der Velde, and Z Su Drought assessment by evapotranspiration mapping in Twente
Z138	EGU2012-2717 <b>J. Timmermans</b> , M. Gokmen, U. Eden, M. Abou Ali, Z. Vekerdy, and Z. Su Drought monitoring over the Horn of Africa using remotely sensed evapotranspiration, soil moisture and vegetation parameters

**SC4/CL5.17 – Visualization and Data Analysis in Earth and Climate Science (co-organized) – Orals**

Convener: N. Röber | Co-Conveners: M. Böttinger, R. Brownrigg, H. Doleisch, W. Freiler, T. Nocke, M. Sips

**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 Dam and Hofuf Formations: Outcrop Analog of Mixed Carbonate and Siliciclastic (Miocene-Pliocene) Succession, Eastern Saudi Arabia

09:30–09:45 EGU2012-1819

**L. Gale**, A. Šmuc, T. Kolar-Jurkovšek, D. Skaberne, B. Celarc, J. ?ar, and B. Roži?

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

**S.-H. Bae**, D.-C. Kim, G.-S. Lee, H.-I. Yi, and H.-G. Cho

Sequence stratigraphy of the late Quaternary deposits in the central Yellow Sea

A305 EGU2012-2922

**F. Bastide**, G. Massonnat, K. Föllmi, T. Adatte, T. Dumont, A. Arnaud-Vanneau, A. Virgone, and H. Arnaud 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 EGU2012-13922

**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

The 14C 'bomb' pulse in selected European stalagmites as a tracer of soil carbon cycling dynamics

14:45–15:00 EGU2012-4735

**S. Riechelmann**, D. Buhl, D.K. Richter, A. Schröder-Ritzrau, D.F.C. Riechelmann, A. Niedermayr, H.B.

Vonhof, J. Wassenburg, and A. Immenhauser

Speleothem Mg-isotope time-series data from different climate belts

Chairperson: Heather Stoll

15:30–15:45 EGU2012-7124

**C. Spötl** and Y. Dublyansky

Devils Hole, Nevada: revisited

15:45–16:00 EGU2012-8206

**R. Drysdale**, I. Couchoud, G. Zanchetta, J. Hellstrom, E. Regattieri, I. Isola, and I. Baneschi

Decoupling between the tropics and the mid- to high-latitude North Atlantic region during Marine Isotope Stage 7

16:00–16:15 EGU2012-13311

**I. John**, S. Burns, H. Cheng, L. Edwards, W. McCoy, S. Markovic, and W. Endlicher

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

**H. Ridley**, J.U.L Baldini, C.G Macpherson, K.M Prufer, D.J Kennett, and Y Amserom

Monthly-scale palaeo-rainfall reconstructed using a Belizean stalagmite.

16:45–17:00 EGU2012-1627

**L. Comas-Bru**, F. McDermott, and D. FleitmannA 1,000 year annually resolved record of speleothem  $\delta^{18}\text{O}$  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 palaeoclimate 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.

- A329 EGU2012-5625  
**H. Rowe**, J. Buckles, Y. Gao, G. Springer, H. Cheng, R.L. Edwards, and B. Hardt  
 Resolving Global-Scale Climate Changes in Stalagmites from Eastern North America: A Focus on MIS 5 through 3
- A330 EGU2012-5825  
**J. Buckles**, H. Rowe, Y. Gao, H. Cheng, R.L. Edwards, G. Springer, and B. Hardt  
 Trace element and stable isotope variations in three coeval West Virginia speleothems spanning the LGM and Younger Dryas
- A331 EGU2012-5869  
**J. Buckles**, H. Rowe, Y. Gao, H. Cheng, R.L. Edwards, G. Springer, and B. Hardt  
 A new technique for trace elemental analysis of speleothems using microbeam xrf
- A332 EGU2012-6305  
**H. Stoll**, W. Muller, and M. Prieto  
 Deciphering annual and long term trace element cycles in speleothems using cave monitoring and simple models
- A333 EGU2012-7226  
**S. Brandstätter**, W. Müller, R. Boch, and C. Spötl  
 Trace element patterns across rapid climate change events in Pleistocene speleothems from caves in the Alps
- A334 EGU2012-6806  
**J. Urrutia-Fucugauchi**, L. Perez-Cruz, X. Zhao, M. Rebolledo-Vieyra, and A. Rodriguez  
 Preliminary Geochemical and Rock Magnetic Study of a Stalagmite From Quintana Roo, Northeastern Yucatan Peninsula
- A335 EGU2012-8272  
**R. Drysdale**, B. Paul, J. Hellstrom, I. Couchoud, A. Greig, P. Bajo, G. Zanchetta, I. Isola, C. Spötl, I. Baneschi, E. Regattieri, and J. Woodhead  
 Precise microsampling of poorly laminated speleothems for U-series dating
- A336 EGU2012-8621  
**Y. Kayama**, S. Sakai, and K. Okamoto  
 Reconstruction of paleoclimate using stalagmite on Ishigaki-Island, Japan
- A337 EGU2012-8685  
**J. Bosle**, D. Scholz, and T. Hoffmann  
 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
- A338 EGU2012-8734  
A. Moreno, **M. Bartolomé**, C. Sancho, Á. Belmonte, H. Stoll, I. Cacho, R. L. Edwards, and J. Hellstrom  
 Climate variability during the Holocene inferred from northeastern Iberian speleothems
- A339 EGU2012-9621  
**T. Marx** and W. Aeschbach-Hertig  
 Challenges on the way to noble gas temperatures on speleothems
- A340 EGU2012-9999  
**T.E. Horsfield**, M. Rogerson, G.M. Henderson, E.J. Rohling, A. Mihevc, M. Budja, M. Prelovsek, T.J. Coulthard, and G.M. Greenway  
 A High-Resolution, Multi-Proxy Palaeoclimate Study of the Central Northern Mediterranean
- A341 EGU2012-10425  
**M. Luetscher**, D.L. Hoffmann, W. Müller, and C. Spötl  
 The 8.2 ka event in the northern Alps
- A342 EGU2012-7288  
**S. Dietrich**, M. Werner, and G. Lohmann  
 Influence of the Solar Activity on the Variability of Water Isotopes over Europe during the Late Holocene
- A343 EGU2012-7290  
**H. Hercman** and J. Pawlak  
 MOD-AGE - an algorithm for age-depth model construction; U-series dated speleothems case study
- A344 EGU2012-7676  
**B. Goswami**, J. Heitzig, K. Rehfeld, N. Marwan, and J. Kurths  
 The problem of calibration: A possible way to overcome the drawbacks of age models
- A345 EGU2012-9064  
**H.-C. Li**, P. C. Chu, and C. W. Fan  
 Speleothem Evidence for Temporal-Spatial Variation in East Asian Summer Monsoon since Medieval Warm Period
- A346 EGU2012-10592  
**D. Ballesteros**, M. Jiménez-Sánchez, S. Giralt, J. García-Sansegundo, and G. Sendra  
 Shaft speleogenesis in Picos de Europa (North Spain): contribution of cave geomorphological mapping and U-Th dating techniques

## Tuesday, 24 April

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### 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**, S. Masson, P. Terray, T. Izumo, T. Tozuka, and T. Yamaga  
 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

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

Convener: M.-S. Seidenkrantz | Co-Conveners: A. Kuijpers, M.-A. Sicre, G. Masse, M. Faurschou Knudsen, J. Olsen, W. Hoek, S. O. Rasmussen, S. Blockley, H. Renssen, A. Svensson, M.F.A. Furze, A. Pienkowski

**Room: 16**

Chairperson: n.n.

- 08:30–08:45 EGU2012-13305  
**B. Machalett**, E.A. Oches, E. Haam, Z.P. Lai, and W. Endlicher  
 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  
**A.J. Pienkowski**, J. England, M.F.A. Furze, B. MacLean, G. Vilks, and S. Blasco  
 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

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### COFFEE BREAK

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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  
 Millennial 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  
**M.-A. Sicre**, K. Weckström, M.-S. Seidenkrantz, A. Kuipers, M. Benetti, G. Massé, U. Ezat, S. Schmidt, and I. Bouloubassi  
 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 Kuipers, 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**

Convener: M.-S. Seidenkrantz | Co-Conveners: A. Kuipers, M.-A. Sicre, G. Masse, M. Faurschou Knudsen, J. Olsen, W. Hoek, S. O. Rasmussen, S. Blockley, H. Renssen, A. Svensson, M.F.A. Furze, A. Pienkowski

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- Z1 EGU2012-2268  
**H. Zou**, I. Schulte-Loh, E. Bazhenova, R. Stein, J. Matthiessen, and C. Vogt  
 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

Z5	EGU2012-929 <b>C.M. Sheldon</b> , A.E. Jennings, J.T. Andrews, C. O Cofaigh, J.A. Dowdeswell, and A.A. Kilfeather Deglacial History and Paleoceanography of the Umanak System, West Greenland
Z6	EGU2012-6634 <b>Y. Iizuka</b> , 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
Z7	EGU2012-6741 <b>I. Oyabu</b> , Y. Iizuka, T. Sakurai, T. Suzuki, T. Miyake, M. Hirabayashi, H. Motoyama, and T. Hondoh Chemical compositions of soluble particles around the Termination 1 in the Dome Fuji ice core
Z8	EGU2012-12907 <b>T.R. Lakeman</b> , 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
Z9	EGU2012-3936 <b>K.K. Park</b> , B.K. Khim, and K. Ohkushi Provenance of deglacial IRD and clay minerals in the Chukchi Plateau, western Arctic Ocean
Z10	EGU2012-5065 <b>A. Mackensen</b> High preindustrial $\delta^{13}\text{C}$ in the deep Arctic Ocean: Implications for the interpretation of abrupt benthic $\delta^{13}\text{C}$ excursions during the last glaciation
Z11	EGU2012-8746 V. Montade, <b>N. Combourieu Nebout</b> , M. Kagayema, C. Kissel, G. Siani, and E. Michel Southern Westerly Wind belt and Carbon dioxide changes during the Antarctic Cold Reversal
Z12	EGU2012-4668 <b>A. H. Pasanen</b> , J. P. Lunkka, and N. O. Putkinen Reconstruction of the White Sea Basin during the late Younger Dryas
Z13	EGU2012-3319 M. Meheust, <b>R. Stein</b> , and K. Fahl Deglacial-Holocene variability of sea ice and surface water temperature in the Bering Sea: Reconstruction based on "IP25" and alkenone data
Z14	EGU2012-12901 U.J. van Raden, <b>A. Gilli</b> , J. van Leeuwen, and B. Ammann Changes in erosional input and environmental conditions at Lake Gerzensee, Switzerland, during Termination 1
Z15	EGU2012-12675 <b>M. S?owi?ski</b> , I. Zawiska, A.M. Nory?kiewicz, K. Apolinarska, M. Luty?ska, P. Skuba?a, F. Ott, S. Wulf, and A. Brauer Climate impact on the Trzechowskie paleolake ecosystem during the Late Glacial and early Holocene in the light of multiproxy analysis
Z16	EGU2012-282 <b>A. Junginger</b> and M.H. Trauth The Role of the Congo Air Boundary and Solar Variations during the Early Holocene East African Humid Period
Z17	EGU2012-5710 A.B. Pedersen, <b>M.-S. Seidenkrantz</b> , F. Mienis, A. Fischel, N. Frank, and D. Hebbeln Gulf Stream variability in western North Atlantic off Cape Lookout, North Carolina
Z18	EGU2012-4047 <b>M.J. Hansen</b> , C.S. Andresen, M.-S. Seidenkrantz, A. Kuipers, and N. Nørgaard-Pedersen Reconstruction of past oceanographic variability in Southeast Greenland from marine sedimentary records: The influence from the Atlantic Multi-decadal Oscillation
Z19	EGU2012-8724 <b>K. Müller-Navarra</b> , U. Kotthoff, U. C. Müller, and J. Pross Holocene vegetation and climate changes in Northeast Greece deduced from a terrestrial pollen record
Z20	EGU2012-8745 <b>V. R. Krossa</b> , 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
Z21	EGU2012-8301 <b>D. Fritzsché</b> , 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)
Z22	EGU2012-12934 M.-A. Sicre, P. Rasmussen, <b>U. Ezat</b> , A. Fernane, K. Weckström, A. Kuipers, and G. Massé Sea surface temperature history in Isefjord (Denmark) over the last 2000 yrs
Z23	EGU2012-11044 <b>O. Bothe</b> , D. Zanchettin, and J. Jungclaus Climatology of cold and warm periods in recent centuries - consistency of simulations and reconstructions

Z24	EGU2012-3420 <b>A.D. Tegzes</b> , 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 <b>F.J. Davies</b> , H Goosse, and H Renssen The Influence of Volcanic and Solar forcings on the Freshwater Budget of the Arctic Ocean
Z26	EGU2012-9891 <b>S. Muthers</b> , C. Raible, and A. Born On the role of external forcing for the Atlantic Multidecadal Oscillation.
Z27	EGU2012-5891 D. Zanchettin, <b>J.-H. Jungclaus</b> , 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 <b>X. Xiao</b> , 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 <b>R. Stein</b> 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, <b>H. Zou</b> , 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 <b>L. Mitchell</b> , 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 <b>J. G. Levine</b> , E. W. Wolff, A. E. Jones, M. A. Hutterli, L. C. Sime, O. Wild, P. O. Hopcroft, P. J. Valdes, A. T. Archibald, G. D. Carver, N. J. Warwick, and J. A. Pyle The Ice-core Record of Atmospheric Methane: Chemistry-Climate Interactions on Tens to Thousands of Years
09:00–09:15	EGU2012-4938 <b>I. Levin</b> , G. Brailsford, T. Bromley, E. Dlugokencky, R. Fisher, R. Heinz, D. Lowe, D. Lowry, J.B. Miller, E. Nisbet, C. Poß, B.H. Vaughn, C. Veidt, and J.W.C. White 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 <b>S. Houweling</b> 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 <b>H. Fischer</b> Climate and CO <sub>2</sub> control on emissions and ecosystem composition of global methane sources over the last 160,000 years derived from <sup>13</sup> CH <sub>4</sub> in ice cores
09:45–10:00	EGU2012-162 <b>J. Chappellaz</b> , T. Blunier, X. Faïn, C. Stowasser, V. Gkinis, E. Brook, R. Rhodes, J. McConnell, S. Schüpbach, J. Rosen, R. Dallmayr, O. Pascual, and M. Bigler 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

Z31	EGU2012-5751 <b>A. Basu</b> , M. G. Schultz, and L. Francois Evaluation of a wetland methane emission parameterization for present-day and Last Glacial Maximum
Z32	EGU2012-10947 <b>A. Budishchev</b> , Y. Mi, A. Gallagher, J. van Huissteden, G. Schaepman-Strub, A.J. Dolman, and T.C. Maximov Validation of a methane emission model using eddy covariance observations and footprint modeling.
Z33	EGU2012-13057 <b>S. Dadson</b> Modelling land-atmosphere interactions in tropical African wetlands
Z34	EGU2012-7135 <b>T. Umezawa</b> , S. Sugawara, T. Sugiyama, K. Kawamura, S. Aoki, and T. Nakazawa Histories of atmospheric methane and its carbon and hydrogen isotopic ratios over the last 250 years obtained from an ice core and firn air
Z35	EGU2012-1699 <b>S. Bryant</b> , L. Mitchell, E. Brook, and T. Sowers High-resolution methane records covering the Holocene
Z36	EGU2012-3217 H. Mitchell, M. Bock, and <b>T. Sowers</b> Decoupling atmospheric methane isotope records during MIS 5-4 transition
Z37	EGU2012-2366 <b>M. Bock</b> , J. Schmitt, R. Schneider, and H. Fischer Post pyrolysis trapping of molecular hydrogen improves precision for $\delta$ D(CH <sub>4</sub> ) analysis
Z38	EGU2012-7234 J. Schmitt, <b>B. Seth</b> , and H. Fischer In situ production of ethane and propane in dust-rich Greenland ice core samples: is methane also affected?
Z39	EGU2012-14109 M Baumgartner, A Schilt, O Eicher, J Schmitt, J Schwander, R Spahni, <b>H Fischer</b> , and T Stocker Interpolar difference of atmospheric methane around the last glacial maximum
Z40	EGU2012-5578 <b>T. Blunier</b> , J. Chappellaz, S. Schuepbach, Ch. Stowasser, E. Brook, J. Rosen, R. Dallmayr, O. Pascual, M. Bigler, and D. Leuenberger Steps towards a continuous methane concentration record back to 100 kyr BP
Z41	EGU2012-4396 <b>C. J. Sapart</b> , G. Monteil, M. Prokopiou, R.S.W. van de Wal, P. Sperlich, J.O. Kaplan, K.M. Krumhardt, C. van der Veen, S. Houweling, M.C. Krol, T. Blunier, T. Sowers, P. Martinerie, D. Dahl-Jensen, and T. Röckmann Natural and anthropogenic variations in methane sources over the last 2 millennia
Z42	EGU2012-3868 <b>H. Schaefer</b> , D.F. Ferretti, K.R. Lassey, J.W.C. White, P. Sperlich, D.M. Etheridge, and D.C. Lowe Methane source reconstructions for the last 300 years from Law Dome $\delta$ 13CH <sub>4</sub> and their relation to past climate

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**CL1.17/EG1 – Reconstructing the climate of the last two millennia (including Hans Oeschger Medal Lecture) (co-organized) – Orals**

Convener: J. Luterbacher | Co-Conveners: D. McCarroll, F. González-Rouco, E. Zorita, L. von Gunten

**Room: 15**

Chairperson: Eduardo Zorita

08:30–08:45	EGU2012-883 <b>Z. Yuan</b> A Robust Reconstruction of Precipitation Variations of China Over Both a Short-term Scale and the Last Two Millennia
08:45–09:00	EGU2012-8892 <b>B. Wilhelm</b> , F. Arnaud, C. Giguet-Covex, P. Sabatier, C. Crouzet, and J.J. Delannoy Two millennia of torrential activity reconstructed from alpine lake sediments: towards regional patterns of extreme precipitation changes
09:00–09:15	EGU2012-5833 <b>H. Oerter</b> , S. Kipfstuhl, and F. Wilhelms Stable isotope records for the past 2000 years from ice cores in central Dronning Maud Land, Antarctica
09:15–09:30	EGU2012-2546 <b>D. Guillot</b> , B. Rajaratnam, and J. Emile-Geay Multiproxy Paleoclimate Reconstruction Using Gaussian Graphical Models
09:30–09:45	EGU2012-7632 <b>B. Christiansen</b> and F. C. Ljungqvist 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

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**COFFEE BREAK**

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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

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**LUNCH BREAK**

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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

**L. Fernández-Donado**, J. F. González-Rouco, C. C. Raible, D. Barriopedro, J. Luterbacher, J. H. Jungclaus, D. Swingedouw, J. Servonnat, S. Tett, P. Brohan, E. Zorita, S. Wagner, C. M. Ammann, S. J. Phipps, D. Klocke, P. Yiou, and S. Lorenz

Forcings, 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

**E. García-Bustamante**, J. Luterbacher, E. Xoplaki, J. P. Werner, J. Jungclaus, E. Zorita, J.F. González-Rouco, L. Fernández-Donado, G. Hegerl, Q. Ge, Z. Hao, and S. Wagner

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

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**CL1.17/EG1 – Reconstructing the climate of the last two millennia (including Hans Oeschger Medal Lecture)****(co-organized) – Posters**

Convener: J. Luterbacher | Co-Conveners: D. McCarroll, F. González-Rouco, E. Zorita, L. von Gunten

**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 <b>J. A. Wassenburg</b> , A. Immenhauser, D. K. Richter, J. Fietzke, D. Scholz, K. P. Jochum, D. F. C. Riechelmann, L. Schneider, and J. Esper Medieval climate anomaly and little ice age as recorded in speleothem and tree-ring data from the Middle Atlas in Morocco
Z45	EGU2012-2570 <b>A. Laskar</b> , 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 <b>Y. Watanabe</b> , 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 <b>Dr Macdonald</b> , Dr Chiverrell, Ms Hind, Ms Todd, and Dr Charman A multi-proxy reconstruction of millennial scale drought history for Northern England
Z48	EGU2012-2844 <b>H. Wu</b> , 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 <b>M.P. Lüthi</b> A 1600 year history of Alpine glacier equilibrium line altitude inferred from glacier length records, and the relation to summer temperature and radiation
Z50	EGU2012-10969 <b>F. Ott</b> , B. Brademann, M. S?owi?ski, P. Dulski, B. Plessen, M. Blaszkiewicz, and A. Brauer Seasonal sub-layer variations of a varved record from the Czechowskie Lake, Poland
Z51	EGU2012-7756 <b>D. Schillereff</b> , R. Chiverrell, N. Macdonald, and J. Hooke Lakes as recorders of extreme flows: a millennial-scale palaeoflood record from the English Lake District
Z52	EGU2012-13364 <b>I. Gil</b> , 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 <b>G. Rueda</b> , A. Rosell-Melé, and R. Gyllencreutz Reconstructing climatic conditions in the Skagerrak during the last 2000 years using an organic biomarker approach
Z54	EGU2012-13466 <b>L. Pérez-Cruz</b> , 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 <b>J.J. Gómez-Navarro</b> , J.P. Montávez, P. Jiménez-Guerrero, J.F. González-Rouco, E. García-Bustamante, J. Luterbacher, and E. Zorita Assessing the Physical Consistence of Several Gridded Reconstructions Over Europe Through a High-Resolution Climate Paleosimulation
Z56	EGU2012-10764 <b>M. Gagen</b> , E Zorita, D McCarroll and the The Millennium project consortium. Team Episodes of large unforced variability in European climate over the last millennium.
Z57	EGU2012-4788 <b>J. Franke</b> , D. Frank, C. Raible, J. Esper, and S. Br?nnimann Spectral biases in climate proxies and reconstructions
Z58	EGU2012-6392 <b>P. Yiou</b> , 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 <b>J.A. García-Valero</b> , J.J. Gómez-Navarro, J.P. Montávez, P. Jiménez-Guerrero, R. Lorente-Plazas, R. Baró, and E. Zorita External forcing influence on Weather Types along the last Millennium
Z60	EGU2012-13245 <b>S. Hanhijärvi</b> 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. Mauritsen, 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. Mauritsen  
 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. Smedsrød, 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  
**B. H. Samset**, T. Berntsen, S.B. Dahlsøren, L.I. Eide, M.S. Eide, J. Fuglestvedt, S. Glomsrød, L. Lindholt, G. Myhre, T.B. Nilssen, G.P. Peters, and K. Ødemark  
 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. Willén** 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

Z72	EGU2012-13439 <b>R. Bintanja</b> Changes in the seasonality of Arctic sea ice and temperature
Z73	EGU2012-13449 <b>R. T. Pinker</b> , E. A. Nussbaumer, X. Niu, and Y. Ma Radiative Fluxes at High Latitudes: Implications for Climate Research
Z74	EGU2012-13459 <b>A. V. Chernokulsky</b> 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**

Convener: A. M. Tarquis | Co-Conveners: N. R. Dalezios, A. Saa, M. Semenov, A. Gobin, M. van der Velde, M. Ruiz-Ramos, M. Ramos

**Room: 1**

Chairperson: M. Semenov

08:30–08:45	EGU2012-7685 <b>A. Gobin</b> and I. Piccard Meteorological risks, impacts on crop production systems and agricultural insurances in Belgium
08:45–09:00	EGU2012-556 <b>S.A. Khresat</b> Adaptation measures to reduce the impact of climate variability on crop production in Jordan
09:00–09:15	EGU2012-13551 <b>K. C. Kersebaum</b> , 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 <b>E. Vanuytrecht</b> , 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 <b>H. Fraga</b> , 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 <b>Z. Dunkel</b> , 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 <b>M. Capa-Morocho</b> , B. Rodríguez-Fonseca, and M. Ruiz-Ramos Climatic variability effects on summer cropping systems of the Iberian Peninsula
10:45–11:00	EGU2012-14106 <b>M. Bielza</b> , 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 <b>M. Gil</b> , A. Garrido, and N. Hernández-Mora Economic Drought Impact on Agriculture: analysis of all agricultural sectors affected
11:15–11:30	EGU2012-4085 <b>N. R. Dalezios</b> , A. Blanta, and N.V. Spyropoulos Remotely Sensed Quantitative Drought Risk Assessment in Vulnerable Agroecosystems
11:30–11:45	EGU2012-13927 E. Iglesias and <b>K. Baez</b> Innovation in drought risk management: exploring the potential of weather index insurance
11:45–12:00	EGU2012-13945 <b>J.A. Escribano Rodríguez</b> , A.M. Tarquis, and C.G. Hernandez Díaz-Ambrona Pasture Drought Insurance Based on NDVI and SAVI

**NH1.11/AS4.16/CL2.4 – Hazard Risk Management in Agriculture and Agroecosystems (co-organized) – Posters**

Convener: A. M. Tarquis | Co-Conveners: N. R. Dalezios, A. Saa, M. Semenov, A. Gobin, M. van der Velde, M. Ruiz-Ramos, M. Ramos

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

Author in Attendance: 17:30–19:00

Chairperson: Nicolas Dalezios

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. Quenol, 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-Bennett

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-IPCC/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  
**J. M. Anton**, J. B. Grau, A. M. Tarquis, D. Andina, and J. M. Cisneros  
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. Alessio, 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 sSmulation 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

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**CL2.5 – Climate and infectious disease interactions – Orals**

Convener: R. Lowe | Co-Conveners: V. Ermert, A. M. Tompkins, D. Taylor, A. Morse

**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

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**CL2.5 – Climate and infectious disease interactions – Posters**

Convener: R. Lowe | Co-Conveners: V. Ermert, A. M. Tompkins, D. Taylor, A. Morse

**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 <b>A. P. Morse</b> , C Caminade, A E Jones, D MacLeod, and A E Heath The QWeCI Project: seamlessly linking climate science to society
Z77	EGU2012-1878 <b>D. MacLeod</b> Uncertainty in climate-driven disease prediction on seasonal to decadal timescales
Z78	EGU2012-3108 <b>S. K Tay</b> , 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 <b>F. Di Giuseppe</b> , 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 <b>J. Gachohi</b> , F. Hansen, B. Bett, and P. Kitala Persistence of Rift Valley fever virus in East Africa
Z81	EGU2012-8969 J. Chirombo, <b>R. Lowe</b> , and L. Kazembe Geostatistical modelling of household malaria in Malawi
Z82	EGU2012-9503 <b>R. Lowe</b> , T. Chadza, J. Chirombo, C. Fonda, A. Muyepa, M. Nkoloma, E. Pietrosemoli, S. M. Radicella, A. M. Tompkins, and M. Zennaro A platform to integrate climate information and rural telemedicine in Malawi
Z83	EGU2012-9825 <b>S Kienberger</b> , 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 <b>F Molteni</b> Systematic Errors in the ECMWF long range Forecasting System over Africa
Z85	EGU2012-12193 <b>A. M. Tompkins</b> , V. Ermert, and R. Lowe VECTRI: A new dynamical disease model for malaria transmission
Z86	EGU2012-12228 <b>A. M. Tompkins</b> , 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**

Convener: J. L. Bamber | Co-Conveners: P. Lemke, F. Pattyn, S. Gruber, M. Van den Broeke, T. Payne, S. Nowicki

**Room: 5**

Chairperson: n.n.

08:30–08:45	EGU2012-5483 <b>S. Kotlarski</b> , 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 <b>O. Anisimov</b> , 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 <b>F. A. Haumann</b> , D. Notz, H. Schmidt, and M. R. van den Broeke Response of Wind-Driven Antarctic Sea-Ice Transport to External Anthropogenic Forcings
09:15–09:30	EGU2012-2460 <b>J. Wahr</b> , 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 <b>A. Fischer</b> , 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 <b>R. H. Giesen</b> and J. Oerlemans Global glacier volume projections for the 21st century including the dynamical response to changes in climate

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**COFFEE BREAK**

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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. Aðalgeirs Þóttir, F. Boberg, O. Bøssing Christensen, M. Stendel, and J. Hesselberg  
 Christensen  
 Regional Climate Projections for Greenland 1980 - 2099 using the HIRHAM5 Model
- 11:15–11:30 EGU2012-8312  
**I. Sasgen**, J.L. Bamber, M. van den Broeke, L. Sandberg Sørensen, B. Wouters, Z. Martinec, M. Horwath, H. Konrad, E. Rignot, and I. Velicogna  
 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

Convener: J. L. Bamber | Co-Conveners: P. Lemke, F. Pattyn, S. Gruber, M. Van den Broeke, T. Payne, S. Nowicki

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 Ahlstrøm, 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.

XL73	EGU2012-11222 <b>P. Rastner</b> , T. Bolch, N. Mölg, R. Le Bris, and F. Paul The first glacier inventory for entire Greenland
XL74	EGU2012-2734 <b>P. L. Svendsen</b> , O. B. Andersen, and A. A. Nielsen Acceleration of the GrIS mass loss as observed by GRACE
XL75	EGU2012-12101 <b>C. S. Hvidberg</b> , L. B. Larsen, D. Dahl-Jensen, and S. L. Buchardt Surface movement and elevation change at the NEEM deep drilling site, North Greenland, 2007-2011
XL76	EGU2012-8011 R.T.W.L Hurkmans and <b>J.L. Bamber</b> Time-varying mass changes of the Greenland and Antarctic ice sheets from radar and laser altimetry
XL77	EGU2012-12769 <b>M. Horwath</b> What do we mean by ice sheet mass trends?
XL78	EGU2012-9230 <b>K. Scharrer</b> , T. Murray, A. Booth, T. D. James, A. J. Luckman, A. L. Hughes, S. L. Bevan, Y. Drocourt, L. Cordero Llana, N. Selmes, A. Goldsack, S. Cook, J. Bradley, and J. McGovern Seasonal and inter-annual trends of Greenland tidewater glaciers
XL79	EGU2012-8675 <b>S. B. Simonsen</b> , L. Stenseng, G. Adalgeirsdottir, and C. S. Hvidberg Monte Carlo inversion of firn layers observed in firn cores and radar images - a validation of a dynamic firn compaction model
XL80	EGU2012-1144 <b>G. Picard</b> , F. Domine, G. Krinner, L. Arnaud, E. Lefebvre, N. Champollion, and Q. Libois Inhibition of the positive snow-albedo feedback by precipitation on the Antarctic plateau
XL81	EGU2012-2868 J. Grieger, G.C. Leckebusch, and <b>U. Ulbrich</b> Dynamical Impacts on Change of Net Precipitation over Antarctica in an A1B Scenario
XL82	EGU2012-5760 <b>R. Arthern</b> , R.C.A. Hindmarsh, and C.R. Williams Initialisation of a vertically-integrated, higher-order ice sheet model using observations of surface mass balance and elevation rate.
XL83	EGU2012-3595 <b>G. Adalgeirsdottir</b> , A. Aschwanden, R. Mottram, and J.H. Christensen Projections of the contribution of the Greenland Ice Sheet to sea level rise for the next 100 years
XL84	EGU2012-10281 <b>H. Goelzer</b> , J.J. Fürst, and P. Huybrechts Ensemble projections of the Greenland ice sheet contribution to future sea-level rise
XL85	EGU2012-11852 <b>J.J. Fürst</b> , H. Goelzer, and P. Huybrechts Future projections of Greenland's ice loss accounting for changes in surface mass balance and dynamic discharge
XL86	EGU2012-10229 M. Vizcaíno, <b>W.H. Lipscomb</b> , and M. Van den Broeke 21st century changes in the surface mass balance of the Greenland ice sheet simulated with the global model CESM
XL87	EGU2012-13457 <b>T.L. Edwards</b> , S.R. Shannon, A.J. Payne, G. Adalgeirsdottir, I.D. Bartholomew, A. Le Brocq, R. Mottram, P.W. Nienow, J. Rae, A. Shepherd, A. Sole, A. Sundal, R. van de Wal, and X. Fettweis New parameterisations for the Greenland contribution to sea level rise
XL88	EGU2012-7926 <b>J. Krug</b> , T. Flament, G. Durand, and F. Rémy Surface curvature as a signature of dynamical thinning
XL89	EGU2012-12403 <b>W. Lipscomb</b> , J. Johnson, S. Price, and W. Sacks Modeling Land Ice in the Community Earth System Model
XL90	EGU2012-7976 <b>R. Winkelmann</b> , A. Levermann, K. Frieler, and M.A. Martin Uncertainty in Future Solid Ice Discharge from Antarctica
XL91	EGU2012-6420 <b>M. A. Martin</b> , R. Winkelmann, and A. Levermann 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. Demetrescu

Space-time variability in scaling aspects of surface air temperature records

Z88 EGU2012-6322

**E. Holtanova** and A. Valeranova

The estimates of probability distribution of annual and seasonal maxima of maximum air temperature

Z89	EGU2012-11841 <b>T. Feng</b> and Z.T. Fu The role of changes in the seasonality in strong wind season shortening over China
Z90	EGU2012-6993 <b>M.C. Bramati</b> and C. Tarragoni Climatic patterns and extreme rainfalls on coastal areas in Central Italy
Z91	EGU2012-2992 <b>K. Pandzic</b> and T. Likso Comparing the Palmer Drought Index and the Standardized Precipitation Index for Zagreb Gric Observatory
Z92	EGU2012-9653 <b>B. Ustaoglu</b> Comparisons of Annual Precipitation Gridded and Station Datasets: An example from Istanbul, Turkey
Z93	EGU2012-4092 <b>I. B. Gregersen</b> , H. Madsen, D. Rosbjerg, and K. Arnbjerg-Nielsen Variations of extreme rainfall events in space and time
Z94	EGU2012-13863 <b>S. Yerel</b> and N. Ozbay Determination of Climate Changes by Using the Trend Analysis
Z95	EGU2012-4929 <b>S. Bathiany</b> , M. Claussen, and K. Fraedrich Detecting hotspots of atmosphere-vegetation interaction via Early Warning Signals
Z96	EGU2012-4320 <b>D. Karssenberg</b> and M.F.P. Bierkens Early-warning signals (potentially) reduce uncertainty in forecasted timing of critical shifts
Z97	EGU2012-12984 <b>I. Vieru</b> , I.H. Holobâc?, O. Pop, I.A. Irimu?, and M. Georgescu Climate signal in a Picea abies tree ring chronology in Eastern Romanian Carpathians
Z98	EGU2012-5404 <b>A. Di Piazza</b> , E. Cordano, and E. Eccel Use of a Weather Generator for analysis of projections of future daily temperature and its validation with climate change indices
Z99	EGU2012-11538 <b>N. Schütz</b> , M. Hayn, M.C. Brown, and M. Holschneider Quantifying conjoint patterns of multiple paleo signals based on Bayesian inversion
Z100	EGU2012-5752 <b>K. Rehfeld</b> , N. Marwan, J. Heitzig, and J. Kurths Pearson correlation estimation for irregularly sampled time series
Z101	EGU2012-457 <b>J. Pawlak</b> and H. Hercman Genetic algorithm as a correlation tool - speleothems stable isotope records example
Z102	EGU2012-4595 <b>G. Lenoir</b> and M. Crucifix Climate wavelet spectrum estimation under chronology uncertainties
Z103	EGU2012-8357 <b>D. Divine</b> , F. Godtliebsen, and H. Rue A modelling approach to assessing the timescale uncertainties in proxy series with chronological errors
Z104	EGU2012-9263 F. Godtliebsen, L. Holmstrom, A. Miettinen, P. Erasto, <b>D. Divine</b> , and N. Koc Pairwise Scale-Space Comparison of Time Series with Application to Climate Research

**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

XY278	EGU2012-1458 <b>D. Dommenget</b> Model Climate Sensitivity Spread forced by Mean Sea Surface Temperature Biases
XY279	EGU2012-4477 <b>E. Exarchou</b> , J.-S. Von Storch, and J. Jungclaus The effect of tidally driven mixing on the transient climate response to CO <sub>2</sub> increase
XY280	EGU2012-2414 <b>S. Pueyo</b> Objective prior distribution of climate sensitivity

- XY281 EGU2012-7754  
**R. B. Skeie**, T. Berntsen, M. Aldrin, M. Holden, and G. Myhre  
A lower and more constrained estimate of climate sensitivity using updated observations and detailed radiative forcing time series
- XY282 EGU2012-8125  
**P. Köhler**, R.S.W. van de Wal, H.A. Dijkstra, and E.J. Rohling  
The climate sensitivity parameter during the last 800 kyr - offsets due to transient effects and state dependency
- XY283 EGU2012-9198  
**A Paul**, S. Mulitza, and M. Losch  
Estimates of global ocean cooling at the Last Glacial Maximum based on sea-surface temperature and oxygen-isotope reconstructions
- XY284 EGU2012-9693  
**X. Zhu**, I. Bordi, K. Fraedrich, and A. Sutera  
On the climate response to zero ozone
- XY285 EGU2012-13186  
**S. Lovejoy** and D. Schertzer  
Scaling analysis of stochastic climate sensitivities
- XY286 EGU2012-7152  
**J. D. Annan** and J. C. Hargreaves  
What do we know about climate sensitivity?

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**CL5.11 – EuroFORUM 2012: Major achievements and perspectives in scientific ocean and continental drilling – Orals**

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

**Room: 16**

Chairperson: n.n.

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

- 16:15–16:30 EGU2012-7104  
**C Mevel**, R. Gatliiff, 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**

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

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: C. Escutia

- Z105 EGU2012-11635  
**T. Westerhold**, M. Lyle, H. Pälike, U. Röhl, and R. Wilkens  
 Middle to Late Eocene Carbonate Accumulation Events in the Equatorial Pacific - new geochemical records from IODP Exp 320/321 and ODP Leg 199
- Z106 EGU2012-5892  
**I. Neugebauer**, A. Brauer, M.J. Schwab, U. Frank, P. Dulski, N. Waldmann, Y. Enzel, D. Ariztegui, E. Hadzhiivanova, and DSDDP Scientific Party  
 The ICDP Dead Sea Deep Drilling Project: An overview and the potential for high-resolution records of floods and droughts in the Levant
- Z107 EGU2012-14264  
**J Hernandez-Molina**, D. Stow, C. Alvarez-Zarikian and the Expedition 339 Scientists Team  
 Onset, evolution and effects of the Mediterranean Outflow: Preliminary Results of IODP Expedition 339 in the Gulf of Cadiz
- Z108 EGU2012-6207  
**M. Schreck**, J. Matthiessen, and **R. Stein**  
 The Neogene of the Iceland Sea - Paleoenvironmental reconstructions using marine palynomorphs
- Z109 EGU2012-6718  
**K. Katsuki**, B.K. Khim, and B. Song  
 Latest Miocene and Pliocene paleoceanographic condition in the Southern Ocean based on silicoflagellate assemblage
- Z110 EGU2012-12680  
 J.J. Gonzalez, **C Escutia**, F.J. Espejo, T Williams, R.M. McKay, S. 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/Ca sea 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  
**M. Python**, L. France, B. Abily, N. Abe, J.C. Alt, M.M. Godard, B. Ildefonse, J.H. Koepke, M.D. Kurtz, R. Oizumi, B.D. Payot and the Exp. 335 Science Party Team  
 Petrographical and geochemical characteristics of the sheeted dyke-gabbro transition zone in ODP/IODP Hole 1256D

Z117	EGU2012-6976 <b>N. T. Arndt</b> 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, <b>E.C. Ferré</b> , 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 <b>A. Rüggeberg</b> , 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 <b>C. Gebhardt</b> , L. Naudts, L. De Mol, and M. De Batist Seismic investigation of Lake Issyk-Kul, Kyrgyzstan
Z121	EGU2012-7644 <b>H. Lorenz</b> and C. Juhlin The Swedish Deep Drilling Program - projects and status 2012
Z122	EGU2012-6463 <b>A. Kopf</b> , S. Hammerschmidt, E. Davis, D. Saffer, G. Wheat, A. LaBonte, R. Meldrum, M. Heesemann, H. Villinger, T. Freudenthal, V. Ratmeyer, J. Renken, M. Bergenthal, and G. Wefer Simple, Affordable and Sustainable Borehole Observatories for Complex Monitoring Objectives
Z123	EGU2012-7379 J.-E. Rosberg and <b>H. Lorenz</b> A new scientific drilling infrastructure in Sweden
Z124	EGU2012-12985 <b>M. Rothfuss</b> , 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 <b>A. Arnaout</b> , 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 <b>S Tavakoli</b> , 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 <b>H. Zeiner</b> Rig Side Online Drilling Support System for Prediction and Prevention of Upcoming Crises
Z128	EGU2012-8501 <b>K. Behrends</b> and R. Conze Science Data Management for a CO <sub>2</sub> -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 <b>D. Dahl-Jensen</b> 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 <b>W. J. van de Berg</b> , 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 <b>A. Born</b> and K.H. Nisancioğlu Melting of Northern Greenland during the last interglaciation
14:15–14:30	EGU2012-6978 <b>U. Mikolajewicz</b> , M. Vizcaíno, C. Rodehacke, and F. Ziemen Anthropogenic climate change and the Greenland ice sheet
14:30–14:45	EGU2012-5482 <b>A. Robinson</b> , 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

**L.M. Wake**, G. A. Milne, A. J. Long, and S. A. Woodroffe

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

Convener: S. Winkler | Co-Conveners: T. Davies, M.P. Kirkbride, L. Iturriaga

**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

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

Convener: S. Winkler | Co-Conveners: T. Davies, M.P. Kirkbride, L. Iturriaga

**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. Stroeve, C. Hättstrand, M.W. Caffee, J. Heyman, and L.P. Zhou

Paleo-glaciations of the Shaluli Shan, southeastern Tibetan Plateau

XL277	EGU2012-5911 <b>D.H. Roberts</b> , B. Rea, T. Lane, C. Schnabel, and A. Rodes The Uummannaq Ice Stream System, West Greenland
XL278	EGU2012-2459 <b>E. Ravier</b> , J.F. Buoncristiani, S. Clerc, M. Guiraud, and E. Portier Sedimentological and deformational evidence for a terrestrial deglaciation: Ballyhorsey, eastern Ireland
XL279	EGU2012-2966 <b>K. Leith</b> , J. Moore, P. Sternai, S. Ivy-Ochs, F. Hermann, and S. Loew Reconstruction of an extensive Younger Dryas glacial stadial in Canton Valais, Switzerland
XL280	EGU2012-3573 <b>L.L. Siame</b> , H.-T. Chu, D.L. Bourlès, F. Derrieux, L. Léanni, R.-F. Chen, and C.-C. Kang Preservation of glacial landforms in the high mountains of Taiwan: Insights from in situ cosmogenic $^{10}\text{Be}$
XL281	EGU2012-6570 <b>E. Šink?n?</b> and P. Šink?nas Sedimentary structures from different proglacial glaciofluvial settings in Lithuania
XL282	EGU2012-8762 <b>P. Šink?nas</b> , B. Karmaza, D. Karmazien?, V. Kazakauskas, and R. Waller Architecture and sedimentation pattern of Skeidarárjökull end moraine at Gigjukvisl gap, Iceland
XL283	EGU2012-7838 <b>A. Rudoy</b> Study diluvium: general provisions.
XL284	EGU2012-3664 <b>J. Alcalá</b> , D. Palacios, and L. Vázquez-Selém 36Cl Exposures Ages and Equilibrium Line Altitude (ELA) of the Ampato Volcanic Complex (Southern Peru).
XL285	EGU2012-3683 <b>J. Úbeda</b> , D. Palacios, and L. Vázquez-Selém Glacial and volcanic evolution on Nevado Coropuna (Tropical Andes) based on cosmogenic 36Cl surface exposure dating
XL286	EGU2012-3686 L. García-Sancho, <b>D. Palacios</b> , J.J. Zamorano, A. Green, M. Vivas, and A. Pintado Recent Deglaciation of Darwin Mountains (Tierra de Fuego) after Little Ice Age: monitoring by photogrammetry, lichenometry, dendrochronology and field studies.
XL287	EGU2012-3702 <b>J. Úbeda</b> , C. Giráldez, and D. Palacios Equilibrium Line Altitudes and paleotemperature reconstructions from Nevado Hualcán ( $9^{\circ}\text{S}$ ) and Nevado Coropuna ( $15^{\circ}\text{S}$ ), Tropical Andes (Peru).
XL288	EGU2012-3738 <b>D. Palacios</b> , N. Andrés, G. Vieira, J. Marcos, and L. Vázquez-Selém Last Glacial Maximum and deglaciation of the Iberian Central System.
XL289	EGU2012-3751 A. Gómez-Ortiz, <b>D. Palacios</b> , B. Palade, L. Vázquez-Selém, F. Salvador-Franch, and L.M. Tanarro The deglaciation of the Sierra Nevada (southern Spain) and derived landforms
XL290	EGU2012-3755 <b>D. Palacios</b> , L. García-Sancho, J.J. Zamorano, N. Andrés, and A. Pintado The deglaciation of Iztaccíhuatl volcano (Mexico) from the Little Ice Age maximum to the present, determined by photogrammetry and lichenometry
XL291	EGU2012-3759 <b>D. Palacios</b> , N. Andrés, J. Úbeda, J. Alcalá, J. Marcos, and L. Vázquez-Selém The importance of polygenetic moraines in the paleoclimatic interpretation from cosmogenic dating
XL292	EGU2012-4446 <b>A. Perret</b> , E. Reynard, and J.-J. Delannoy Glacial history of a mid-altitude mountain massif: cartography and dating in the Chablais area (France, Switzerland)
XL293	EGU2012-5070 M. Bichler, M. Reindl, H. Häusler, and J. M. Reitner Chronology of glacial and periglacial deposits in front of the 1850 moraine of the Goldberg-Glacier, Sonnblick area (Salzburg/Austria)
XL294	EGU2012-9576 <b>R.A. Shakesby</b> and J.A. Matthews Pronival ramparts, moraines, rockglaciers or slope failures? Distinctions and palaeoclimatic pitfalls of misidentification.
XL295	EGU2012-8258 <b>M. Brook</b> , D. Quincey, and S. Winkler Moraine formation during an advance/retreat cycle at a temperate alpine glacier

- 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. Iturriaga**  
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**

Convener: F.A. Viehberg | Co-Conveners: Klaus Reicherter, Schäbitz, J. M. Le Tensorer, F. Lehmkuhl, F. Wegmüller

**Room: 41**

Chairperson: Viehberg, Schäbitz, Le Tensorer

- 13:30–13:45 EGU2012-4541  
**J.F. Donges**, R.V. Donner, M.H. Trauth, N. Marwan, H.J. Schellnhuber, and J. Kurths  
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  
**M.-A. Courty**, J.-M. Le Tensorer, E. Boëda, S. Muhsen, E. Alsakhel, and F. Wegmüller  
Palaeolithic use of fossil combustible linked to singular environmental conditions : the long term el Kowm record (Syria).
- 14:30–14:45 EGU2012-5372  
**R. Orain**, V. Lebreton, E. Russo Ermolli, A.-M. Séma, S. Nomade, Q. Shao, J.-J. Bahain, and C. Peretto  
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**

Convener: F.A. Viehberg | Co-Conveners: Klaus Reicherter, Schäbitz, J. M. Le Tensorer, F. Lehmkuhl, F. Wegmüller

**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  
**V. Foerster**, M.H. Trauth, A. Junginger, A. Asrat, H.F. Lamb, T. Gebru, V. Wennrich, M. Weber, J. Rethemeyer, N. Nowaczyk, U. Frank, M.C. Brown, and F. Schäbitz  
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  
**F.A. Viehberg**, E. Damc?, U.B. Ülgen, P. Roeser, S.O. Franz, N. Ça?atay, T. Litt, and M. Melles  
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. Höbig**, M.E. Weber, M. Kehl, G.-C. Weniger, R. Juliá, M. Melles, R.-H. Fülop, H. Vogel, and K. Reicherter  
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  
**F. Turner**, J.F. Tolksdorf, F. Viehberg, A. Schwarz, U. von Bramann, F. Bittmann, K. Kaiser, A. Schwab, U. Staesche, K. Breest, R. Pott, and S. Veil  
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  
Neolithic Mondsee Culture - Living on lakes and living with floods
- A400 EGU2012-8867  
**B. Mächtle**, K. Schittekk, 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**

Convener: J. Paz-Ferreiro | Co-Conveners: A. M. Tarquis, G. Gascó, A. M. Méndez Lázaro, L. Li, N. J. Ostle , P. Genxing, B. Glaser, P. Pereira, A. Merino

**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  
**B. Wilske**, M. Bai, C. Eckhardt, C. Kammann, P. Kraft, M. Bach, H.-G. Frede, and L. Breuer  
Biochar degradation in different soils

**LUNCH BREAK**

Chairperson: J. Paz-Ferreiro, A. Merino, P. Pereiro

- 13:30–13:45 EGU2012-12780  
**F.G.A. Verheijen**, S. Jeffery, A.C. Bastos, and M. van der Velde  
Biochar effects on soils: overview and knowledge gaps
- 13:45–14:00 EGU2012-1006  
**Dr Sohi** and Dr Cross  
Toward a predictive understanding for the function of biochar in soil
- 14:00–14:15 EGU2012-547  
**M. Rack** and J. Woods  
Life Cycle Assessment of Biochar - EuroChar Project
- 14:15–14:30 EGU2012-994  
**S. D. C. Case**, J. Whitaker, N. P. McNamara, and D. S. Reay  
Biochar suppression of N<sub>2</sub>O emissions from an agricultural soil: effects and potential mechanisms
- 14:30–14:45 EGU2012-1584  
**A. Watzinger**, S. Feichtmair, F. Rempt, E. Anders, B. Wimmer, B. Kitzler, S. Zechmeister-Boltenstern, M. Horacek, F. Zehetner, S. Kloss, S Richoz, and G. Soja  
The effect of biochar amendment on the soil microbial community - PLFA analyses and <sup>13</sup>C labeling results
- 14:45–15:00 EGU2012-656  
**J. Chen**, J. Qu, X. Liu, J. Zheng, L. Li, and G. Pan  
Inconsistent Changes in Microbial Community Structure and Abundance with Biochar Amendment in Rice Paddy Soils from South China
- Chairperson: J. Paz-Ferreiro, N. Ostle, L. Li
- 15:30–15:45 EGU2012-12040  
**G. Rein**, R. Hadden, and C. Zarcone  
From organic matter to pyrogenic char to ash: the role of smouldering combustion in wildfires
- 15:45–16:00 EGU2012-10369  
**E. Michie**, P. Panzacchi, C.A. Davies, S. Toet, and P. Ineson  
Soil-plant-biochar interactions and effects on soil C and N cycling in a wheat greenhouse pot experiment.
- 16:00–16:15 EGU2012-665  
**R. Bian**, L. Cui, G. Pan, and L. Li  
Biochar amendment reduces rice Cd uptake in polluted and unpolluted paddy soils: a long term field experiment
- 16:15–16:30 EGU2012-781  
**A. Brennan** and C. Switzer  
Biochar and the remediation of soil micropollutants
- 16:30–16:45 EGU2012-10335  
**P. Panzacchi**, C.A. Davies, M. Ventura, E.J. Michie, and G. Tonon  
Soil GHG emissions in a Miscanthus plantation as affected by increasing rates of biochar application.
- 16:45–17:00 EGU2012-1114  
**HS Schulz** and BG Glaser  
Compared Biochar and Compost effects on plant growth and soil factors as reported for three consequent greenhouse trial setups

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#### **SSS7.5 – Biochar for soil remediation and global warming mitigation (co-listed) – Posters**

Convener: J. Paz-Ferreiro | Co-Conveners: A. M. Tarquis, G. Gascó, A. M. Méndez Lázaro, L. Li, N. J. Ostle , P. Genxing, B. Glaser, P. Pereira, A. Merino

**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  
**P. Jiménez-Pinilla**, E. Lozano, J. Mataix-Solera, V. Arcenegui, L.M. Zavala, A. Jordán, A. Morugán, A. Pérez-Bejarano, and G.M. Bárcenas  
The role of ash on soil water repellency changes in a Mediterranean area affected by a forest fire: a field conditions study

- XY616 EGU2012-1599  
 K. Friede, **K. Rößler**, K. Terytze, I. Vogel, F. Worzyk, R. Schatten, R. Wagner, M. Haubold-Rosar, A. Rademacher, U. Weiß, K. Weinfurter, D. Drabkin, S. Zundel, and S. Trabelsi  
 Sustainable land-use by regional energy and material flow management using "Terra-Preta-Technology"
- XY617 EGU2012-1910  
**P. Pereira**, A Cerdà, X Ubeda, and J Mataix-Solera  
 Vegetation ash erosion. State-of-the-art and future perspectives.
- XY618 EGU2012-2103  
 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
- XY619 EGU2012-3674  
**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
- XY620 EGU2012-4061  
**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
- XY621 EGU2012-5701  
**P. Pereira** and X. Ubeda  
 Modelling ash extractable Total Phosphorous and Total Sulphur distribution after a forest fire
- XY622 EGU2012-8010  
**K. Rasmusson**, A. Niemi, F. Fagerlund, J. Carrera, and Y. Tsang  
 Identification of scale effects in dissolution trapping from the response of a push-pull experiment
- XY623 EGU2012-9501  
**E. Agrafioti**, G. Bouras, D. Kalderis, and E. Diamadopoulos  
 Pyrolysis of Greek sewage sludge to produce biochars for soil amendments
- XY624 EGU2012-10996  
**S.A. McCormack**, A.J. Vanbergen, R.D. Bardgett, D.W. Hopkins, and N. Ostle  
 Biochar and biological carbon cycling in temperate soils
- XY625 EGU2012-11763  
**G. Ojeda**, X. Domene, S. Mattana, J.P. Sousa, O. Ortiz, P. Andres, and J.M. Alcañiz  
 Soil biochar amendments: type and dose effects
- XY626 EGU2012-12323  
**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
- XY627 EGU2012-13535  
**A.C. Bastos**, N. Abrantes, M. Prodana, F. Verheijen, J.J. Keizer, A.M.V.M. Soares, and S. Loureiro  
 Effects of aqueous soil-biochar extracts on representative aquatic organisms: a first evaluation
- XY628 EGU2012-4409  
 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
- XY629 EGU2012-596  
**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
- XY630 EGU2012-607  
**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
- XY631 EGU2012-1446  
**M. Alhassan** and J.M. Andresen  
 Effect of bone on the pyrolysis product distribution and composition in a fixed bed reactor
- XY632 EGU2012-2413  
**C. Niggli** and H.-P. Schmidt  
 Biochar in viticulture
- XY633 EGU2012-4385  
**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
- XY634 EGU2012-5193  
**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
- XY635 EGU2012-5224  
**I. Bargmann**, J.M. Greef, and M. Kücke  
 Impact of hydrochar application on soil nutrient dynamics and plant availability

- XY636 EGU2012-6395  
**D. Werner**, K. Bushnaf, P. Meynet, S. Puricelli, and S. Saponaro  
Effect of biochar on the fate of volatile petroleum hydrocarbons and soil microbiology in an aerobic sandy soil
- XY637 EGU2012-6432  
**S. Kloss**, F. Zehetner, S. Feichtmair, B. Wimmer, S. Zechmeister-Boltenstern, B. Kitzler, A. Watzinger, and G. Soja  
Biochar application to temperate soils - effects on soil fertility and crop yield
- XY638 EGU2012-13770  
**L. Li**, Y. Liu, W. Pan, G. Pan, J. Zheng, J. Zheng, and X. Zhang  
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
- XY639 EGU2012-1637  
**B. Weiner**, I. Baskyr, J. Pörschmann, and F.-D. Kopinke  
Fate of Organic Micropollutants during Hydrothermal Carbonization

## Wednesday, 25 April

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### **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. Latteck, 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

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#### **LUNCH BREAK**

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Chairperson: Jean Lilensten

13:30–13:45 EGU2012-8267

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

13:45–14:15 EGU2012-7098

**P. T. Verronen**, M.E. Andersson, C.J. Rodger, M.A. Clilverd, S. Wang, and B.R. Carson  
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

**C. von Savigny**, C. Robert, N. Rahpoe, H. Winkler, E. Becker, H. Bovensmann, M. T. DeLand, and J. P. Burrows  
On the impact of short-term solar variability on the polar summer mesopause and noctilucent clouds

16:00–16:15 EGU2012-2860

**U. Cubasch**, U. Langematz, A. Kubin, C. Brühl, T. Spangehl, and A. Baumgärtner  
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

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### **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  
**S. Dewitte**, S. Mekaoui, A. Chevalier, C. Conscience, E. Janssen, M. Van Ruymbeke, Z. Phing, J-P. Noel, M. Meftah, and G. Thuillier  
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 Rodaighe  
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. Hejkrlik**  
Spectral analysis of luni-solar signal in daily meteorological data at Prague-Klementinum 1775 to 2011

Z18	EGU2012-7643 <b>P. Francia</b> and M. Vellante Long term changes in the plasmaspheric density through measurements of the ULF resonance frequency at low latitude
Z19	EGU2012-7645 <b>S. Versick</b> , B. Funke, A. Gardini, G. Stiller, T. von Clarmann, and O. Kirner Comparison of EMAC model results to satellite observations in the winter 2008/09 within the HEPPA-II intercomparison
Z20	EGU2012-7767 <b>A.L. Morozova</b> and M.A. Pais Different forcings and their effect on temperature variations in Portugal: volcanic eruptions, anthropogenic aerosols, atmospheric circulation and solar activity
Z21	EGU2012-7887 <b>V. Dobrica</b> , C. Suteanu, and C. Demetrescu Solar/geomagnetic signature in climate parameters. A comparative analysis of temperature evolution in Atlantic Canada and Central-Eastern Europe
Z22	EGU2012-8254 <b>G. Cessateur</b> , A.I. Shapiro, M. Dominique, M. Kretzschmar, N. Krivova, A.V. Shapiro, W. Schmutz, M. Schoell, S. Solanki, R. Tagirov, G. Thuillier, C. Wehrli, and K.L. Yeo Solar Spectral Irradiance as observed by LYRA/PROBA2 and PREMOS/PICARD
Z23	EGU2012-8271 <b>J. O. Pepke Pedersen</b> Ion-induced nucleation of the sulfuric acid - water system
Z24	EGU2012-8338 <b>S. Kowalewski</b> , M. Palm, and J. Notholt 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
Z25	EGU2012-8347 <b>M. Palus</b> and D. Novotna Phase coherence between solar/geomagnetic activity and climate variability from the stratosphere to the troposphere and the North Atlantic Oscillation
Z26	EGU2012-8701 <b>S. Kalisch</b> , P. Preusse, M. Ern, S. D. Eckermann, and M. Riese Gravity wave - planetary wave interaction simulated by gravity wave ray-tracing
Z27	EGU2012-8881 <b>N. Bergeot</b> , I. Tsagouri, C. Bruyninx, J. Legrand, J.-M. Chevalier, P. Defraigne, Q. Baire, and E. Pottiaux Effect of Space Weather on Ionospheric Total Electron Content Variation during the 23rd Solar Cycle.
Z28	EGU2012-9292 <b>L.E.A. Vieira</b> , T. Dudok de Wit, and M. Kretzschmar Modeling the evolution of the total and solar irradiance based on HMI/SDO magnetograms and solar surface magnetic flux transport models
Z29	EGU2012-9589 <b>T. Asikainen</b> , V. Maliniemi, and K. Mursula The corrected NOAA/POES energetic particle database for space climate studies
Z30	EGU2012-10210 <b>H. Lu</b> , C. Franzke, M. Jarvis, and O. Martius Possible Effect of Solar Wind on Rossby Wave Propagation and Breaking
Z31	EGU2012-10255 <b>V. Maliniemi</b> , T. Asikainen, and K. Mursula Correlation between surface temperature variations and energetic electron precipitation in northern hemisphere winter during the last three solar cycles
Z32	EGU2012-10492 <b>O. K. Kvissel</b> , Y. J. Orsolini, and F. Stordal Formation of stratospheric nitric acid by a hydrated ion cluster reaction: chemical and dynamical effects of energetic particle precipitation on the middle atmosphere
Z33	EGU2012-10752 <b>T. Redmann</b> , B. Funke, G. Stiller, S. Versick, J.M. Wissing, R. Ruhnke, W. Kouker, and A. Vlasov The thermospheric NOx intrusion in Arctic winter 2008/2009
Z34	EGU2012-10815 <b>C. G. Hoffmann</b> , D. E. Kinnison, R. R. Garcia, M. Palm, J. Notholt, U. Raffalski, and J. Groß 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
Z35	EGU2012-11122 I. Cnossen and <b>H. Lu</b> The Vertical Connection of the QBO-Modulated 11-year Solar Cycle Signature during NH Early Winter

Z36	EGU2012-11861 <b>B. Strelnikov</b> , A. Szewczyk, and M. Rapp In-situ measurements of small-scale structures in neutrals and plasma species during ECOMA-2010
Z37	EGU2012-12709 <b>T. Demissie</b> , M. Daae, N. Kleinknecht, and P. Espy Planetary waves during a moderate geomagnetic storm
Z38	EGU2012-2496 <b>S. Misios</b> and H. Schmidt Model assessment of the response of the tropical lower stratosphere to the 11-yr solar cycle
Z39	EGU2012-7239 <b>G. Chiodo</b> , 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 <b>K. Rypdal</b> Global temperature response to radiative forcing: solar cycle versus volcanic eruptions
Z41	EGU2012-7456 <b>M. Ern</b> , 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 <b>S Rahmstorf</b> , D. Coumou, and A. Robinson A Fivefold Increase in Monthly Heat Records
08:45–09:00	EGU2012-4373 <b>S. Parey</b> The role of variability in the change of temperature extremes
09:00–09:15	EGU2012-6504 <b>H. de Vries</b> , R.J. Haarsma, and W. Hazeleger On Future European Cold Spells
09:15–09:30	EGU2012-5992 <b>J.M. Loriaux</b> , 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 <b>T. Kruschke</b> , 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 <b>A.M. Monteiro</b> , 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 <b>A. Schindler</b> , 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 <b>F. Giorgi</b> , 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 <b>C. Radermacher</b> , L. Tomassini, and D. Jacob Validation of heavy precipitation and thermodynamic relations in the regional climate model REMO
11:00–11:15	EGU2012-563 <b>R.M.S. Yu</b> , T. Osborn, D. Conway, R. Warren, and R. Hankin European drought under climate change and an assessment of the uncertainties in projections

- 11:15–11:30 EGU2012-4806  
**B. S. Madsen**, J. Ravnbøl, P.D. Ditlevsen, and F. Kwasniok  
 Regime-dependent statistics of extremes
- 11:30–11:45 EGU2012-2264  
**T. Lung**, C. Lavalle, R. Hiederer, and L.M. Bouwer  
 A regional level multi-hazard impact assessment based on indicators of climatic and non-climatic change

**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. Davídkovová**, J. Kyselý, E. Plavcová, A. Urban, B. Kriz, and J. Kyncl  
 Impacts of temperature extremes on cardiovascular morbidity and mortality in the Czech Republic
- Z48 EGU2012-2007  
**I. Tasic** and M. Unkasevic  
 Extreme temperature indices over Serbia
- Z49 EGU2012-2295  
**M. Unkasevic** and I. Tasic  
 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
- Z55 EGU2012-4627  
**Y. Yilmaz** and H. N. Dalfes  
 Extreme Value Statistics of Downscaled Climate Projections for Turkey and Its Region
- Z56 EGU2012-5481  
**N. Groll** and B. Hünicke  
 Baltic Sea wave conditions in a changing climate
- Z57 EGU2012-6311  
**A. Valeranova** 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

Z59	EGU2012-6750 <b>S. Yin</b> , J. Feng, and J. Li Influence of the preceding winter Northern Hemisphere annular mode on the spring extreme low temperature events in the north of eastern China
Z60	EGU2012-6923 <b>M. Wehner</b> Projections of Extreme Weather in a Changing Climate: Balancing Confidence and Uncertainty
Z61	EGU2012-7930 <b>A. Toreti</b> , I. Smith, P. Naveau, and E. Xoplaki A Kernel based approach for the analysis of extreme precipitation events
Z62	EGU2012-8538 <b>V. Blanka</b> and G. Mez?si The changes of flash flood hazard in Hungary due to climate change
Z63	EGU2012-8848 <b>E. Bucchignani</b> , P: Mercogliano, M. Montesarchio, P. Capuano, M. Sellerino, A. Di Ruocco, and W. Kombe Regional and sub-regional climate simulations over Sub-Saharan African regions and the influence on the heat waves hazard
Z64	EGU2012-10005 <b>P. M. Ruti</b> , A Dell'Aquila, and F Giorgi Understanding and attributing the Euro-Russian summer blocking signatures
Z65	EGU2012-10090 Matulla, Lexer, and <b>Zuvela-Aloise</b> DISTURBANCE - Modeling extreme events and disturbance regimes in forest ecosystems under climate change
Z66	EGU2012-11806 <b>M. Voigt</b> , P. Lorenz, T. Kruschke, R. Osinski, U. Ulbrich, and G. C. Leckebusch Statistical Downscaling of Gusts During Extreme European Winter Storms Using Radial-Basis-Function Networks
Z67	EGU2012-12037 <b>Cs.N. Péliné</b> , K. Radics, and J. Bartholy Regional tendencies of extreme wind characteristics from measured, reanalysis and simulated time series over Hungary
Z68	EGU2012-12659 <b>G. Lenderink</b> , G.J van Oldenborgh, and J.J. Attema Scaling and trends of hourly precipitation extremes in a warming climate
Z69	EGU2012-13369 <b>H. Ágústsson</b> , Ó. Rögnvaldsson, H. Ólafsson, and E. M. Einarsson Simulations of precipitation in a future climate scenario at various horizontal resolutions. Part I - Scandinavia
Z70	EGU2012-13407 <b>Ó. Rögnvaldsson</b> , H. Ágústsson, H. Ólafsson, and E. M. Einarsson Simulations of precipitation in a future climate scenario at various horizontal resolutions. Part II - Iceland
Z71	EGU2012-13529 <b>M.I.P. de Lima</b> , F.E. Santo, and A.M. Ramos Seasonal trends in precipitation and surface air temperature extremes in mainland Portugal, 1941-2007
Z72	EGU2012-13745 <b>H. Ólafsson</b> , H. Ágústsson, Ó. Rögnvaldsson, and E.M. Einarsson Winds over Iceland in current and future climate
Z73	EGU2012-13845 <b>N. K. Awan</b> and H. Formayer Climatology of cut-off low systems in the Greater European Alpine region

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**CL3.3/NP5.4 – Centennial, decadal, seasonal and monthly climate predictions (co-organized) – Orals**

Convener: M. A. Liniger | Co-Conveners: G. J. van Oldenborgh, S. Vannitsem, F. J. Doblas-Reyes, R. Knutti, J. D. Annan, K. Frieler

**Room: 13**

Chairperson: n.n.

13:30–13:45 EGU2012-1888

**H.L. Cloke**, A. Weisheimer, F. Pappenberger, and T.N. Palmer

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

13:45–14:00 EGU2012-5016

**Y. ORSOLINI**, R. SENAN, A. CARRASCO, G. BALSAMO, P. DOBLAS-REYES, F. VITART, A. WEISHEIMER, and R. BENESTAD

Impact of snow initialization on sub-seasonal forecasts

14:00–14:15	EGU2012-6007 S C Chapman, <b>D A Stainforth</b> , and N W Watkins Evaluating the sensitivity of local temperature distributions to global climate change
14:15–14:30	EGU2012-8445 <b>T. D. Hewson</b> The new Met Office strategy for seasonal forecasts
14:30–14:45	EGU2012-8742 <b>J. Baehr</b> , M. Botzet, K. Froehlich, L. Kornblueh, S. Tietsche, and W. Mueller Towards a Seasonal Prediction System using MPI-ESM
14:45–15:00	EGU2012-10098 <b>C. Buontempo</b> and C. Hewitt Seasonal and decadal predictions toward climate services.
Chairperson: Andreas Fischer	
15:30–15:45	EGU2012-9729 <b>E B Suckling</b> and L A Smith Do quantitative decadal forecasts from GCMs provide decision relevant skill?
15:45–16:00	EGU2012-11176 <b>J.-F. Guérémy</b> and N. Laanaia Decadal forecasts with CNRM-CM5. Sensitivity to the inclusion of the stratosphere
16:00–16:15	EGU2012-8473 <b>M. Dubrovsky</b> and M. Trnka Probabilistic climate and agroclimatic scenarios for Europe (PRASCE project results)
16:15–16:30	EGU2012-1873 <b>C. Kerkhoff</b> , H. R. Künsch, and C. Schär Relations between RCMs and GCMs in the ENSEMBLES simulations
16:30–16:45	EGU2012-6073 <b>P.A.G. Watson</b> , 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 <b>A. Sokolov</b> , 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**  
 Convener: M. A. Liniger | Co-Conveners: G. J. van Oldenborgh, S. Vannitsem, F. J. Doblas-Reyes, R. Knutti, J. D. Annan, K. Frieler

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

Z74	EGU2012-2969 <b>A. Maidens</b> , 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 <b>K. Fan</b> A prediction model for the Atlantic Basin tropical storm frequency using a year-to-year increment approach
Z76	EGU2012-3128 <b>J. Bustamante</b> , S. C. Chou, and G. Sueiro 10- Year Eta Model Seasonal Forecast Climatology over South America
Z77	EGU2012-1265 <b>C. Jiang</b> , G. Lagerloef, and S. Springer Relationship between PDO and basin-scale ocean circulation variations
Z78	EGU2012-10302 J.M. Eden, M. Widmann, <b>S. Wild</b> , G.R. Evans, and J.G. Hughes Pacific SST influence on spring precipitation in Addis Ababa, Ethiopia
Z79	EGU2012-78 <b>Y. Kuleshov</b> , 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 <b>A. Maidens</b> , 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 <b>M. Hirschi</b> , M. Dubrovsky, C. Spirig, J. Samietz, P. Calanca, A. P. Weigel, A. M. Fischer, and M. W. Rotach Monthly forecasting of agricultural pests in Switzerland
Z82	EGU2012-10664 <b>L A Smith</b> and D A Stainforth Putting Weather back into the Definition of Climate
Z83	EGU2012-11444 <b>H. Du</b> , F. Niehorster, and L.A. Smith Insightful Measures of Predictive Skill in Seasonal Forecasts
Z84	EGU2012-10983 T. Maynard, <b>E B Suckling</b> , and L A Smith Skill Scores for Probabilistic Climate and Weather Prediction
Z85	EGU2012-7718 R. Gangsto, A. P. Weigel, C. Appenzeller, <b>A. Fischer</b> , and M. A. Liniger Evaluating decadal predictions - some considerations on bias correction and cross-validation
Z86	EGU2012-8991 S. M.W. Higgins, <b>H.L. Du</b> , and L.A. Smith Constraints on Rational Model Weighting, Blending and Selecting when Constructing Probability Forecasts given Multiple Models
Z87	EGU2012-3089 <b>W. Mueller</b> , D. Matei, J. Jungclaus, H. Haak, H. Pohlmann, D. Notz, J. Kröger, J.-S. von Storch, J. Baehr, and J. Marotzke The MPI-M CMIP5 Decadal Prediction Experiments
Z88	EGU2012-7664 <b>T. Spangeli</b> , M. Schröder, A. Hense, F. Kaspar, R. Hollmann, R. Glowienka-Hense, and S. Stolzenberger The VeCAP project: Verification, Calibration and Assessment of Predictability of medium-range climate predictions using satellite data
Z89	EGU2012-9615 <b>J. Servonnat</b> , J. Mignot, E. Guilyardi, D. Swingedouw, and S. Labetoulle Testing surface initialisation strategies for decadal projections in a perfect model framework
Z90	EGU2012-1097 <b>B Wouters</b> , W Hazeleger, GJ van Oldenborgh, and S Drijfhout Multimodel Decadal Predictability of the Subpolar Gyre
Z91	EGU2012-2611 V. Zunz, <b>H. Goosse</b> , J. Jungclaus, and S. Dubinkina Evaluating the Decadal Prediction Skill of the Sea Ice Concentration in the Southern Ocean
Z92	EGU2012-11958 <b>L.-P. Caron</b> , C.G. Jones, F.J. Doblas-Reyes, and M. Caian Multi-year forecast of Atlantic tropical cyclone activity using EC-Earth
Z93	EGU2012-107 <b>G. Wang</b> A novel approach in predicting non-stationary time series by combining external forces
Z95	EGU2012-8525 <b>T. Toniazzo</b> and S.J. Woolnough CMIP-5 model errors in the tropical Atlantic
Z96	EGU2012-9497 <b>A Lopez</b> , E Suckling, and L.A. Smith Pattern scaled climate change scenarios: are these useful for adaptation?
Z97	EGU2012-7797 <b>A. Fischer</b> , 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 <b>J. D. Annan</b> , J. C. Hargreaves, and K. Tachiiri A common fallacy in climate model evaluation
Z99	EGU2012-11000 <b>C. J. Rye</b> , M. R. Allen, R. G. Jones, N. Massey, F. Otto, S. Rosier, and The climateprediction.net team Assessment and Selection of GCM Perturbed Physics Ensemble Members Using Observed Top-of-Atmosphere Fluxes
Z100	EGU2012-6865 <b>K. Tachiiri</b> , J.C. Hargreaves, J.D. Annan, C. Huntingford, and M. Kawamiya Allowable carbon emissions for a medium mitigation scenario
Z101	EGU2012-4193 <b>T. Simon</b> , 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 <b>H. Reddad</b> , M. Bakhat, and B. Damnati Climate change and precipitation evolution in Ifran region (Middle Atlas of Morocco).
Z103	EGU2012-7362 <b>E. Bergin</b> , W. Buytaert, C. Onof, and H. Wheater Downscaling of rainfall in Peru using Generalised Linear Models
Z104	EGU2012-12832 A.J. Ansorge, <b>R.W. Arritt</b> and the The MRED Team Precipitation intensity in an ensemble of downscaled seasonal forecasts
Z105	EGU2012-4780 <b>J. Hnilica</b> Statistical correction of daily precipitation data from the climate models

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**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 <b>P. Lionello</b> , M. Gacic, G. Gomis, R. Garcia-Herrera, F. Giorgi, S. Planton, R. Trigo, A. Theocharis, M.N. Tsimplis, U. Ulbrich, and E. Xoplaki The MedCLIVAR program and the climate of the Mediterranean region
08:45–09:00	<b>Young scientist poster presentations</b>
09:00–09:15	EGU2012-9847 <b>M Rogerson</b> , EJ Rohling, GR Bigg, and J Ramirez Why does the Mediterranean Outflow vary through time?
09:15–09:30	EGU2012-8770 S. Alessio, C. Taricco, G. Vivaldo, and M. Ghil Modern decrease of $\delta^{18}\text{O}$ in Mediterranean sediments over the last 150 y: anthropogenic forcing and natural variability
09:30–09:45	EGU2012-13625 <b>J.-P. Savy</b> , K.M. Yao, F. Touratier, and C Goyet Temporal evolution of the anthropogenic CO <sub>2</sub> and acidification of the northwestern Mediterranean Sea, from the mid-1990s to the mid-2000s
09:45–10:00	EGU2012-2657 <b>J. Llasses</b> , G. Jordà, and D. Gomis Optimal spatio-temporal design of an hydrographic sampling aimed to monitor climate change in the Mediterranean Sea

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**COFFEE BREAK**

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Chairperson: I.Bladé

10:30–10:45	EGU2012-1673 <b>J. Romanski</b> , 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 <b>M. Pasqui</b> A synoptic characterization of the Saharan dust transport in the Mediterranean basin
11:00–11:15	EGU2012-4573 <b>K. Schepanski</b> 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 <b>P. Nabat</b> , 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 <b>A. Polonsky</b> 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?

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**LUNCH BREAK**

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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. Jacobbeit, A. Paxian, G. Vogt, S. Seubert, and H. Paeth

Statistical assessments of extreme precipitation and dry periods in the Mediterranean area until the end of the 21st century

14:00–14:15 EGU2012-13623

**J. A. Añel** and the The Weatherathome.net Team

Weatherathome.net: useful simulations for the Mediterranean region

14:15–14:30 EGU2012-194

**A.-L. Lereboullet**, G. Beltrando, and D.K. Bardsley

Climate change and viticulture in Mediterranean climates: the complex response of socio-ecosystems. A comparative case study from France and Australia (1955-2040)

14:30–14:45 EGU2012-1836

**A.G. Koutoulis**, **I.K. Tsanis**, and D. Jacob

Projections of water resources availability in Crete for the 21st century under the global change perspective

14:45–15:00 EGU2012-10819

**S. Somot**, F. Sevault, M. Déqué, M. Herrmann, C. Dubois, R. Aznar, E. Padorno, E. Alvarez-Fanjul, G. Jorda, M. Marcos, and D. Gomis

Regional ocean climate change scenarios for the Mediterranean Sea: assessing the uncertainties along the 21st century.

15:00–15:15 EGU2012-12375

**C. Dubois**, S. Somot, S. Calmanti, A. Carillo, M. Déqué, A. Dell'Aquila, A. Elizalde, S. Gualdi, D. Jacob, B. L'Hévéder, L. Li, P. Oddo, G. Sannino, E. Scoccimarro, and F. Sevault

Future projections of the surface heat and water budgets of the Mediterranean Sea in an ensemble of coupled atmosphere-ocean regional climate models.

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**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. Garcia, C. Sonzogni, and E. Bard

Climate Variability in the Levant basin during the last deglaciation

Z108 EGU2012-12500

**R. Zech**, M. Zech, S. Markovic, and Y. Huang

Humid glacials, arid interglacials? Results from a multiproxy study of the loess-paleosol sequence Crvenka, Serbia

Z109 EGU2012-234

**B. Soumaya**, K. Nejib, B. Franck, L. Laurent, D. Jean-Claude, C. Nicolas, and R. Hélène

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

Z110 EGU2012-4161

**A. Stadnitskaia**, V. Liebetrau, A. Eisenhauer, and J.S. Sinninghe Damsté

Past methane seepage and linked deep-water anoxia are logged in methane-derived carbonates

- Z111 EGU2012-7377  
**O. Peyron**, M. Magny, N. Combourieu-nebout, S. Goring, S. Joannin, J.-L. de Beaulieu, E. Brugapaglia, I. Dormoy, R. Drescher-schneider, D. Galop, E. Ortú, and L. Sadóri  
 Pollen-inferred quantitative reconstruction of the Holocene climate in the central Mediterranean area (Italy)
- Z112 EGU2012-3717  
**G. Jordà**, J. Llasses, and D. Gomis  
 Can we trust Mediterranean hydrographic data products (MEDAR, EN3, Ishii) for climate studies?
- Z113 EGU2012-751  
**M. Gómez**, L. Gimeno, R. Nieto, A. Drumond, and L. Prieto  
 Variability of the moisture sources around the Mediterranean Basin during 1980-2000
- Z114 EGU2012-1121  
**C.M. Goodess**, M.D. Agnew, D. Hemming, C. Giannakopoulos and the CIRCE RL11 Team  
 Integrated assessment in the Mediterranean: the CIRCE case studies
- Z115 EGU2012-1557  
**JD Ruiz Sinoga**, JF Martínez Murillo, MA Gabarrón Galeote, and JM Senciales González  
 Analysis of dry periods using the DDSLR index in the Mediterranean southern Spain
- Z116 EGU2012-3720  
**G. Jordà**, M. Marcos, M. Gómez, and D. Gomis  
 Wind wave climate in the Western Mediterranean under climate change scenarios
- Z117 EGU2012-2465  
**A. Martínez-Asensio**, M. Marcos, G. Jordà, D. Gomis, and M. Gómez  
 Calibration of a wind wave hindcast (1958-2008) in the Western Mediterranean using buoy data.
- Z118 EGU2012-2712  
**M. Tanarhte**, P. Hadjinicolaou, and J. Lelieveld  
 Intercomparison of temperature and precipitation datasets based on observations in the Mediterranean and the Middle-East
- Z119 EGU2012-6008  
**M. Stéfanon**  
 Dynamical effects of vegetation on the 2003 summer heat waves
- Z120 EGU2012-6166  
**M. Revel**, **N. Combourieu Nebout**, E. Ducassou, S. Migeon, M. Ismail, S. Bernasconi, and O. Peyron  
 Temporal evolution of the Ethiopian monsoon intensity since the last 25,000 years from the Nile suspended discharges record.
- Z121 EGU2012-9538  
**E. Romano**, E. Volpi, and F. Stefanucci  
 Analysis of temperature trends, heat and cold waves in Central Italy (1952-2008)
- Z122 EGU2012-6263  
**P. Pereira**, A. Sanchez-Lorenzo, J.-A. Lopez-Bustins, and C.-J. Lolis  
 Trends in summer tropical nights on the Iberian Peninsula and their connection with large-scale atmospheric circulation patterns
- Z123 EGU2012-8804  
**C. Pizzigalli**, P. Lionello, Ahmed Hassan Fahmi, Ghada Al-Naber, Muhammad Shatanawi, Khaldoun Shatanawi, Zohra Lili Chabaane, Mohamed Wael Hamed Al Askhar, Mohamed Magdy Abdel Wahab, and Haifa Goma Ben Mailod  
 Precipitation climatology for the North African and Middle East areas of the Mediterranean Region using a collection of in situ observation
- Z124 EGU2012-6605  
**P. Lionello**  
 The climate of the Venetian and North Adriatic region: variability, trends and future change
- Z125 EGU2012-6582  
**M. Reale** and **P. Lionello**  
 Climate change over Venetia (north-east Italy)
- Z126 EGU2012-7085  
**K.M. Nissen**, **U. Ulbrich**, G.C. Leckebusch, and J.G. Pinto  
 Mediterranean cyclones and wind storms in a changing climate
- Z127 EGU2012-6361  
**A. Blesta**, **P.T. Nastos**, and A. Matzarakis  
 Assessment of bioclimatic conditions in Crete Island, Greece
- Z128 EGU2012-8188  
**R. Marcos**, M. Turco, M.C. Llasat, and P. Quintana-Seguí  
 Application of a statistical downscaling method to detect inhomogeneities in a temperature time series
- Z129 EGU2012-2599  
**J. Kysely**, L. Gaal, S. Begueria, R. Beranova, and J. I. Lopez-Moreno  
 Uncertainties of climate change scenarios of precipitation extremes in the Mediterranean based on ENSEMBLES RCMs

Z130	EGU2012-9351 <b>M. Dubrovsky</b> , 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 <b>C.M Gouveia</b> , R.M. Trigo, S.M. Begueria, and S Vicente-Serrano Drought influence on vegetation behavior in Mediterranean basin
Z132	EGU2012-12272 <b>C. Oikonomou</b> , 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, <b>P. Zanis</b> , 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, <b>M. Krzelj</b> , 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, <b>Y. Tramblay</b> , E. Lawin, and E. Servat Precipitation variability and future projections for water resources management in Tunisia Northern Coastal basins

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**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 <b>J. Jouzel</b> Modeling of water isotopes in polar regions and application to ice core studies
08:45–09:00	EGU2012-919 <b>S.A. Marcott</b> , 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 <b>M. Guillevic</b> , L. Bazin, C. Stowasser, A. Landais, V. Masson-Delmotte, B. Minster, F. Prié, T. Blunier, S.L. Buchardt, B.M. Vinther, and M. Leuenberger 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 <b>E.J. Steig</b> , 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, <b>V. Gkinis</b> , 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 <b>J. P. Steffensen</b> 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?

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**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 M.D. Ellehoj, S.J. Johnsen, <b>H.C. Steen-Larsen</b> , J. Sjolte, and M. Werner Ice-vapor equilibrium fractionation factor of hydrogen and oxygen isotopes: Experimental investigations and implications for stable water isotope studies
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Z137	EGU2012-6523 <b>G. van der Wel</b> , H. Oerter, H. Meyer, and H. Fischer Past local temperatures obtained from the EDML ice core using differential diffusion
Z138	EGU2012-9190 <b>M. Werner</b> , S. Dietrich, and G. Lohmann Glacial-interglacial changes in Antarctica: High-resolution modelling of water isotopes and temperature-isotope relations
Z139	EGU2012-12817 <b>B.M. Vinther</b> Greenland ice core $\delta^{18}\text{O}$ records - from Camp Century to NEEM
Z140	EGU2012-1235 <b>E. Schlosser</b> , H. Oerter, E. Isaksson, H. Anschütz, and T. Martma The relationship between air temperature and accumulation in Antarctica - more than Clausius-Clapeyron
Z141	EGU2012-12705 <b>H. C. Steen-Larsen</b> , D. Noone, M. Berkhammar, D. Schneider, J. White, and K. Steffen Observing and documenting the snow surface processes creating the isotopic signal in the snow at Summit, Greenland
Z142	EGU2012-2512 <b>D. Dahl-Jensen</b> and the NEEM Community Members Team The NEEM climate record
Z143	EGU2012-599 <b>T.K. Bauska</b> , E.J. Brook, A.C. Mix, and J. Ahn A new high-precision record of $\delta^{13}\text{C}$ of CO <sub>2</sub> during the last millennium from the WAIS Divide Ice Core
Z144	EGU2012-7177 <b>J. Schmitt</b> , B. Seth, P. Köhler, J. K. Willenbring, and H. Fischer A new ice core proxy of continental weathering and its feedback with atmospheric CO <sub>2</sub>
Z145	EGU2012-12883 <b>A. Orsi</b> and J. Severinghaus Paleo-temperature from Ice Cores: a new method based on noble gas isotopes and borehole temperature.
Z146	EGU2012-5780 <b>M. Bigler</b> and the NEEM Aerosol Consortium Team New aerosol measurements from the Greenland NEEM ice core
Z147	EGU2012-6668 <b>K. Goto-Azuma</b> , A. Wegner, M. Hansson, M. Hirabayashi, T. Kuramoto, T. Miyake, H. Motoyama, and NEEM Aerosol Consortium members Variations of ion concentrations in the deep ice core and surface snow at NEEM, Greenland
Z148	EGU2012-1895 <b>P. Vallelonga</b> , C. Barbante, G. Cozzi, J. Gabrieli, V. Gaspari, A. Spolaor, and C. Turetta Variations in Iron Fluxes across Antarctica: a new record from Talos Dome in Victoria Land, Antarctica.
Z149	EGU2012-4040 <b>H. Motoyama</b> and Dome Fuji Ice Core Project members Characteristics of correlation between climate and environmental elements from past 700,000 years in Dome Fuji ice core, Antarctica

**NP2.4/CL5.5 – Climate Sensitivity (co-organized) – Orals**

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

**Room: 17**

Chairperson: Michel Crucifix

15:30–16:00	EGU2012-11899 <b>J. Hansen</b> and M. Sato Paleoclimate Implications for Climate Sensitivity and Human-Made Climate Change
16:00–16:15	EGU2012-7796 <b>D A Stainforth</b> and L A Smith Linearity, climate sensitivity and climate changes in the surface temperature field
16:15–16:30	EGU2012-13295 <b>T.L. Edwards</b> , 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 <b>R. Caballero</b> and M. Huber Climate transitions and state-dependent climate sensitivity in NCAR CAM3 simulations over a broad range of radiative forcing

16:45–17:00 EGU2012-13069

**C. Proistosescu** and P. Huybers

A stochastic model for temperature variability and climate sensitivity ranging from months to tens-of-thousands of years

**CL5.7/AS4.22/BG6.4/GM2.6 – Instrumental monitoring of caves: the key to understanding anthropogenic impacts and climate-proxy relationships in speleothems (co-organized) – Orals**

Convener: D. Matthey | Co-Conveners: C. Spötl, J. Baldini

**Room: 16**

Chairperson: James Baldini

15:30–15:45 EGU2012-5830

**F. Bourges**, D. Genty, P. Genton, A. Mangin, and D. D'Hulst

South-France caves monitoring : present day cave air dynamics characterization,paleoclimatic and archaeological interests

15:45–16:00 EGU2012-13481

**J.L. Banner, E.W. James**, D. Breecker, R. Casteel, C. Wong, K. Meyer, W. Feng, and B. Cowan  
Long-term cave monitoring on the Edwards Plateau of Texas (USA) to advance speleothem paleoclimate proxies

16:00–16:15 EGU2012-12117

**P. Aliaga** and J.P. Bernal

In-situ REE calibration as palaeohydrogeological proxies in stalagmites

16:15–16:30 EGU2012-6704

**D.M. Tremaine**, B.P. Kilgore, and P.N. Froelich

Calcite Farming at Hollow Ridge Cave: Calibrating Net Rainfall and Cave Microclimate to Dripwater and Calcite Chemical Variability

16:30–16:45 EGU2012-11697

**T. Atkinson**, D. Matthey, J-P. Latin, M. Ainsworth, and R. Durell

Generation and dispersal of carbon dioxide in the caves and karst of Gibraltar

16:45–17:00 EGU2012-10502

**M. Luetscher** and P.-Y. Jeannin

Monitoring cave drips in a (partly) controlled hydrological system, Milandre cave, Switzerland

**CL5.7/AS4.22/BG6.4/GM2.6 – Instrumental monitoring of caves: the key to understanding anthropogenic impacts and climate-proxy relationships in speleothems (co-organized) – Posters**

Convener: D. Matthey | Co-Conveners: C. Spötl, J. Baldini

**Hall Z | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Christoph Spötl

Z150 EGU2012-831

**E. Garcia-Anton**, S. Cuevza, A. Fernandez-Cortes, S. Sanchez-Moral, and J.C. Canaveras

Multiparametric surveillance of conservation measures at subterranean rock-art sites: case of Altamira cave

Z151 EGU2012-874

**S Sanchez-Moral**, A Fernandez-Cortes, S Cuevza, E Garcia-Anton, and D BenaventeBalance of pCO<sub>2</sub> in the carbonate-bearing unsaturated zone controlling mineral precipitation: Implications for geo-environmental analyses in caves

Z152 EGU2012-4775

**S. Riechelmann**, A. Schröder-Ritzrau, C. Spötl, D.F.C. Riechelmann, D.K. Richter, and A. Immenhauser

Water chemistry and isotope data from a five year monitoring programme of Bunker Cave, NW Germany

Z153 EGU2012-13546

**D. Matthey**

Continuous multichannel monitoring of cave air carbon dioxide using a pumped non-dispersive infrared analyser

Z154 EGU2012-861

**A. Fernandez-Cortes**, S Cuevza, M Garcia-Anton, M Alvarez-Gallego, JC Canaveras, E Porca, V Jurado, C Saiz-Jimenez, and S Sanchez-Moral

Assessment of aerodynamic processes on subsurface in karst terrains by rapid multi-parametric surveys (case of Castanar Cave, Spain)

Z155 EGU2012-4209

**S.F.M. Breitenbach**, M.-J. Gilbert, O. Kwiecien, R. Seifert, and D. Fleitmann

Monitoring drip water isotope and element variability: A new device for automatic drip water collection

Z156	EGU2012-4859 <b>E. Garcia-Anton</b> , S. Cuevza, A. Fernandez-Cortes, S. Sanchez-Moral, and D. Benavente Daily variations of CO <sub>2</sub> , d13CO <sub>2</sub> and CH <sub>4</sub> of cave air controlled by external weather conditions: example of rapid survey in Altamira cave (north of Spain)
Z157	EGU2012-6118 <b>D. Tapete</b> , 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
Z158	EGU2012-7910 <b>M. Gasiorowski</b> 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
Z159	EGU2012-9604 <b>J.U.L. Baldini</b> and C.M. Sherwin Using high-resolution monitoring data to identify the effects of cave and surface conditions on cave drip water hydrochemistry
Z160	EGU2012-10646 <b>H. Ridley</b> , J.U.L. Baldini, and K.M. Prifer Monitoring tropical cave environmental parameters: Implications for palaeoclimate reconstruction
Z161	EGU2012-10680 <b>D. Ballesteros</b> , M. Jiménez-Sánchez, J. García-Sansegundo, M. Borreguero, and G. Sendra Quantitatively structural control of the karst based on speleological cave survey data: Cabeza Llerosos massif (Picos de Europa, Spain)
Z162	EGU2012-11195 <b>R. Kirk</b> , D. Matthey, 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.
Z163	EGU2012-11463 <b>C. Thrush</b> , D. Matthey, D. Lowry, D. Hoffmann, and E. Anton-Garcia Deciphering ENSO periodicity in an annually resolved speleothem from Fiji
Z164	EGU2012-11604 <b>D. Scholz</b> , M. Hansen, and W. Dreybrodt Stable carbon and oxygen isotope fractionation processes during speleothem growth: systematic investigation in novel laboratory experiments

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**IG5/CL5.8/SSP5.3 – Stable isotopes as a tool in (paleo-)climate studies in different environments and by multi-proxi approaches (co-organized) – Orals**

Convener: Dr. Bojar | Co-Conveners: M Werner, RTW Siegwolf, L. Dallai, A. Demény, D. R. Gröcke, S. H. Halas, Dr. Melinte-Dobrinescu, A. Per?oiu, M. Savard

**Room: 39**

Chairperson: Rolf Siegwolf, Mihaela Melinte-Dobrinescu

13:30–13:45	EGU2012-10432 <b>D. Sarris</b> , 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 <b>M. M. Savard</b> , 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 <b>A. McAnena</b> , J.O. Herrle, A. Griesand, T. Wagner, H.M. Talbot, J. Rethemeyer, and P. Hofmann 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 <b>M.C. Melinte-Dobrinescu</b> and A.-V. Bojar Cretaceous biotic changes and isotope events in the Southern and Eastern Carpathians (Romania)
14:30–14:45	EGU2012-8668 <b>A. Demény</b> , Gy. Czuppon, Z. Siklósy, G. Schöll-Barna, P. Sümegi, Sz. Leél-?ssy, K. Lin, C.-C. Shen, and B. Bajnóczki 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 <b>J. L. Toney</b> , J. A. Bendle, O. Seki, S. Krishnan, M. Pagani, G. Inglis, R. Pancost, P. K. Bijl, S. Bohaty, S. Schouten, J. Pross, H. Brinkhuis, U. Roehl, S. Jamieson and the IODP Expedition 318 Team Insights into peatland expansion and methane cycling on the East Antarctic continent in the early Eocene

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**IG5/CL5.8/SSP5.3 – Stable isotopes as a tool in (paleo-)climate studies in different environments and by multi-proxi approaches (co-organized) – Posters**

Convener: Dr. Bojar | Co-Conveners: M Werner, RTW Siegwolf, L. Dallai, A. Demény, D. R. Gröcke, S. H. Halas, Dr. Melinte-Dobrinescu, A. Per?oiu, M. Savard

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Martin Werner, Darren Grocke, Ana-Voica Bojar

- A388 EGU2012-8908  
**L. Kocsis**, E. Gheerbrant, M. Mouflih, H. Cappetta, J. Yans, A. Ulianov, and M. Amaghazaz  
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\*  
 $^{87}\text{Sr}/^{86}\text{Sr}$ -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  $^{23}\text{Si}$  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  
**H. C. Steen-Larsen**, S. J. Johnsen, V. Masson-Delmotte, B. Stenni, C. Risi, and H. Sodemann  
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  
**R.T.W. Siegwolf**, N. Buchmann, D. Frank, F. Joos, A. Kahmen, K. Treydte, M. Leuenberger, and M. Saurer  
iTREE: Long-term variability of tree growth in a changing environment - identifying physiological mechanisms using stable C and O isotopes in tree rings.
- A403 EGU2012-11019  
**I. Labuhn**, V. Daux, D. Genty, M. Pierre, M. Stievenard, and E. Regnier  
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

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**GM4.2 – Organic matter export across landscapes: Understanding the rates and controls (co-listed) – Orals**

Convener: R. Hilton | Co-Conveners: M. Evans

**Room: 21**

Chairperson: n.n.

- 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  
**F. Tamooh**, F Meysman, T. R. Marwick, A. V. Borges, R Merckx, J Nyunja, and S Bouillon  
Seasonal dynamics of organic carbon in the Tana River Basin, Kenya
- 09:45–10:00 EGU2012-13331  
**T. Eglington**, V. Galy, X. Feng, N. Drenzek, A. Dickens, C. Ponton, L. Giosan, 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

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**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. Vanwallghem, and **J.A. Gomez**  
Organic carbon fluxes in stemflow, throughfall and rainfall in an olive orchard
- XL129 EGU2012-4232  
**J.A. Gomez**, M. Burguet, M.E. Taguas, R. Perez, J.L. Ayuso, T. Vanwallghem, J.V. Giraldez, and K. Vanderlinden  
Distribution of soil organic carbon in two small agricultural Mediterranean catchments.

XL130	EGU2012-6510 <b>M. Glendell and R.E. Brazier</b> Controls on suspended sediment, particulate and dissolved organic carbon export from two adjacent catchments with contrasting land-uses, Exmoor UK.
XL131	EGU2012-12415 <b>E. L. Shuttleworth</b> , 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 <b>M. Moreno</b> 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, <b>JM Turowski</b> , N Federspiel, K Swingle, C Rickli, and SR Abt Coarse particulate organic matter transport and particle-size distribution in two mountain streams
XL134	EGU2012-8156 <b>J. Bouchez</b> , 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 <b>R. G. Hilton</b> , 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>B. M. Voss</b> , B. Peucker-Ehrenbrink, T. I. Eglinton, and V. Galy Do different components of terrestrial sources contribute to the riverine suspended load?
XL137	EGU2012-5474 <b>G. Erkens</b> , M. Van der Meulen, and H. Middelkoop The storage of carbon in Holocene deposits in the Netherlands
XL138	EGU2012-10920 <b>C. Goulsbra</b> , M. Evans, and T. Allott Oxidation rates of overbank POC deposition in an eroding peatland
XL139	EGU2012-12455 <b>C. Goulsbra</b> , M. Evans, and T. Allott Inferring rates of in-river POC-DOC transformation using radio carbon dating
XL140	EGU2012-8380 <b>S. Waldron</b> , S. Drew, D. Gilvear, H. Murray, and K. Heal Advancing understanding of the fluvial export of organic matter through high-resolution profiling of dissolved organic carbon.
XL141	EGU2012-2624 <b>D.N. Kothawala</b> , C.A. Stedmon, G.A. Weyhenmeyer, S. Köhler, R.A. Müller, and L.J. Tranvik Structure of dissolved organic matter across 500 boreal lakes analyzed by fluorescence spectroscopy
XL142	EGU2012-12546 <b>G. Riise</b> , D. Hongve, S. Haaland, R. Müller, and S. Sobek Key factors determining DOM and colour in boreal forest lakes

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**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 <b>S. M. Mudd and K. Yoo</b> Influence of erosion rates on particle size and carbon export from upland landscapes
10:45–11:00	EGU2012-11695 <b>J. O. Kaplan</b> 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 <b>K. Van Oost</b> , G. Verstraeten, B. Notebaert, N. Broothaerts, 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 <b>R. Aalto</b> and A. Aufdenkampe Episodic Emplacement of Sediment + Carbon within Large Tropical River Basins

- 11:30–11:45 EGU2012-7709  
**D. Schillereff**, R. Chiverrell, J. Boyle, N. Macdonald, and J. Hooke  
 Brotherswater, English Lake District: a record of organic and inorganic sediment flux over the past two millenia
- 11:45–12:00 EGU2012-6827  
**R. Wasson**  
 Delays in fluvial systems

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**HS2.13 – Hydrological change: Regional hydrological behaviour under transient climate and land use conditions (co-listed) – Orals**

Convener: S. Hagemann | Co-Conveners: H. Kunstmann, A. Bronstert

**Room: 33**

Chairperson: n.n.

- 13:30–13:45 EGU2012-10273  
**F. Ludwig**, I. haddeland, H. Biemans, D. Clark, W. Fransen, F. Voss, M. Floerke, J. Heinke, S Hagemann, N Hanasaki, D. Gerten, and P. Kabat  
 Anthropogenic impacts on the global water cycle - a multi model approach.
- 13:45–14:00 EGU2012-10723  
**M. Muerth**, B. Gauvin St-Denis, S. Ricard, J.A. Velázquez, F.J. Schmid, R. Ludwig, D. Chaumont, and R. Turcotte  
 Investigating the impact of correcting regional climate scenarios on the projected changes in river runoff
- 14:00–14:15 EGU2012-8979  
**T. Bosshard**, S. Kotlarski, M. Carambia, K. Görgen, P. Krahe, M. Zappa, and C. Schär  
 Quantifying uncertainty sources in hydrological climate impact projections
- 14:15–14:30 EGU2012-13098  
**J. Freer**, M.P. Clark, N. Odoni, G. Coxon, H. McMillan, and M. Souvignet  
 Understanding the main uncertainties in hydrological ensembles of future climate change predictions
- 14:30–14:45 EGU2012-11238  
**O. Rössler**, B. Diekkrüger, and J. Löffler  
 Ensemble simulation and uncertainty estimation - Mountain soil moisture variability under climate change
- 14:45–15:00 EGU2012-5056  
**B.P. Guillod**, E.L. Davin, C. Kündig, G. Smiatek, and S.I. Seneviratne  
 Impact of soil properties for European climate simulations
- Chairperson: n.n.
- 15:30–15:45 EGU2012-982  
**M. Renner** and C. Bernhofer  
 Two simple concepts to assess the role of climate and land-use changes on streamflow
- 15:45–16:00 EGU2012-11704  
**A. Molina**, V. Vanacker, E. Brisson, and V. Balthazar  
 Detecting the hydrological impacts of forest cover change in tropical mountain areas: need for detrending time series of rainfall and streamflow data.
- 16:00–16:15 EGU2012-8364  
**R. P. Silberstein**, W. R. Dawes, and C. K. Macfarlane  
 Designing forest thinning to compensate stream flow for climate change
- 16:15–16:30 EGU2012-5434  
**B. Galos**, K. Sieck, D. Rechid, A. Haensler, C. Teichmann, G. Kindermann, Cs. Matyas, and D. Jacob  
 Biogeophysical effects of afforestation on temperature and precipitation extremes - case studies for Europe
- 16:30–16:45 EGU2012-12166  
**M. Weiß** and B. van den Hurk  
 The role of land cover variability on modelled land-atmosphere coupling
- 16:45–17:00 EGU2012-851  
**G. Garner**, D.M. Hannah, J.P. Sadler, and H.G. Orr  
 Climatic sensitivity of river temperature regimes within England and Wales

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**HS2.13 – Hydrological change: Regional hydrological behaviour under transient climate and land use conditions (co-listed) – Posters**

Convener: S. Hagemann | Co-Conveners: H. Kunstmann, A. Bronstert

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- 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. Rodriguez** 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  
**Á. Drüsler**, P. Vig, and K. Csirmaz  
 Meteorological Effects of Land Cover Changes in Hungary during the 20th Century
- A77 EGU2012-13670  
**E.M.C.D. Paiva**, C.H. Heatwole, J.B.D. Paiva, and R.C.D. Paiva  
 Investigating the influence of rice crop irrigation on streamflow in the Ibicui river basin using trend analyses
- A78 EGU2012-9282  
**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 - Hydraulical 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. Sapriza**, 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. Mathevret, 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. Kopřivšek**, M. Brilly, A. Vidmar, M. Šraj, and A. Horvat  
 Analysis of mean annual discharge trends on the Mura River
- A88 EGU2012-12314  
**E. Ehsanzadeh**, H. M. Saley, T.B.M.J. Ouarda, D.H. Burn, A. Pietroniro, O. Seidou, C. Charron, and D. Lee  
 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. Koutoulis, **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 ?

- A93 EGU2012-863  
**S. Krakovska, V. Balabukh, L. Palamarchuk, G. Djukel, and N. Gnatiuk**  
 Analysis and projections of climate change impacts on flood risks in the Dniester river basin based on the ENSEMBLES RCM data
- A94 EGU2012-1709  
**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
- A95 EGU2012-1722  
**Y. Yang**  
 Mechanisms resulting in sharp decrease of runoff in Haihe Catchment of North China
- A96 EGU2012-2292  
**A. Gaedeke**, H. Hözel, H. Koch, and U. Grünewald  
 Assessing possibilities of reducing the uncertainty related to climate change impact studies
- A97 EGU2012-2321  
**H. Hözel**, A. Gädeke, H. Koch, and U. Grünewald  
 Assessment of climate change impacts on hydrological processes and patterns in the Spree River catchment
- A98 EGU2012-2738  
**T. Vansteenkiste**, N. Van Steenbergen, V. Ntegeka, and P. Willems  
 Intercomparison of runoff predictions by lumped and distributed models before and after climate change
- A99 EGU2012-3799  
**E.-S. Im**, J.-H. Kwon, B.-J. Lee, S.-R. In, and S.-O. Han  
 Potential increase of flood hazards in Korea due to global warming from a high-resolution regional climate simulation
- A100 EGU2012-4264  
**C. Teutschbein** and J. Seibert  
 Validity of Differently Bias-Corrected Regional Climate Model Simulations for Streamflow Simulations under Changing Climate Conditions
- A101 EGU2012-4563  
**S. Ham** and S.-Y. Hong  
 Effects of freshwater inflow to the ocean on climate simulation using the coupled climate model
- A102 EGU2012-5605  
**H. Kling**, M. Preishuber, and M. Fuchs  
 Runoff conditions in the Zambezi basin under historic climate and possible future scenarios
- A103 EGU2012-7051  
**JL Chiang** and HC Yang  
 Climate change impact on river wetted perimeter
- A104 EGU2012-8171  
**M. Honti**, C. Stamm, and P. Reichert  
 Integrated uncertainty assessment of flow predictions in a Swiss catchment
- A105 EGU2012-8227  
**J.-F. Exbrayat**, E. Timbe, I. Plesca, P. Kraft, D. Windhorst, K. Trachte, W. Buytaert, and L. Breuer  
 Characterising the hydrological response to climate change of a remote tropical mountainous catchment: a multi-model approach
- A106 EGU2012-8909  
**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
- A107 EGU2012-9325  
**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
- A108 EGU2012-10526  
**S. Boettcher**, R. Dannowski, and C. Merz  
 Sustainable Water Resources Management of small catchments under climate change: New Approaches at the Fredersdorfer Mühlenfließ, Germany
- A109 EGU2012-11456  
**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)
- A110 EGU2012-11631  
**M. Sulis**, C. Paniconi, M. Marrocu, D. Huard, and D. Chaumont  
 Impact of climate change on groundwater/surface water interactions projected by a multimodel ensemble

- A111 EGU2012-13969  
**X. Beuchat**, B. Schaeffli, M. Soutter, and A. Mermoud  
A robust framework for probabilistic precipitations downscaling from an ensemble of climate predictions applied to Switzerland

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

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

**Room: 17**

Chairperson: n.n.

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

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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  
**S. Thual**, B. Dewitte, S.-I. An, S. Illig, and N. Ayoub  
Low frequency modulation of the stability in a conceptual model of the equatorial Pacific: an estimate of the most influential changes in ENSO parameters over the recent decades
- XY370 EGU2012-1201  
**M. Ohba** and M. Watanabe  
Role of the Indo-Pacific Interbasin Coupling in Predicting Asymmetric ENSO Transition and Duration
- XY371 EGU2012-11636  
**B. Vannière**, E. Guilyardi, T. Toniazzo, and S. Woolnough  
Understanding coupled model errors in the tropical Pacific using hindcasts
- XY372 EGU2012-1718  
**m. zhao**, h. hendon, y.h. yin, and o. Alves  
Impact of Assimilating Salinity on ENSO Variability and Seasonal Forecast Skill in a Coupled Model
- XY373 EGU2012-2586  
**A. S. von der Heydt** and H. A. Dijkstra  
El Niño dynamics in the warm Pliocene climate
- XY374 EGU2012-2883  
**J. Stoll**, K. Trachte, and J. Bendix  
Analysis of ENSO related multi source SST for the east pacific Nino 1.2 region
- XY375 EGU2012-3824  
**D. Chen** and T. Lian  
Effects of westerly wind bursts on El Niño: a new perspective
- XY376 EGU2012-6728  
**W. Duan**, Y. Yu, and H. Xu  
Behaviors of nonlinearities modulating the El Niño events induced by optimal precursory disturbances

- XY377 EGU2012-6874  
**H.-Y. Son**, J.-Y. Park, and J.-S. Kug  
Winter Precipitation variability over East Asia associated with ENSO
- XY378 EGU2012-7035  
**M. Ohba**, H. Shiogama, T. Yokohata, and M. Watanabe  
Phase-dependent Impact of Strong Tropical Volcanic Eruption on predicting ENSO
- XY379 EGU2012-8944  
**S. Ineson** and T. Graham  
ENSO in the HadGEM2-ES CMIP5 centennial simulations
- XY380 EGU2012-10485  
**A. Babonneix**, L. Gourdeau, F. Durand, C. E. Menkes, and N. Djath  
Impact of ENSO variability on the Pacific Equatorial Undercurrent (EUC) sources: A modeling approach depending on the horizontal resolution
- XY381 EGU2012-13576  
**B. Rodríguez de Fonseca**, E. Mohino, T. Losada, M. Martin-Rey, and I. Polo  
Multidecadal Modulation of Tropical Atlantic impact on ENSO
- XY382 EGU2012-3088  
**H. Ding**, N. Keenlyside, and M. Latif  
Potential of Equatorial Atlantic Variability to Enhance El Niño Prediction

## Thursday, 26 April

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### 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

**R.H. Maneja**, A.Y. Frommel, A.J. Geffen, A Folkvord, U. Piatkowski, M.Y. Chang, and C. Clemmesen  
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 epibionts 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. Andreson**, H. Anlauf, L. Mackinder, D. Iglesias-Rodriguez, J. LaRoche, and B. Lenhard  
Transcriptome analysis of *Emiliania huxleyi* cells grown under different conditions using high-throughput sequencing data

09:45–10:00 EGU2012-6576

**H. Poigner**, D. Monien, P. Monien, M. Kriewa, 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

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### COFFEE BREAK

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Chairperson: K Schulz

10:30–10:45 EGU2012-6933

**T. Toyofuku**, H. Nomaki, M. Tsuchiya, and H. Kitazato  
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 *Eunice norwegica* on feeding and calcification in the coral *Lophelia pertusa*

11:15–11:30 EGU2012-7817

**L.C.M. Mackinder**, L.T. Bach, K.G. Schulz, G Wheeler, D.C. Schroeder, C Brownlee, and U Riebesell  
Calcification and inorganic carbon uptake in the coccolithophore *Emiliania 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

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### LUNCH BREAK

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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 Neogloboquadrinadutertrei, implications for reconstructing past sea water temperature
- BG38 EGU2012-4274  
**F. Le Moigne**, R.J. Sanders, M. Villa, A. Martin, K. Pabortsava, H. Planquette, P.J. Morris, and S.J. Thomalla  
The role of biomimetic in the transport of POC from the surface ocean
- BG39 EGU2012-4340  
**S. Lee**  
Biocatalytic CO<sub>2</sub> 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 CO<sub>2</sub> environments in the Pleistocene, Paleogene and Cretaceous
- BG45 EGU2012-11062  
**M. Wall**, G. M. Schmidt, S. Khokkatiwong, 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 pCO<sub>2</sub> 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  
Sensing seasonality in the North Atlantic during Termination III: an Individual Specimen Analysis.

BG48	EGU2012-12350 <b>I.E.Y. van Dijk</b> , L.J. de Nooijer, T. Toyofuku, and G.J. Reichart Species-specific impacts of temperature and seawater Mg/Ca on foraminiferal Mg/Ca
BG49	EGU2012-12626 <b>N. Fruchter</b> , J. Erez, A. Eisenhauer, M. Dietzel, A. Niedermayr, J. Fietzke, and F. Boehm Strontium and Calcium Isotope Fractionation during Aragonite Formation - Corals versus Inorganic Precipitation
BG50	EGU2012-11016 <b>T.R.R. Bontognali</b> , C. Vasconcelos, and J.A. McKenzie Role of Organic Acids in Bioformation of Kaolinite: Results of Laboratory Experiments

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**CL1.5 – Climate response to orbital forcing (including Milutin Milankovic Medal Lecture) – Orals**

Convener: E.L. McClymont | Co-Conveners: A. Dolan, A. M. Haywood

**Room: 15**

Chairperson: Alan Haywood, Aisling Dolan

13:30–13:45	EGU2012-4867 <b>A. Ganopolski</b> and R. Calov Simulation and understanding the nature of Quaternary glacial cycles
13:45–14:00	EGU2012-4950 <b>M.-F. Loutre</b> , T. Fichefet, H. Goosse, P.-Y. Barriat, 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 <b>W.H.G Roberts</b> and P.J. Valdes The tropical Pacific climate response to the changing forcing over the last glacial cycle
14:15–14:30	EGU2012-10876 <b>T. Rodrigues</b> , 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 <b>S Kender</b> , 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 <b>D. Bell</b> , 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 <b>W.H. Berger</b> Milankovitch theory - hits and misses (Milutin Milankovitch Medal Lecture)
16:30–16:45	EGU2012-11621 A.C. Fowler, R.E.M. Rickaby, and <b>E.W. Wolff</b> Modelling paleoclimate with a simple box model
16:45–17:00	EGU2012-13635 <b>A Abe-Ouchi</b> , F Saito, K Kawamura, and M.E. Raymo Multiple steady states of Northern Hemisphere ice sheets and the timing of glacial cycles

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**CL1.5 – Climate response to orbital forcing (including Milutin Milankovic Medal Lecture) – Posters**

Convener: E.L. McClymont | Co-Conveners: A. Dolan, A. M. Haywood

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

Author in Attendance: 17:30–19:00

Chairperson: Alan Haywood, Aisling Dolan

XY110	EGU2012-1387 <b>A. W. Omta</b> Difference between the glacial cycles of Antarctic temperature and greenhouse gases
XY111	EGU2012-3946 <b>S. Kim</b> , 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, CO<sub>2</sub> 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 EGU2012-12353  
**H. Beddow**, A. Sluijs, 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. Omata**, 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

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**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

- 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  $^{17}\text{O}$ -excess in Antarctica
- 09:30–09:45 EGU2012-10699  
**D. Oliveira**, F. Naughton, R. Trigo, T. Rodrigues, J-M. Jouanneau, and O. Weber  
 Holocene climate variability in south-western France
- 09:45–10:00 EGU2012-9080  
**T. Laepple** and P. Huybers  
 How variable is the Holocene?

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**COFFEE BREAK**

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Chairperson: H.Fischer

- 10:30–10:45 EGU2012-8391  
**M. Sarnthein** and H. Sadatzki  
 Planktic  $\delta^{18}\text{O}$  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  $\delta^{13}\text{C}$  variability within interglacials
- 11:30–11:45 EGU2012-8910  
 V. Gkinis, **S. B. Simonsen**, T. J. Popp, D. D. Jensen, S. L. Buchardt, B. Vinther, and S. J. Johnsen  
 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  $\delta^{18}\text{O}$  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

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**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. Tudryk  
 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 Circumcasian 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 <b>H. Renssen</b> , H. Seppä, X. Crosta, H. Goosse, and D.M. Roche Global characterization of the Holocene Thermal Maximum
XY132	EGU2012-7285 <b>Y. Milker</b> , 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 <b>J. Sherriff</b> , 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 <b>S. Lauterbach</b> , 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 <b>P. Bakker</b> , 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 <b>M. Blaschek</b> and H. Renssen The sensitivity of Arctic sea ice production to shelf flooding during the early Holocene: a modelling study
XY137	EGU2012-10858 <b>S. Gomes</b> , 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 <b>T. Jenk</b> , M. Rubino, D. Etheridge, M. Bigler, and T. Blunier Greenland CO <sub>2</sub> and ? <sup>13</sup> C of CO <sub>2</sub> - assigning the contamination
XY139	EGU2012-11190 <b>K. Tachikawa</b> , L. Vidal, and C. Sonzogni Thermal history of the Western Pacific Warm Pool as an indicator of global temperature
XY141	EGU2012-12958 <b>A. Gogou</b> , 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
XY142	EGU2012-13043 <b>B.M. Vinther</b> , H.B. Clausen, S. Kipfstuhl, H. Fischer, M. Bigler, H. Oerter, A. Wegner, F. Wilhelms, M. Severi, R. Udisti, J. Beer, F. Steinhilber, R. Muscheler, S.O. Rasmussen, and A. Svensson An annual layer counted EDML time scale covering the past 16700 years
XY143	EGU2012-13236 <b>C. Kissel</b> , A. Van Toer, E. Michel, and E. Cortijo Variations in the Strength of the North Atlantic Bottom water during Holocene.
XY144	EGU2012-13825 A. El Ouahabi, <b>B. Martrat</b> , 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 <b>M. Demuzere</b> , 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 <b>N. Blond</b> , 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 <b>M. Wattenbach</b> , J.M. Delgado, S. Roessner, M. Bochow, A. Güntner, J. Kropp, A.G. Cantu Ros, F. Hattermann, T. Kolbe, S. Sodoudi, U. Ulrich Cubasch, J. Zeitz, L. Ross, K. Böckel, C. Fang, L. Bo, and G. Pan 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 <b>N. Müller</b> and W. Kuttler Assessment of human thermal comfort and mitigation measures in different urban climatotopes

- 09:30–09:45 EGU2012-4042  
**L. Järvi**, A. Nordbo, S. Haapanala, J. Moilanen, and T. Vesala  
 Spatial and temporal variability of turbulent vertical fluxes in Helsinki, Finland
- 09:45–10:00 EGU2012-6591  
**T.-C. Chen**, M.-C. Yen, and J.-D. Tsay  
 Synoptic Development of the Afternoon Thunderstorm Activity in An Over-Urbanized Valley: Taipei (Taiwan)

**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. Davídkovová, and J. Kysely  
 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. Zuvela-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. Pierros, **P.T. Nastos**, and M. Petrakis  
 Evolution of the urban heat island at a large coastal urban area of Mediterranean
- XY155 EGU2012-12458  
**R. Pongracz**, J. Bartholy, E. Lelovics, ZS. Dezso, 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) ant its relationship with morphological features
- XY157 EGU2012-12880  
 J. Nemec, **M. Zuvela-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. ?ezní?ková, and L. Krahula  
 Spatial and temporal variability of urban heat island intensity in Brno (Czech Republic)

XY161	EGU2012-5396 <b>A. Goldbach</b> and W. Kuttler Influence of evapotranspiration on thermal comfort in central European cities
XY162	EGU2012-9772 <b>K. Menberg</b> , P. Blum, K. Zhu, and P. Bayer Urban heat islands in the subsurface of German cities
XY163	EGU2012-2543 <b>P. H. Lin</b> , K. C. Mei, and Y. C. Chen Preliminary observation result of urban boundary layer at Taipei 101 Skyscraper
XY164	EGU2012-7869 <b>M. Bakkali</b> , M. Davies, and JP. Steadman Developing an Integrated Approach for Local Urban Climate Models in London from Neighbourhood to Street Scale

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**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 <b>A.M. Trowbridge</b> , H.D. Adams, D.D. Breshears, and R.K. Monson Untangling the primary drivers of pinyon monoterpane production and emissions under predicted drought
08:45–09:00	EGU2012-754 <b>M.H.A. van Geel</b> , K.F. Boersma, J.E. Williams, V. Huijnen, T.P.C. van Noije, J. Vilà-Guerau de Arellano, D.J. Parker, C.E. Reeves, H. Schlager, M. Lichtenstern, J.G. Murphy, G. Mills, D.E. Heard, T. Ingham, and R. Commane Towards a better understanding of isoprene emissions and chemistry above tropical forests with the TM5 model
09:00–09:15	EGU2012-4410 <b>S. Bourtsoukidis</b> , 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 <b>I. Bamberger</b> , L. Hörtagl, 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 <b>G. Salque-moreton</b> , Y. Liu, D. Voisin, F. Siekmann, P. Renard, A. Monod, and R. Thissen A HRMS study of oligomer formation through aqueous phase photooxidation of methylvinyl-ketone and methacrolein
09:45–10:00	EGU2012-3934 <b>H. G. Takahashi</b> , 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

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**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 <b>M. Beck</b> and T. Hoffmann Formation and characterization of dimeric compounds in Secondary Organic Aerosol
XY57	EGU2012-1073 <b>T. Rusu</b> , P. I. Moraru, M. L. Sopterean, 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 <b>M. Li</b> , 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 <b>E. Chalaya</b> , V. Slepyp, A. Babyakin, and N. Povolotckaia The seasonal dynamics of bacteriostatic character of oak forests
XY60	EGU2012-2783 <b>B. Illes</b> and A. Anda Field effects of cadmium contamination in the radiation characteristics of maize
XY61	EGU2012-7186 <b>J. Regnery</b> , 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 <b>R. J. Jakob</b> and T. Hoffmann Development of a chiral separation method for the enantiomers of two atmospheric oxidation products of $\gamma$ -pinene
XY63	EGU2012-9247 <b>M. J. D. Mann</b> , M. Kundel, and T. Hoffmann Online Quantification of gaseous Amines via Aerosol Mass Spectrometry
XY64	EGU2012-10196 <b>P. Veres</b> , J. Auld, and J. Williams Tropical Greenhouse Measurements of Volatile Organic Compounds Using Switchable Reagent Ion Proton-Transfer-Reaction Time-of-Flight Mass Spectrometry (PTR-TOF-MS)
XY65	EGU2012-10376 <b>M. Walser</b> , I. Bamberger, L. Hörtnagl, G. Wohlfahrt, and A. Hansel Drought induced methanol emission from grassland
XY66	EGU2012-10544 R. Kohl, <b>B. Bonn</b> , S. Bourtsoukidis, H. Wex, F. Stratmann, H. Bingemer, W. Haunold, and S. Jacobi Aerosol and cloud condensation nuclei formation at Mt. Kleiner Feldberg, Germany
XY67	EGU2012-2771 B. Illes and <b>A. Anda</b> Changes in radiative properties of soot contaminated maize canopy

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**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 <b>R. Cahalan</b> , P. Pilewskie, and T. Woods Free Flyer Total and Spectral Solar Irradiance Sensor (TSIS) and Climate Services Mission
08:45–09:00	EGU2012-5194 <b>P. Pilewskie</b> , T. Woods, and R. Cahalan Solar Spectral Irradiance and Climate
09:00–09:15	EGU2012-8591 <b>A. Voigt</b> , 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, <b>K. L. Smith</b> , and L. M. Polvani Estimating the Influence of the Stratospheric Processes on the Antarctic Atmospheric Energy Budget
09:30–09:45	EGU2012-2971 <b>E. M. Zubler</b> , U. Lohmann, D. Lüthi, C. Schär, and M. Wild Simulation of dimming and brightening in Europe from 1958 to 2001 using a regional climate model
09:45–10:00	EGU2012-5222 <b>D. Folini</b> and M. Wild Surface solar radiation and hydrological cycle in 20th century China: sensitivity studies with ECHAM5-HAM

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**COFFEE BREAK**

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Chairperson: Martin Wild, Rolf Philipona

10:30–11:00	EGU2012-11872 <b>J. Hansen</b> , K. von Schuckmann, M. Sato, and P. Kharecha Earth's Energy Imbalance and Implications
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- 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  
**R.P. Allan**, N.G. Loeb, J.M. Lyman, and G.C. Johnson  
 Heating of Earth's climate continues in the 2000s based upon satellite and ocean observations

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**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. Riihelä, **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  
**A. Viudez-Mora**, P.W. Stackhouse, and S. Kato  
 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. Bangalih**, 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. Pugnachi, 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 AEROGRID 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 understanding 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
- XY185 EGU2012-7893  
**M. Z. Hakuba**, M. Wild, D. Folini, A. Sanchez-Lorenzo, and G. Schaepman-Strub  
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
- XY192 EGU2012-8614  
**P. Weihs**, W. Feitzinger, D. Baumgartner, J.E. Wagner, M. Rennhofer, W. Laube, J. Gadermayer, and E. Hochwarter  
Investigation of the effect of contrails on direct and diffuse irradiance
- 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
- XY196 EGU2012-13344  
**N. Hatzianastassiou**, C. D. Papadimas, C. Matsoukas, K. Pavlakis, A. Fotiadi, M. Wild, and I. Vardavas  
Features and causes of recent surface solar radiation dimming and brightening patterns

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**HS7.3/CL2.9/NP1.3 – Climate, water and health (co-organized) – Posters**

Convener: A. Langousis | Co-Conveners: A. Jutla, A. Kolovos, A. A. Carsteau, G. Christakos

**Hall A | Display Time 08:00–19:30**

Author in Attendance: 17:30–19:00

Chairperson: Andreas Langousis

A139	EGU2012-585 <b>H.-L. Yu</b> , 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 <b>M. Bray</b> and D. Han Comparative study on Climate Change Policies in the EU and China
A141	EGU2012-1979 <b>L. Righetto</b> , S. Islam, Z.H. Mahmud, E. Bertuzzo, L. Mari, R. Casagrandi, M. Gatto, I. Rodriguez-Iturbe, M. Blokesch, and A. Rinaldo Presence and viability of <i>V. Cholerae</i> in the waters of rural Bangladesh (Matlab area)
A142	EGU2012-3607 <b>M.V. Podimata</b> , 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 <b>A S Akanda</b> and A S Jutla Hydroclimatic drivers, Water-borne Diseases, and Population Vulnerability in Bengal Delta
A144	EGU2012-6046 W. Wagner and <b>R.A. Kidd</b> The Use of Near-Real-Time Global ASCAT Soil Moisture Observations for Monitoring of Water Hazards
A145	EGU2012-4710 <b>J. Derx</b> , A.H. Farnleitner, M. Zessner, and A.P. Blaschke Water temperature effects on virus and DOC transport during riverbank infiltration
A146	EGU2012-8731 <b>E. Bertuzzo</b> , 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 <b>L. Baltesiu</b> , 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, <b>M. Mohsin</b> , and A. Gebhardt A bivariate pseudo Gamma distribution with application to acid rain data
A149	EGU2012-7639 <b>S. F. Tseng</b> , 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 <i>Salmonella</i> spp. in Surface Water by Molecular Technology in Taiwan
A150	EGU2012-7551 <b>H. F. Tsai</b> , 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 <b>S. Burak</b> 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

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**HS7.4/AS4.17/CL2.10 – Climate, Hydrology and Water Infrastructure (co-organized) – Orals**

Convener: D. Koutsoyiannis | Co-Conveners: T. Cohn, M. Mudelsee, H. Lins, J. L. M. P. de Lima, X. L. Wang, M. Naranjo, C. Tortajada, C. Arregoitia

**Room: 33**

Chairperson: n.n.

13:30–13:45	EGU2012-14002 <b>Z. W. Kundzewicz</b> Changes in flood risk in Europe - Holistic perspective
13:45–14:00	EGU2012-698 <b>C. Chaudhuri</b> , 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 <b>J. Dahne</b> , 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 <b>M. Kallache</b> 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. Kilsby, 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. Slanger**, 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. Schmitt  
 Decadal sea level variations in the North Atlantic and Arctic Oceans
- 16:30–16:45 EGU2012-9155  
**M. Carson**, A. Köhl, and D. Stammer  
 Low-frequency sea surface height variability from long control runs of coupled models
- 16:45–17:00 EGU2012-9802  
**K. von Schuckmann**, J.-B. Sallée, C. Cabanes, P.-Y. Le Traon, F. Gaillard, S. Speich, and M. Hamon  
 The role of Argo steric sea level within the global sea level budget

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

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

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

Author in Attendance: 17:30–19:00

Chairperson: Jevrejeva

- XY197 EGU2012-2146  
**E.P.H. Bregman, I.Kant Baltic Federal State University, Kaliningrad, Russia; Utrecht University, the Netherlands** and O.A. Druzhinina, I.Kant Baltic Federal State University, Kaliningrad, Russia  
 Post-glacial coast development and human settling of the North European Ice Marginal Landscape (IML)
- XY198 EGU2012-3077  
 B. Meyssignac, **O. Henry**, P. Prandi, A. Cazenave, and D. Stammer  
 Past sea level reconstruction over the Arctic Ocean since the mid-1950s
- XY199 EGU2012-3304  
 R. Torres and **M. Tsimplis**  
 Seasonal sea level cycle in the Caribbean Sea
- XY200 EGU2012-3305  
 R. Torres and **M. Tsimplis**  
 Sea level trends and interannual variability in the Caribbean Sea
- XY201 EGU2012-3831  
**S. Jevrejeva**, J. Moore, and A. Grinsted  
 Trends and acceleration in regional sea levels
- XY202 EGU2012-3699  
**A. Cazenave**, O. Henry, S. Munier, B. Meyssignac, T. Delcroix, W. Llovel, H. Palanisamy, and A. Gordon  
 Estimating ENSO influence on the global mean sea level during 1993–2010
- XY203 EGU2012-3874  
**S. Jevrejeva**, J. Moore, and A. Grinsted  
 About the difference between sea level projections by 2100 using semi-empirical and process based models.
- XY204 EGU2012-4764  
**M. Benavent**, J. Arnoso, and E. J. Vélez  
 Tides at the east coast of Lanzarote Island
- XY205 EGU2012-5062  
**R. V. Donner**, R. Ehrcke, S. M. Barbosa, J. Wagner, J. F. Donges, and J. Kurths  
 Spatial patterns of linear and nonparametric long-term trends in Baltic sea-level variability
- XY206 EGU2012-5493  
 M. Wenzel and **J. Schroeter**  
 Regional and global sea level change since 1900 estimated from tide gauges and altimetry
- XY207 EGU2012-6050  
**M. Hewelt**, B. 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. Tsivtsivadze, K. Tavartkiladze, G. Dokhnadze, L. Lagidze, and N. Motsonelidze  
 Characteristic Features of Sea Level Series Analysis in the World Ocean Current Climatic Eustasy Research
- XY212 EGU2012-6746  
**T. Suzuki** and M. Ishii  
 Decadal to inter-decadal sea level changes in the North Pacific

XY213	EGU2012-10078 <b>A. Hibbert</b> The Semianual Oscillation of Southern Ocean Sea Level
XY214	EGU2012-6765 <b>A. Fadil</b> , 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 <b>A. P. Matthews</b> , E. Bradshaw, K. M. Gordon, S. J. Holgate, S. Jevrejeva, L. J. Rickards, M. E. Tamisiea, and P. L. Woodworth The Permanent Service for Mean Sea Level: A review of recent updates
XY216	EGU2012-14377 <b>M. Ablain</b> , 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 <b>L. Scarascia</b> and P. Lionello Links between Sea Level in the northern Adriatic sea and large scale patterns
XY218	EGU2012-12935 <b>Y. Cheng</b> 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 <b>M. Beenstock</b> , E. Frank, D. Felsenstein, and Y. Rengewertz Tide Gauge Location and the Measurement of Global Sea Level Rise
XY220	EGU2012-13526 <b>S. Esselborn</b> Patterns of Sea Level Variability in the North Atlantic
XY221	EGU2012-12100 <b>A. Bonaduce</b> and N. Pinardi Low frequency Sea Level Variability: correlation between altimetry and tide gauges in the Mediterranean Sea
XY222	EGU2012-11534 <b>S. Morucci</b> , R. Inghilesi, and A. Orasi Analysis of Long-Term Sea Level Variation in the Italian Seas
XY223	EGU2012-1536 <b>h. chen</b> , 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 <b>P. L. Svendsen</b> , O. B. Andersen, and A. A. Nielsen Sea level reconstruction from satellite altimetry and tide gauge data
XY225	EGU2012-11013 <b>A. Ollivier</b> , 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 <b>D. Gomis</b> and <b>G. Jordà</b> Inconsistencies in sea level pressure trends between different atmospheric products. Impact on sea level trend estimation
XY227	EGU2012-8688 <b>T. Schmitt</b> , S. Johansen, and P. Thejll Statistical analysis of global surface temperature and sea level using cointegration methods
XY228	EGU2012-11364 <b>B.D. Hamlington</b> , R.R. Leben, and K.-Y. Kim Improving Sea Level Reconstructions Using Non-Sea Level Measurements

**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 <b>N. Huneeus</b> and the AeroCom Team Global dust model intercomparison in AeroCom phase I
10:45–11:00	EGU2012-2213 <b>M. Astitha</b> , 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

- 11:00–11:15 EGU2012-7176  
**I. Tegen**, K. Schepanski, and B. Heinold  
 Saharan dust source activation: Comparing two years regional modelling results and satellite observations
- 11:15–11:30 EGU2012-10359  
**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
- 11:30–11:45 EGU2012-11125  
**C. Filizzola**, F. Sannazzaro, P. Di Girolamo, F. Marchese, G. Mazzeo, D. Summa, R. Paciello, N. Pergola, and V. Tramutoli  
 A Robust Satellite Technique (RST) for detection and monitoring of dust storms
- 11:45–12:00 EGU2012-4552  
**K. Schepanski**, F. Marnas, C. Flamant, J.-P. Chaboureau, C. Kocha, J. Pelon, C. Lavaysse, T. J. Wright, and P. Knippertz  
 A multi-observational Characterisation of Dust Emission from Sources within complex Terrain

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**LUNCH BREAK**

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Chairperson: n.n.

- 13:30–14:00 EGU2012-1498  
**A. Ansmann**  
 Lessons learned from the SAMUM-1 and SAMUM-2 field campaigns and future activities
- 14:00–14:15 EGU2012-11975  
**R Washington**, D.J. Parker, J.H. Marsham, J. McQuaid, H. Brindley, M.C. Todd, E.J. Highwood, C Flamant, J-P. Chaboureau, C Kocha, A Saci, and M Bechir  
 Fennec - The Saharan Climate System: an overview
- 14:15–14:30 EGU2012-4424  
**J. H. Marsham**, C. Allen, M. Bart, B. J. Brooks, C. Cavazos-Guerra, S. Engelstaedter, M. Gascoyne, M. Hobby, J. B. McQuaid, A. O'Leary, A. Lima, V. Martins, B. Ouchene, A. Ouladichir, D. J. Parker, A. Saci, M. Salah-Ferroudj, M. C. Todd, and R. Washington  
 An overview of the June 2011 Fennec surface-based observations in the central Sahara: New insights into dust uplift and transport
- 14:30–14:45 EGU2012-8488  
**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
- 14:45–15:00 EGU2012-5922  
**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.

- 15:30–15:45 EGU2012-7055  
**H. Zheng**  
 Production of Asian dust: tectonics vs climate
- 15:45–16:00 EGU2012-2674  
**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
- 16:00–16:15 EGU2012-11026  
**A. Bory**, W. Abouchami, S. Galer, A. Svensson, and P. Biscaye  
 Chinese mineral dust and anthropogenic aerosol inter-continental transport: a Greenland perspective
- 16:15–16:30 EGU2012-6899  
**P. De Deckker**  
 Multidisciplinary studies of the dust storm that affected Sydney in September 2009
- 16:30–16:45 EGU2012-9676  
**S. Cowie**, P. Knippertz, and K. Schepanski  
 A Climatology of Dust-Emission Events over North Africa Based on 27 Years of Surface Observations

16:45–17:00 EGU2012-4094

**F. Lambert**, J.S. Kug, R.J. Park, N. Mahowald, A. Abe-Ouchi, R. O'Ishi, G. Winckler, and T. Takemura  
Reconstruction of Holocene and LGM atmospheric dust aerosol concentrations from paleoclimatic archives

**AS4.13/CL4.7 – Aeolian dust, initiator, player, and recorder of environmental change (co-organized) – Posters**

Convener: P. Knippertz | Co-Conveners: J.-B. Stuut

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

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY68 EGU2012-9691

**I. Vlastelic**, K. Sellegrí, A. Colomb, K. Suchroski, L. Bouvier, and F. Nauret  
Inorganic trace element content of aerosols at puy de Dôme, France

XY69 EGU2012-9477

**N. Meskhidze** and M.S. Johnson  
Updated dust-iron dissolution mechanism: Effects of organic acids, photolysis, and dust mineralogy

XY70 EGU2012-641

**M. Abdel Kader**, M. Astitha, and J. Lelieveld  
Evaluation of a Mineral Dust Simulation in the Atmospheric-Chemistry General Circulation Model-EMAC

XY71 EGU2012-183

**Dr. P. Kishcha**, C. Carnevale, G. Finzi, E. Pisoni, M. Volta, S. Nickovic, and P. Alpert  
Improving Air Pollution Modeling Over The Po Valley Using Saharan Dust Transport Forecasts

XY72 EGU2012-9398

**G.P. Gobbi**, H. Wille, R. Sozzi, F. Angelini, F. Barnaba, F. Costabile, S. Frey, A. Bolignano, and A. Di Giosa  
Saharan dust contribution to PM levels: The EC LIFE+ DIAPASON project

XY73 EGU2012-13543

C. Pio, T. Nunes, J. Cardoso, A. Caseiro, **D. Custódio**, M. Cerqueira, D. Patoilo, S. M. Almeida, and M. C. Freitas  
CV-Dust: Atmospheric aerosol in the Cape Verde region: carbon and soluble fractions of PM10

XY74 EGU2012-13643

C. Pio, T. Nunes, **J. Cardoso**, A. Caseiro, M. Cerqueira, D. Custodio, M. C. Freitas, and S. M. Almeida  
Size distribution of PM at Cape Verde - Santiago Island

XY75 EGU2012-10381

**F. Guarnieri**, F. Calastrini, C. Busillo, and M. Pasqui  
An analysis of Saharan desert dust over Mediterranean Basin

XY76 EGU2012-6461

**H. V. Nguyen**, R. Yokota, G. Stenchikov, and G. Kocurek  
A parallel direct numerical simulation of dust particles in a turbulent flow

XY77 EGU2012-5443

**C. Tsamalis** and A. Chédin  
Vertical distribution of the Saharan Air Layer from 5 years of CALIPSO observations

XY78 EGU2012-3073

**L. Klüser**, D. Martynenko, and T. Holzer-Popp  
Towards the ability to retrieve dust mineral composition from space

XY79 EGU2012-4565

**K. Schepanski**, I. Tegen, and A. Macke  
Satellite based Observations of Saharan Dust Source Areas - Comparison and Variability

XY80 EGU2012-3762

**P. Knippertz**, J. H. Marsham, K. Schepanski, B. Heinold, S. Cowie, S. Fiedler, and A. J. Roberts  
The Desert Storms Project - Towards an Improved Representation of Meteorological Processes in Models of Mineral Dust Emission

XY81 EGU2012-9812

**S. Cowie**, P. Knippertz, and J. Marsham  
Is a change in roughness length the cause of the recent decrease in Sahelian dust emission?

XY82 EGU2012-4529

**S. Fiedler**, K. Schepanski, B. Heinold, P. Knippertz, and I. Tegen  
A climatology of Nocturnal Low-level Jets over North-Africa and implications for simulating mineral dust emission

XY83 EGU2012-8314

**K. Schepanski** and P. Knippertz  
The Representation of Nocturnal Low-Level Jets in Meso-Scale Atmospheric Models and its Relevance for Dust Emission

XY84	EGU2012-10533 <b>B. Heinold</b> , P. Knippertz, S. Cowie, S. Fiedler, and K. Schepanski The Low-Level Jet Phenomenon in North-African Deserts: An Idealized Large Eddy Simulation Study
XY85	EGU2012-5742 <b>A. Roberts</b> and P Knippertz The Formation and Behaviour of a large Saharan Haboob
XY86	EGU2012-8306 <b>C. Flamant</b> , J.-P. Chaboureau, C. Kocha, C. Lavaysse, K. Schepanski, P. Chazette, O. Bock, B. Marticorena, P. Tulet, J. Pelon, F. Marnas, M. Mokhtari, J.-P. Lafore, R. Roehrig, A. Koulali Idrissi, C. Tsamalis, and A. Chedin The French component of the FENNEC Saharan Climate project 2011 Special Observing Period
XY87	EGU2012-7847 J.-P. Chaboureau, <b>C. Flamant</b> , C. C. Kocha, J.-P. Lafore, C. Lavaysse, F. Marnas, M. Mokhtari, J. Pelon, K. Schepanski, and P. Tulet Verification of mesoscale dust forecasts over the Sahara during FENNEC 2011
XY88	EGU2012-5252 <b>P. Chazette</b> , P. Royer, F. Marnas, C. Flamant, P. Doira, C. Grenier, and J. Sanak N2-Raman lidar for dust aerosol survey over the southern Spain within the frame of FENNEC
XY89	EGU2012-7951 <b>F. Marnas</b> , P. Chazette, C. Flamant, P. Royer, H. Sodemman, and Y. Derimian Characterization of Saharan dust properties transported towards Europe in the frame of the FENNEC project: a case study
XY90	EGU2012-10639 H. Sodemann, <b>M. Lai</b> , P. Knippertz, M. Bart, F. Marenco, J.B. McQuaid, P. Rosenberg, and C. Ryder Validation of a Lagrangian dust transport model with data from the Fennec/LADUNEX field campaign
XY91	EGU2012-4198 C. E. Birch, <b>J. H. Marsham</b> , D. J. Parker, and G. M. Devine The effect of orography and surface albedo on stratification in the summertime Saharan boundary layer: Dynamics and implications for dust transport
XY92	EGU2012-10185 <b>C. Cavazos-Guerra</b> , M.C. Todd, C. Allen, M. Bart, B. Brooks, S. Engelstaedter, L. Garcia-Carreras, M. Hobby, J.H. Marsham, J McQuaid, D. Parker, A Saci, and R Washington WRF sensitivity analysis of the diurnal cycle of Saharan planetary boundary layer
XY93	EGU2012-9906 <b>C. Cavazos-Guerra</b> , M.C. Todd, J. Pelon, C. Flamant, C. Allen, R Washington, S. Engelstaedter, J. Marsham, and D. Parker Understanding the central west Saharan summertime dust hotspot: Identification and classification of active dust emissions and associated processes from Calipso analysis
XY94	EGU2012-720 <b>C.J.T. Allen</b> , J.H. Marsham, S. Engelstaedter, and R. Washington Atmospheric dust emission mechanisms at the summer global dust maximum: observations from Bordj Mokhtar, Algeria
XY95	EGU2012-13105 <b>S. Engelstaedter</b> , R. Washington, C. Allen, C. Flamant, J.-P. Chaboureau, C. Kocha, and C. Lavaysse Understanding the Role of the Saharan Heat Low in Modifying Atmospheric Dust Distributions - Observations From Two Research Aircraft Flying Simultaneously Over Western Africa
XY96	EGU2012-2285 <b>J. Brooke</b> , M. Bart, J. Trembath, J.B. McQuaid, B.J. Brooks, and S. Osborne Coarse mode aerosol measurement using a Low Turbulence Inlet
XY97	EGU2012-13672 <b>B. Weinzierl</b> , D. Sauer, M. Esselborn, A. Petzold, A. Veira, M. Rose, S. Mund, M. Wirth, A. Ansmann, M. Tesche, S. Groß, and V. Freudenthaler Aging of mineral dust during transport from the Sahara into the Cape Verde area - results from airborne measurements during SAMUM
XY98	EGU2012-7665 <b>C. Flamant</b> , F. Abdi Vishkaee, J. Cuesta, H. Khalesifard, L. Oolman, and P. Flamant Observation of dust emission and transport over Iraq and northwest Iran associated with winter Shamal
XY99	EGU2012-13374 <b>H. Ágústsson</b> and H. Ólafsson The 13 September 2011 storm of resuspended volcanic ash
XY100	EGU2012-13713 <b>S. Jónsson</b> and H. Ólafsson The Reykjavík storm of resuspended ash
XY101	EGU2012-3511 <b>Z. Svir?ev</b> , S.B. Markovi?, T. Stevens, I.J. Smalley, U. Hambach, I. Obreht, T. Luki?, and Dj.A. Vasiljevi? Importance of Biological Loess Crusts for Loess Formation in Semi-Arid Environments

- 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  
**J. Párraga**, M. Sanchez-Maranon, J. Calero, R. Delgado, G. Delgado, J. Martín-García, J. Díaz, and V. Aranda  
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  
**B. Delmonte**, P.S. Andersson, C. Baroni, B. Narcisi, J.R. Petit, M.C. Salvatore, S. Albani, and V. Maggi  
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 Kukla, 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

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**CL4.9/AS1.4 – Synoptic climatology – methods and applications (co-organized) – Orals**

Convener: C. Beck | Co-Conveners: A. Philipp, J. Jacobbeit

**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. Radanovics**, 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

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**CL4.9/AS1.4 – Synoptic climatology – methods and applications (co-organized) – Posters**

Convener: C. Beck | Co-Conveners: A. Philipp, J. Jacobbeit

**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 <b>G. Masato</b> and D. Brayshaw Clustered GWL types: methodology and applications
XY231	EGU2012-172 <b>C. Lennard</b> Changes in the synoptic drivers of extreme rainfall in South Africa
XY232	EGU2012-4171 <b>H. Baltaci</b> , 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 <b>P. Froidevaux</b> , O. Martius, and R. Weingartner Characterisation of flood events in Switzerland based on weather patterns
XY234	EGU2012-7680 <b>C. S. Photiadou</b> , 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 <b>P. Brigode</b> , 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 <b>J.M. Arraut</b> and P. Satyamurti The Argentinean Col, Separatrices, Frontogenesis and Strong Rainfall in Subtropical South America
XY237	EGU2012-3342 <b>V. Stefanescu</b> , S. Stefan, and F. Georgescu GWT18 air circulation types linked to heavy precipitation in Romania between 1980 and 2009
XY238	EGU2012-13428 <b>L. Durán</b> , B. Rodriguez-Fonseca, E. Sánchez-Sánchez, and C. Yagüe Weather types and precipitation at the Iberian Central System
XY239	EGU2012-2144 <b>E. Tyrllis</b> and J. Lelieveld Aspects of a climatology and dynamics of the summer Etesians
XY240	EGU2012-14227 <b>M Menendez</b> , P Camus, FJ Mendez, and IJ Losada A weather type method to study surface ocean variables
XY241	EGU2012-3472 S. Andrei and <b>S. Stefan</b> Climatologically aspects of Bucharest's UHI in connection with synoptic scale atmospheric circulation patterns
XY242	EGU2012-12971 C. Weitnauer, <b>C. Beck</b> , and J. Jacobbeit Local PM10 concentrations in Augsburg (Germany) and their connection to large scale circulation types
XY243	EGU2012-6822 S. Parsons, <b>A. J. McDonald</b> , and J. Renwick Future Weather Patterns in New Zealand using Synoptic Climatology: Kidson Types and a Simple Synoptic Classification System
XY244	EGU2012-9170 <b>A. Belleflamme</b> , X. Fettweis, and M. Erpicum Are the CMIP5 GCMs able to simulate atmospheric blocking situations over Europe ?
XY245	EGU2012-13539 <b>J. A. Añel</b> , S. Jewson, M. R. Allen, C. Mitas, and C. Rye Comparison of wind simulations in HadRM3P and WRF with ERA-Interim
XY246	EGU2012-5682 <b>H. Ries</b> , C. Moseley, and A. Haensler REMO poor man's reanalysis

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**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 <b>D. Zhang</b> , J. Winter, and E. Eltahir Coupling of a Dynamic Biosphere Model and a Regional Climate Model
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- 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  
**M. Inatsu**, T. J. Yamada, T. Sato, K. Nakamura, N. Matsuoka, A. Komatsu, Y. N. Pokhrel, S. Sugimoto, and S. Miyazaki  
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  
M. S. Suh, **S. G. Oh**, D. K. Lee, D. H. Cha, S. J. Choi, S. Y. Hong, and H. S. Kang  
Development of new ensemble methods based on the performance 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. Sinigoi, 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. Calmant, 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. Halenka** 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 arctic 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  
**D. Taima-Hernández**, A. Enríquez, J.C. Pérez, J.P. Díaz, A. González, and F.J. Expósito  
Regional climate simulations over Africa using WRF Model: Sensitivity to the dynamical downscaling methods.
- XY280 EGU2012-8800  
A. Enríquez, **D. Taima-Hernández**, A. González, J.C. Pérez, J.P. Díaz, and F.J. Expósito  
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. Solmon, 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. Romera, 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

- XY286 EGU2012-8564  
**C. Fox Maule** and P. Thejll  
Changes in the percentage of area under drought in Europe during this century
- XY287 EGU2012-8681  
**A. Schindler**, D. Maraun, and J. Luterbacher  
Validation of the annual cycle of extreme precipitation events across the UK in 14 regional climate models
- XY288 EGU2012-11277  
**P.A. Mooney**, F.J. Mulligan, and R. Fealy  
Developing next generation high resolution DEcadal and Long Term climate projections for Ireland (DELTa)
- XY289 EGU2012-10490  
**t. zeleke**, F. Giorgi, G. Mengistu, and G.T Diro  
Trend and frequency of drought over Ethiopia using observational and RegCM4 driven indices
- XY290 EGU2012-8825  
**C. Klein**, P. Hoffmann, and **E. Priesack**  
Modelling soil-plant-atmosphere interactions by coupling the regional weather model WRF to mechanistic plant models
- XY291 EGU2012-10962  
**R.P. da Rocha**, M.S. Reboita, and S.V. Cuadra  
Characterization of wet and dry spells simulated by RegCM4 over the South America
- XY292 EGU2012-12583  
**J. Bartholy**, R. Pongracz, E. Miklos, and A. Kis  
Comparison of 21st century regional climate projections for the Carpathian Basin using ENSEMBLES outputs
- XY293 EGU2012-1833  
**I.K. Tsanis**, M.G. Grillakis, and J. Polcher  
Assessing the climate change impact on the hydrology of Spencer Creek watershed based on RCMs and an interpolated GCM
- XY294 EGU2012-4116  
**F. Al Zawad**  
Regional climate projections for Saudi Arabia
- XY295 EGU2012-6026  
**M. Stéfanon**  
Contribution of soil moisture in summer heat waves amplitude in MED-CORDEX simulations
- XY296 EGU2012-6373  
**G. Stenchikov** and M. Dogar  
Regional Climate Response to Volcanic Radiative Forcing in Middle East and North Africa
- XY297 EGU2012-6931  
**I. Güttler**  
Systematic errors in regional climate model RegCM over Europe and sensitivity to variations in PBL parameterizations
- XY298 EGU2012-7252  
**M. S. Suh**, S. G. Oh, D. H. Cha, and H. S. Kang  
Regional climate projection based on RCP scenarios in the CORDEX East Asia Domain Using RegCM4
- XY299 EGU2012-13594  
**J.P. Montavez**, J.J. Gomez-Navarro, S. Jerez, R. Baro, R. Lorente, J.A. Garcia-Valero, and P. Jimenez-Guerrero  
Evaluation of Regional climate models: how much can we trust in gridded observational data sets?
- XY300 EGU2012-11039  
**P.M.M Soares**, R.M. Cardoso, P.M.A. Miranda, P. Viterbo, and M. Belo-Pereira  
Precipitation variability and extremes in ENSEMBLES RCM simulations over Portugal
- XY301 EGU2012-8927  
**N. Natoo**, A. Paul, M. Hadfield, S. Jendersie, J. Bornman, W. de Lange, W. Ye, and M. Schulz  
A regional ocean model for the Southwest Pacific Ocean region to assess the risk of storms
- XY302 EGU2012-7503  
S. K. Dash, **A. Mamgain**, K. C. Pattnayak, and F. Giorgi  
Variations in temperature and precipitation during Indian summer monsoon simulated by RegCM3
- XY303 EGU2012-8440  
**N. Elguindi**, S. Rauscher, and F. Giorgi  
Historical and future changes in maximum and minimum temperature records over Europe
- XY304 EGU2012-8565  
**L. Srnec**, I. Güttler, ?, Brankovi?, and M. Patar?i?  
The impact of horizontal resolution in RegCM4 simulations on extreme temperature parameters
- XY305 EGU2012-10121  
**J. Boé**  
Soil-atmosphere interactions, cloud feedback and land-sea contrast: their interactions and role in the uncertainties of regional climate projections over Europe.

XY306	EGU2012-11578 <b>R. Bojarie</b> , L. Velea, M. Birsan, S. I. Dascalu, and R. Cica Impact of land-use type on present climate over Romanian territory using RegCM
XY307	EGU2012-13296 <b>G. Fipps</b> , G. Bonaiti, and C. Swanson Climate and ET: Does Plant Water Requirements Increase during Droughts?
XY308	EGU2012-12266 <b>I. Yiannikopoulou</b> , K. Philippopoulos, and D. Deligiorgi A hybrid downscaling procedure for estimating the vertical distribution of ambient temperature in local scale
XY309	EGU2012-10537 <b>G. Nikulin</b> , C. Jones, and E. Kjellström Projected changes in the West African Monsoon from an ensemble of Africa-CORDEX simulations

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**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 <b>F Lúcio</b> Global Framework for Climate Services (GFCS)
13:45–14:00	EGU2012-2588 <b>S. Rösner</b> The WMO RA VI Regional Climate Centre Network - a support to users in Europe
14:00–14:15	EGU2012-9751 <b>C.D. Hewitt</b> and C. Buontempo Climate services at the international level
14:15–14:30	EGU2012-6780 <b>S. Zebiak</b> , 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 <b>G. Anderson</b> Climate Services for Development Planning and Implementation: A Framework for Assessing and Valuing Climate Services
14:45–15:00	EGU2012-7284 <b>D Jacob</b> , L Kotova, and IMPACT2C Team IMPACT2C: Quantifying projected impacts under 2°C warming
Chairperson: R. van Oss	
15:30–15:45	EGU2012-4797 <b>G. Brasseur</b> , 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 <b>C.M. Goodess</b> 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 <b>C. Dubois</b> and the CLIM-RUN Team CLIM-RUN: Tourism cas study over the French Alps
16:15–16:30	EGU2012-14318 <b>A Feijt</b> Towards new Climate Scenarios for The Netherlands; connecting science and society
16:30–16:45	EGU2012-3308 <b>S. Sobolowski</b> , 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 <b>S. Parey</b> , G. Galloy, and M. Nogaj An example of model result correction to study the impact of climate change on electricity consumption

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**CL5.13 – Climate Services - Underpinning Science – Posters**

Convener: A. Dell'Aquila | Co-Conveners: R. van Oss, P. M. Ruti

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

Author in Attendance: 17:30–19:00

Chairperson: A. Dell'Aquila

- XY310 EGU2012-2076  
**Cs. Matyas**, I. Berki, A. Drüsler, A. Eredics, B. Galos, N. Moricz, and E. Rasztovits  
 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. Yiou** 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  
**C. Giannakopoulos**, A. Roussos, A. Karali, M. Hatzaki, G. Xanthopoulos, E. Chatzinkos, N. Fyllas, N. Georgiades, G. Karetso, G. Maheras, I. Nikolaou, N. Proutsos, T. Sbarounis, K. Tsaggari, I. Tzamtzis, and C. Goodess  
 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  
**A. Fischer**, C. Appenzeller, I. Bey, T. Bosshard, T. Corti, M. Croci-Maspoli, E. M. Fischer, J. Fuhrer, R. Knutti, S. Kotlarski, A. Kress, C. Kull, M. A. Liniger, A. Lustenberger, C. Schär, S. C. Scherrer, and A. P. Weigel  
 Swiss Climate Change Scenarios: The CH2011 Initiative
- XY321 EGU2012-9483  
**P. Kutschera**, J. Olsson, D. Havlik, and G. Gruber  
 Future IDF curves for regional planning in Europe
- XY322 EGU2012-10534  
**S. Calmant**, 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

- 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

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**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. Mojtafid, 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  
**A. Bercovici, V. Vajda, T. R. Lyson, S. G. B. Chester, E. J. Sargis, D. A. Pearson, and W. G. Joyce**  
 Terrestrial ecosystem collapse associated to the K-Pg boundary and dinosaur extinction: palynological evidences

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**HS7.2/AS1.20/CL5.16/NH1.3/NP3.6 – Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized) – Posters**

Convener: R. Deidda | Co-Conveners: T. Bellerby, G. Grossi, A. Langousis, X. L. Wang, S. Vogl, P. Laux, H. Kunstmann

**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

- A107 EGU2012-3465  
**R. Remesan** and T. Bellerby  
Sensitivity and dependence of mesoscale downscaled prediction results on different parameterizations of convection and cloud microphysics
- A108 EGU2012-3680  
**H. Sharif**, C Furl, and M Al-Zahrani  
Rainfall Climatology over Asir Region, Saudi Arabia
- A109 EGU2012-3922  
**J. B. Gilmore**, J. P. Evans, and S. C. Sherwood  
The influence of physics parameterizations on precipitation extremes in the Newcastle east coast low of 2007
- A110 EGU2012-4010  
**E. Maeda**, J. Arevalo, and C. Carmona-Moreno  
Effects of time-series length and gauge network density on rainfall climatology estimates in Latin America
- A111 EGU2012-4231  
**C. Nyunt**, H. Yamamoto, A. Yamamoto, T. Nemoto, M. Kitsuregawa, L. Wang, and T. Koike  
Bias correction and Downscaling of GCM for basin scale simulation
- A112 EGU2012-4665  
**E. Mair**, G. Bertoldi, S. Della Chiesa, G. Niedrist, L. Egarter Vigl, and U. Tappeiner  
An approach to improve precipitation estimation to model the water budget in Alpine catchments
- A113 EGU2012-5087  
**L. Dobor**, Z. Barcza, Á. Havasi, and N. Fodor  
Preparation of high resolution climate scenarios for agricultural impact analysis in Hungary
- A114 EGU2012-5859  
**C. Dobler**  
Downscaling precipitation extremes in a complex Alpine catchment
- A115 EGU2012-6448  
**S. Thober**, L. Samaniego, and R. Kumar  
Evaluation of Regional Climate Models: Extremes important for Hydrological Projections
- A116 EGU2012-6891  
**N. Ohara**, M.L. Kavvas, S. Kure, Z.Q. Chen, and S. Jang  
Model-based Estimation of Maximum Precipitation for the 1997 Storm Event Over American River Watershed, California, USA
- A117 EGU2012-7420  
**S.D. Blazkova**, K.J. Beven, and M. Martinkova  
Hazard and vulnerability to climate change of the Skalka dam in Czech Republic
- A118 EGU2012-7612  
**R. Deidda**, G. Mascaro, M. Hellies, L. Baldini, and S. Sebastianelli  
A systematic analysis of precipitation retrieved by a Polarimetric Doppler ground radar in Central Italy
- A119 EGU2012-7755  
**A. Langousis** and V. Kaleris  
A statistical approach to resolve incompatibilities between measured runoff data and daily estimates of spatially averaged rainfall
- A120 EGU2012-8266  
**Q. Zhang**, H. Körnich, and K. Holmgren  
How well do reanalyses represent the southern African precipitation?
- A121 EGU2012-8952  
**I. Anders** and K. Haslinger  
Varying trends in precipitation and temperature at different elevations in the European Alps? - A regional climate modelling perspective with COSMO-CLM
- A122 EGU2012-9087  
**R. Sasse**, G. Schädler, H. Feldmann, and Ch. Kottmeier  
Generation of Regional Climate Ensembles Using Atmospheric Forcing Shifting
- A123 EGU2012-9432  
**R. Haas**, K. Born, A. Georgiadis, M. K. Karremann, and J. G. Pinto  
Statistical Downscaling of Large-Scale Wind Signatures Using a Two-Step Approach
- A124 EGU2012-9736  
**H.L. Cloke**, F. Pappenberger, T. Eckel, R. Buizza, and K. Bogner  
The probabilistic Forecast Convergence Score (pFCS)
- A125 EGU2012-10021  
**P-E. Mellander**, S.G. Gebrehiwot, A.I. Gärdenäs, W. Bewket, and K. Bishop  
Summer Rains in the Upper Blue Nile Basin: half a century of past and future spatiotemporal patterns
- A126 EGU2012-10836  
**N. Salzmann**, M. Rohrer, D. Acuna, P. Calanca, and C. Huggel  
Assessment of future regional precipitation pattern for an Andes region in Southern Peru

- 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. Calmant, 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. Marrocù, M. Puliga, G. Pusceddu, and A. Speranza  
 An intercomparison and verification of outputs of several climate models on representative Mediterranean catchments

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**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  $\delta^{18}\text{O}$ -T Relationship
- XY392 EGU2012-4262  
**M. Bugelmann**, 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 <b>R. Calov</b> , A. Robinson, and A. Ganopolski Improved representation of ice discharge from the Greenland ice sheet into the surrounding ocean
XY394	EGU2012-7436 <b>M. Z. Hakuba</b> , D. Folini, M. Wild, and C. Schär Impact of Greenland's topographic height on precipitation and snow accumulation
XY395	EGU2012-8592 <b>M. S. Madsen</b> , 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 <b>P. Beghin</b> , 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 <b>A.C. Fowler</b> , 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 <b>F. Colleoni</b> , S. Masina, A. Cherchi, J. Liakka, M. Jochum, B. Otto-Bliesner, N. Rosemblum, C. Ritz, C. Dumas, W. Lipscomb, and I. Rutt MIS 7 and MIS 5 glacial inceptions: investigating the asynchronous build-up of Laurentide and Eurasian ice sheets
XY399	EGU2012-6277 <b>F. Ziemen</b> , C. Rodehacke, and U. Mikolajewicz LGM ice sheets simulated with a complex fully coupled ice sheet - climate model
XY400	EGU2012-7475 <b>W.H.G Roberts</b> , 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 <b>C. Rodehacke</b> , 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 <b>O. Rybak</b> , 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

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**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 <b>M. Rhein</b> , D. Kieke, and R. Steinfeldt The Circulation of Newly Formed Deep Water in the Atlantic
08:45–09:00	EGU2012-4891 <b>C. Mertens</b> , M. Rhein, and F. R. Karbe Transport variability in the western subpolar North Atlantic at 47°N
09:00–09:15	EGU2012-3096 <b>C. S. Meinen</b> and S. L. Garzoli Physical mechanisms involved in Deep Western Boundary Current variability at 26.5°N
09:15–09:30	EGU2012-4160 <b>D. Kieke</b> , 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 <b>J. Schroeter</b> On estimating the circulation in the North Atlantic from altimetry and ARGO data
09:45–10:00	EGU2012-13143 M. G. Magaldi, <b>T. W. N. Haine</b> , and R. S. Pickart On the nature and variability of the East Greenland Spill Jet

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**COFFEE BREAK**

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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)

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#### LUNCH BREAK

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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. Eliot**, 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 Boltyshev 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. Vandenberghe  
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

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### CL1.3 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic – Orals

Convener: J. S. Laberg | Co-Conveners: Prof Dr Brinkhuis, A. Camerlenghi, C. Escutia, F. Florindo, M. Forwick, D. Harwood, C. Hass, B. O. Hjelstuen, K. Hogan, M. Rebesco

#### 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-rafterd debris provenance and model results

11:00–11:15 EGU2012-13750

**T. Naish**, R. McKay, L. Carter, C. Riesselman, C. Sjunneskog, D. Winter, R. Dunbar, F. Sangiorgi, C.

Warren, M. Pagani, V. Wilmott, R. Levy, R. Powell, and R. DeConto

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

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### CL1.3 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic – Posters

Convener: J. S. Laberg | Co-Conveners: Prof Dr Brinkhuis, A. Camerlenghi, C. Escutia, F. Florindo, M. Forwick, D. Harwood, C. Hass, B. O. Hjelstuen, K. Hogan, M. Rebesco

#### 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

**C.S. Andresen**, F. Straneo, M.H. Ribergaard, A. A. Bjoerk, T.J. Andersen, A. Kuijpers, N.

Nørgaard-Pedersen, K.H. Kjaer, F. Schjøth, K. Weckstrøm, and A.P. Ahlstrøm

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

**C. März**, A. Stratmann, J. Matthiessen, S.W. Poulton, A.-K. Meinhardt, S. Eckert, B. Schnetger, C. Vogt, R. Stein, and H.-J. Brumsack

More than just "brown layers": Manganese enrichments in Quaternary Arctic Ocean sediments

Z7	EGU2012-2384 <b>J. Knies</b> , S. Baranwal, K. Fabian, K. Grøsfjeld, K. Andreassen, K. Husum, R. Mattingsdal, C. Gaina, S. De Schepper, C. Vogt, and N. Andersen New insights into late Neogene glacial dynamics, tectonics, and hydrocarbon migrations in the Atlantic-Arctic gateway region.
Z8	EGU2012-6595 <b>S. Baranwal</b> and J. Knies Quaternary record of carbonate preservation and paleocenographic changes from the Yermak Plateau (Hole 912A)
Z9	EGU2012-5928 <b>M. Forwick</b> and T.O. Vorren Submarine landslides in Spitsbergen fjords
Z10	EGU2012-8414 <b>T.L. Rasmussen</b> , 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 <b>J. Huuse</b> and M. Huuse 3D Seismic geomorphology of ice stream imprints the Northern North Sea since 1.1 Ma
Z12	EGU2012-10404 <b>H.C. Hass</b> , G. Kuhn, N. Wittenberg, and A. Wölfli Modern sedimentation in a rapidly warming fjord: Potter Cove, King George Island, Antarctica
Z13	EGU2012-13578 <b>J. Lindow</b> , M. Castex, H. Wittmann-Oelze, J. Johnson, F. Lisker, K. Gohl, and C. Spiegel Holocene glacial retreat at the Walgreen Coast, West Antarctica
Z14	EGU2012-8765 <b>C. Ohneiser</b> and G. S. Wilson Plio-Pleistocene evolution of the southern Victoria Land climate system as seen in New Harbor drill cores
Z15	EGU2012-10500 <b>S. L. Greenwood</b> , 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 <b>U. Salzmann</b> , F. Sangiorgi, P.K. Bijl, J. Pross, S. Schouten, L. Tauxe, J. Bendle, H. Brinkhuis, C. Escutia, and IODP Expedition 318 Science Party Early to Middle Miocene vegetation and climate of Wilkes Land, Antarctica (IODP 318)
Z17	EGU2012-8404 <b>L. Tauxe</b> Magnetostratigraphic calibration of the Early Eocene Climatic Optimum

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**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 <b>M. Huber</b> Eocene Paleoclimate: Incredible or Uncredible? Model data syntheses raise questions.
08:45–09:00	EGU2012-4147 <b>P. Köhler</b> , 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, <b>F.J. Hilgen</b> , 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 <b>S. Galeotti</b> , 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 <b>S. Boulila</b> , B. Galbrun, J. Laskar, and H. Pälike Correlation of very long-term variations in Cenozoic $\delta^{13}\text{C}$ record and eccentricity modulation cycles
09:45–10:00	EGU2012-10794 <b>K. Littler</b> , J. C. Zachos, A. Kersey, U. Röhl, and T. Westerhold A high-resolution benthic stable-isotope record for the South Atlantic: implications for orbital scale changes in Late Paleocene-Early Eocene climate and circulation

**SSP4.3/CL1.4 – Cenozoic greenhouse climates and carbon cycle dynamics (co-organized) – Posters**

Convener: J. L. Toney | Co-Conveners: P. Bijl

**Hall A | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: Jaime Toney

- 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  
**J.C. Silva-Tamayo**, M. Ducea, A. Cardona, C. Montes, D. Rincon, A. Machado, A Flores, A. Sial, A. Pardo, H. Niño, V. Ramirez, C. Jaramillo, P. Zapata, L. Barrios, S. Rosero, G. Bayona, and V. Zapata  
 Precise U-Pb dating of Cenozoic tropical 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: pCO<sub>2</sub>, 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. Uttescher, and L. Francois  
 Variational methods application for retrieving past climates and paleo vegetation maps
- A366 EGU2012-13572  
 V. Lefebvre, **Y. Donnadieu**, Y. Goddériss, 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**

Convener: T. Rutishauser | Co-Conveners: A. Menzel, J. Weltzin, A. Donnelly, E. Koch

**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  
**M. Mozny**, V. Potop, L. Hajkova, D. Bares, M. Stalmacher, M. Trnka, L. Bartosova, and Z. Zalud  
 Long-term variations in phenological phases and growing season indexes in the Czech Republic

14:20–14:35	EGU2012-7964 <b>H. N. Dalfes</b> , H. Ülgen, U. Zeydanli, and A. T. Durak Toward a phenology network in Turkey
14:35–14:50	EGU2012-1313 <b>F. Orlandi</b> , T. Bonfiglio, L. Ruga, B. Romano, and M. Fornaciari Fifteen year phenological plant species and meteorological trends in central Italy
14:50–15:00	<b>Discussion</b> Chairperson: Elisabeth Koch, This Rutishauser
15:30–15:45	EGU2012-3823 <b>E. Wolkovich</b> , B. Cook, and Forecasting Phenology Working Group Warming experiments underpredict plant phenological responses to climate change
15:45–16:00	EGU2012-4443 <b>M. Rebetez</b> , V. Renaud, G. Von Arx, and M. Dobbertin Impact of forest cover on increases in temperature under the canopy
16:00–16:15	EGU2012-9904 <b>Y. Vitasse</b> , G. Hoch, C. Randin, J.F. Scheepens, C. Kollas, A. Lenz, and C. Körner Elevational adaptation and plasticity in bud burst and budset timing in seedlings of major temperate tree species in the Swiss Alps
16:15–16:30	EGU2012-2618 <b>G. Wohlfahrt</b> , A. Gobiet, A. Hammerle, A. Haselwanter, L. Hörtagl, Ch. Irschick, and M. Themeßl Off-season carbon dioxide exchange of a temperate mountain grassland in a warmer future climate
16:30–16:45	EGU2012-7398 <b>H. Scheifinger</b> , T. Schöngässner, M. Zuvela-Aloise, and C. Matulla Direct Attribution of the Anthropogenic climate signal to PHENological observations - DATAPHEN
16:45–17:00	EGU2012-551 A.-M. Luchian, O.-M. Machidon, D. Luchian, <b>N. Luchian</b> , and D. Machidon Water and precipitation patterns in the North-East of Romania

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**CL2.2 – Seasons and phenology: Evidence from observations, reconstructions, measurements and models (co-sponsored by USA-NPN, PAGES & ILEAPS) – Posters**

Convener: T. Rutishauser | Co-Conveners: A. Menzel, J. Weltzin, A. Donnelly, E. Koch

**Hall Z | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: This Rutishauser, Elisabeth Koch

Z18	EGU2012-1411 <b>K. Kato</b> , S. Sato, H. Kato, R. Akagi, N. Sueishi, T. Mori, T. Nakakura, and I. Irie 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 B. Šikoparija, C. A. Skjøth, K. Alm Kübler, A. Dahl, P. Radišić, J. Sommer, ?, Grewling, and <b>M. Smith</b> 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. Brando, E. Caeiro, I. Silva-Palacios, Á. Gonzalo-Garijo, and <b>M. Smith</b> Identification of potential sources of airborne Olea pollen in the Southwest Iberian Peninsula
Z21	EGU2012-2748 <b>E. Vincze</b> , M. Hunkár, and Z. Dunkel Phenology of lilac ( <i>Syringa vulgaris</i> ) and elderberry ( <i>Sambucus nigra</i> ) as the indicator of spring warming
Z22	EGU2012-2807 <b>Y.S.H. Fu</b> , 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 <b>A. Thomas</b> , S. Corgne, O. Planchon, C. Bonnefond, 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 <b>A. Caffarra</b> , D. Molitor, I. Pertot, P. Sinigoy, and J. Junk Developing a phenological model for grapevine to assess future frost risk in Luxembourg
Z25	EGU2012-8279 <b>E. Koch</b> , W. Lipa, M. Uengersböck, and S. Zach-Hermann PEP725 Pan European Phenological Database

Z26	EGU2012-11201 <b>B. Perrimond</b> , 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
Z27	EGU2012-11281 <b>R. Lorenz</b> , E.L. Davin, D.M. Lawrence, and S.I. Seneviratne Phenology experiments in a regional climate model
Z28	EGU2012-11795 <b>P. Di Tommasi</b> , 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
Z29	EGU2012-12124 <b>A. Lehoczky</b> , B. Szabó, R. Pongrácz, and F. Szentkirályi First flowering sensitivity analysis to climate on 19th century data: using phenophase as thermometer

**HS7.4/AS4.17/CL2.10 – Climate, Hydrology and Water Infrastructure (co-organized) – Posters**

Convener: D. Koutsoyiannis | Co-Conveners: T. Cohn, M. Mudelsee, H. Lins, J. L. M. P. de Lima, X. L. Wang, M. Naranjo, C. Tortajada, C. Arregoitia

**Hall A | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: João de Lima, Harry F Lins, Cecilia Tortajada

A191	EGU2012-5644 <b>D. Long</b> and M. Collins Hydrological Response Under CO <sub>2</sub> Forcing: A Process Based Assessment of CMIP5 models.
A192	EGU2012-1015 <b>R. Payano Almánzar</b> The Influence of Climate Change on the Hydraulic Heritage
A193	EGU2012-1798 <b>K. Haslinger</b> , B. Chimani, and R. Böhm 200 years of liquid and solid precipitation in major river systems originating in the Greater Alpine Region
A194	EGU2012-6485 <b>I. Mares</b> , C. Mares, A. Stanciu, and M. Mihailescu On the changes in the precipitation in the middle and lower Danube basin under the NAO influence
A195	EGU2012-4680 S. Giannoulis, <b>C. Ioannou</b> , E. Karantinos, L. Malatesta, G. Theodoropoulos, G. Tsekouras, A. Venediki, P. Dimitriadis, S.M. Papalexiou, and D. Koutsoyiannis Long term properties of monthly atmospheric pressure fields
A196	EGU2012-4037 <b>E. Maeda</b> and G. Naumann Relationship between monthly temperature anomalies and drought frequency
A197	EGU2012-7566 <b>M. Biabanaki</b> , S.S. Eslamian, J. Abedi-Koupai, J. Cañón, and G. Boni The SPI index in west Iran associated to PDO signal
A198	EGU2012-7758 <b>V. Potop</b> , C. Boronean?, P. Stepanek, P. Skalak, and M. Mozny Projected changes in the evolution of drought assessed with the SPEI over the Czech Republic
A199	EGU2012-9937 <b>A. Bichet</b> , M. Wild, D. Folini, and C. Schär Causes for the late 19th century European floods, as simulated in ECHAM5-HAM
A200	EGU2012-11089 <b>J. Liebert</b> , D. Düthmann, P. Berg, H. Feldmann, J. Ihringer, H. Kunstmann, B. Merz, I. Ott, G. Schädler, and S. Wagner Uncertainties in discharge projections in consequence of climate change
A201	EGU2012-12181 <b>Y. Markonis</b> , P. Kossleris, A. Lykou, and D. Koutsoyiannis Effects of Medieval Warm Period and Little Ice Age on the hydrology of Mediterranean region
A202	EGU2012-14354 <b>A.A. Carsteau</b> , I.A. Berdeja-Sotelo, and J.J. Castro Hydrological aspects of climatic-scale variations in Mexico
A203	EGU2012-2434 <b>C. L. Liu</b> and R.P. Allan Precipitation changes from dynamic and thermodynamic processes
A204	EGU2012-2436 <b>M. Zahn</b> and R.P. Allan Past and future changes of the tropical atmospheric circulation and associated moisture transports

- A205 EGU2012-10300  
**M. Naranjo** and C. Tortajada  
 Climate change and its impact on water infrastructure: the case of Alcala de Henares (Spain) and Mexico City (Mexico)
- A206 EGU2012-2079  
**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
- A207 EGU2012-72  
**a. bilal**  
 Rainfall water and climatic changements in Syria-remote sensing applications
- A208 EGU2012-14399  
 M. Siena, A. Guadagnini, **M. Riva**, and S.P. Neuman  
 A Theoretical Model of Extended Power-Law Scaling
- A209 EGU2012-9606  
**A. Christofides** and D. Koutsoyiannis  
 A toy model of a climate system with multiyear temperature variability produced by constant radiation forcing
- A210 EGU2012-1556  
**T Leon Gross** and JD Ruiz Sinoga  
 Social perception of droughts in the mass media (southern Spain)
- A211 EGU2012-5309  
**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
- A212 EGU2012-9360  
**M. M. Kvalevag**, B. H. Samset, and G. Myhre  
 Hydrological sensitivity and global temperature change to greenhouse gases and aerosols in CESM

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

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

**Room: 5**

Chairperson: S. Somot, E. Ozsoy

- 13:30–13:45 EGU2012-787  
**M. Bensi**, V. Cardin, and M. Ga?i?  
 Thermohaline variability and mesoscale activities observed at the E2M3A deep site in the south Adriatic Sea
- 13:45–14:00 EGU2012-12099  
**A. Gogou\***, A. Sanchez-Vidal\*, S. Stavrakakis, X. Durrieu de Madron, A.M. Calafat, M. Stabholz, S. Psarra, M. Canals, S. Heussner, I. Stavrakaki, and E. Papathanassiou  
 Carbon Flux to the Deep in three open sites of the Southern European Seas
- 14:00–14:15 EGU2012-11948  
**I. Bouloubassi**, A. Gogou, S. Stavrakakis, A. Sanchez-Vidal, and M. Grégoire  
 Downward biogenic fluxes in the SW Black Sea: dynamics of their compositional and temporal patterns
- 14:15–14:30 EGU2012-178  
**S. Karimova**  
 Satellite observations of eddies in the Baltic, Black and Caspian seas
- 14:30–14:45 EGU2012-2755  
**A. Pascual**, J. Bouffard, S. Ruiz, B. Buongiorno Nardelli, and R. Escudier  
 Recent advances on mesoscale variability in the Western Mediterranean Sea: complementarity between satellite altimetry and other sensors
- 14:45–15:00 EGU2012-4692  
**A. Peliz**  
 Alboran jets, gyres and eddies in a 20-year high resolution simulation
- Chairperson: M. Gregoire, A. Pascual
- 15:30–15:45 EGU2012-6229  
**J. Soto-Navarro**, S. Somot, F. Sevault, J. Beuvier, F. Criado-Aldeanueva, J. García-Lafuente, and A. Sánchez-Román  
 Study of the exchange flow through the Strait of Gibraltar with the NEMOMED8 Ocean Circulation Model: model validation, interannual variability and trends.
- 15:45–16:00 EGU2012-12311  
**C. Dubois**, F. Sevault, and S. Somot  
 Impact of the heat and salt content in the Atlantic on the Western Mediterranean Deep Water masses formation

- 16:00–16:15 EGU2012-11230  
**A. Elizalde** and U. Mikolajewicz  
 Resolving explicitly the Black Sea in the Mediterranean Sea simulations using a fully coupled atmosphere-ocean model.
- 16:15–16:30 EGU2012-11614  
**A. Theocharis**, G. Krokos, and G. Korres  
 An internal mechanism driving decadal oscillations of the thermohaline circulation and properties in the Eastern Mediterranean
- 16:30–16:45 EGU2012-4437  
**G. Mattia**, M. Vichi, M. Zavatarelli, and P. Oddo  
 The wind-driven response of the Mediterranean sea biogeochemistry to the Eastern Mediterranean Transient. A numerical model study.
- 16:45–17:00 EGU2012-11669  
**L. Velea**, R. Bojariu, and T. Chronis  
 Evaluation of air-sea exchange over Black Sea from a regional climate simulation

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

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

**Hall X/Y | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: S. Somot

- XY365 EGU2012-901  
**V.V. Fomin**, V.B. Zalesny, N.A. Diansky, and A.V. Gusev  
 Black and Azov Sea circulation numerical modelling on the basis of splitting technique
- XY366 EGU2012-2606  
**I. Vilicic**, S. Matijevic, and J. Sepic  
 Long-term changes in the middle Adriatic oceanographic properties
- XY367 EGU2012-2809  
**A. Sanchez-Roman**, J. Garcia-Lafuente, R. Sanchez-Leal, J. Delgado, J. Soto-Navarro, and C. Naranjo  
 Seasonal and Inter-annual signals in the Mediterranean Outflow observed in Espartel Sill (western Strait of Gibraltar) during the last decade
- XY368 EGU2012-3036  
**P. Censi**, M. Raso, F. Saiano, and P. Zuddas  
 HOW Zr/Hf AND Gd ANOMALY SIGNATURES CAN DEPICT SOLID-LIQUID INTERACTIONS IN SEAWATER
- XY369 EGU2012-3655  
**G. Korotaev**, Yu. Ratner, A. Kholod, M. Martynov, M. Ivanchik, S. Denmyshev, V. Dorofeev, V. Knysh, V. Moiseenko, A. Kybryakov, T. Churilova, and V. Suslin  
 Variability of the Black Sea from My Ocean Black Sea Monitoring and Forecasting Center Products
- XY370 EGU2012-3972  
**V.S. Arkhipkin**, E.A. Malyarenko, and G.V. Surkova  
 Analysis of storm waves on the Caspian Sea
- XY371 EGU2012-4188  
**V. Dorofeyev**, T. Oguz, G. Korotaev, and L. Sukhikh  
 Hindcast and Forecast of the Black Sea Ecosystem on the Basis of 3D Interdisciplinary Model
- XY372 EGU2012-4244  
 D. Boutov and **A. Peliz**  
 Atmospheric forcing and Sea Surface Temperature response in the Gulf of Cadiz-Alboran Sea system in a 20 years simulation
- XY373 EGU2012-4300  
 E. Clementi, **M. Zavatarelli**, P. Oddo, G. Volpe, S. Colella, and V. Djurdjevic  
 Validation of a 3D coupled physical-biogeochemical model in the Adriatic Sea
- XY374 EGU2012-4423  
**S. Ruiz**, L. Renault, B. Garau, and J. Tintoré  
 Underwater glider observations and modeling of an abrupt mixing event in the upper ocean
- XY375 EGU2012-4432  
**A.I. Kubryakov**, G.K. Korotayev, F.-X. Thoorens, O. Liungman, and C. Ambjorn  
 New tool for the Black Sea environmental safety: BlackSea Track Web
- XY376 EGU2012-4751  
**G. Surkova**, A. Kislov, and P. Koltermann  
 Large-scale atmospheric circulation and extreme wind events during the Black sea storms

- XY377 EGU2012-4877  
**B. Petelin**, V. Malacic, A. Malej, M. Kukar, and I. Kononenko  
Multi-level Association Rules and Directed Graphs for the Lagrangian Analysis of the Mediterranean Ocean Forecasting System (MFS)
- XY378 EGU2012-5633  
**F.N. Gippius** and V.S. Arkhipkin  
Hydrological regime of the Black Sea waters: numerical modeling
- XY379 EGU2012-5643  
**A. K. Stips**, E. Garcia Gorri, and G. Lessin  
Linear trends or regime shifts: statistical analysis of data and biogeochemical model simulations for the last 50 years in the Aegean Sea
- XY380 EGU2012-6016  
**B. L'Hévéder**, L. Li, F. Sevault, and S. Somot  
Interannual variability of deep convection in the Gulf of Lions in a Atmosphere-Ocean Regional Climate Model for the Mediterranean area.
- XY381 EGU2012-6292  
**S. Riha** and A. Peliz  
An Idealized Isopycnal 2-Layer Model of the Alboran Sea
- XY382 EGU2012-7200  
**T. Churilova** and V. Suslin  
Black Sea spectral bio-optical models based on satellite data and their applications for assessment of spatial and temporal variability in waters transparency, chlorophyll a content and primary production
- XY383 EGU2012-7591  
**R. Balbín**, A. Aparicio, J.L. López-Jurado, and M.M Flexas  
Interannual variability of Dissolved Oxygen values around the Balearic Islands
- XY384 EGU2012-8476  
**A. Aparicio**, J.L. López-Jurado, R. Balbín, J. Jansá, and B. Amengual  
IBAMar 2.0: 36 years sampling on the Western Mediterranean Sea
- XY385 EGU2012-8932  
**E. Padorno**, R. Aznar, E. Álvarez-Fanjul, S. Somot, F. Sevault, M. Déqué, M. Herrmann, G. Jordá, M. Marcos, and D. Gomis  
Impact of climate change scenarios in the Mediterranean Sea from a regional ocean model
- XY386 EGU2012-9349  
**M. Adani**, G. Korres, P. Oddo, and N. Pinardi  
Coupling OGCM and Wave model trough the drag coefficient
- XY387 EGU2012-12232  
**C. Naranjo**, J. García-Lafuente, G. Sannino, JC. Sanchez-Garrido, J. Soto-Navarro, E. Bruque, S. Sammartino, A. Sanchez-Roman, and C. Calero  
The WMDW path from its formation place to the Gibraltar gateway.
- XY388 EGU2012-7836  
R. Soczka Mandac and **B. Bogunovi?**  
Spatial and temporal variability of R1 in the Bay of Koper (Gulf of Trieste)
- XY389 EGU2012-4851  
**G. Sannino** and A. Carillo  
Effect of explicit tides in an eddy resolving Mediterranean model with increased resolution at Gibraltar.
- XY390 EGU2012-12855  
A. Capet, J.M Beckers, A. Barth, and **M. Grégoire**  
Interannual variability of Black Sea's hydrodynamics and connection to atmospheric patterns: model study.
- XY391 EGU2012-716  
**N. Sokolikhina**, E. Semenov, and E. Sokolikhina  
Meteorological and Synoptic Aspects of the Novorossiysk Bora Forming and Evolution

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

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

**Room: 16**

Chairperson: K. Husum, U. Schauer

08:30–08:45 EGU2012-6063

**J. Müller**, K. Werner, and R. Stein  
Holocene sea ice in the main Arctic gateway

08:45–09:00 EGU2012-7773

**S. Aagaard-Sørensen**, K. Husum, M. Hald, T. Marchitto, and F. Godtliebsen  
Holocene Atlantic Water temperature reconstruction in the Nordic Seas based on foraminiferal Mg/Ca ratios

- 09:00–09:15 EGU2012-10679  
**M. Blaschek** and H. Renssen  
The Influence of Greenland melt water on the temporal and spatial response of the Holocene Thermal Maximum in the Nordic Seas: a modelling study
- 09:15–09:30 EGU2012-11593  
**L. de Steur**, E. Hansen, C. Mauritzen, and A. Beszczynska-Moeller  
Transport of the East Greenland Current in Fram Strait
- 09:30–09:45 EGU2012-3640  
**I. A. Dmitrenko**, S. A. Kirillov, V. V. Ivanov, U. 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. Nøst  
The air-sea transformation and diapycnal overturning circulation within the Nordic Seas

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**COFFEE BREAK**

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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  
**F. Lamy**, H.W. Arz, R. Kilian, O. Baeza Urrea, M. Caniupan, C. Kissel, and C. Lange  
Millennial-scale ocean current intensity changes off southernmost Chile and implications for Drake Passage throughflow
- 11:45–12:00 EGU2012-9842  
**I. N. McCave**, S.C. Crowhurst, C.-D. Hillenbrand, and G. Kuhn  
Constant flow speed of the ACC through Drake Passage between glacial maximum and Holocene.

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

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

Hall Z | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: K. Husum, L. Jonkers

- Z30 EGU2012-14476  
**S. Berben**, K. Husum, and M. Hald  
Sub-centennial Holocene fluctuations of surface water masses in the western Barents Sea
- Z31 EGU2012-2714  
**P. Cabedo Sanz**, A. Navarro Rodriguez, S.T. Belt, T.A. Brown, J. Knies, K. Husum, J. Giraudeau, and J. Andrews  
Calibration and application of the IP25 biomarker for Arctic sea ice reconstructions
- Z32 EGU2012-10651  
**F.J. Davies**, H Goosse, and H Renssen  
Simulating the natural variability of the freshwater budget of the Arctic ocean from the mid to late Holocene using LOVECLIM
- Z33 EGU2012-1993  
**C. Dylmer**, J. Giraudeau, E. Frédérique, A. de Vernal, J. Knies, K. Husum, and S. Belt  
Northward advection of Atlantic Water in Fram strait during the late Holocene: a view from mixed layer proxies
- Z34 EGU2012-6030  
**J.C. Faust**, J. Knies, J. Giraudeau, and G. Milner  
Geochemical investigations of fjord surface sediments as basis for Holocene climate change studies in the Trondheimsfjord area

Z35	EGU2012-7635 <b>D.E. Groot</b> , S. Aagaard Sørensen, K. Husum, and M. Hald Holocene intermediate and bottom water mass reconstructions of the western Barents Sea
Z36	EGU2012-2716 <b>A. Navarro Rodriguez</b> , P. Cabedo Sanz, S. Belt, T. Brown, J. Knies, K. Husum, and J. Giraudeau Analysis of sea ice and phytoplankton biomarkers in marine sediments from the Nordic Seas - a calibration study
Z37	EGU2012-2958 <b>I. Maier</b> , M. Felix, J. Knies, and U. Mann Historic surface water productivity changes in the Barents Sea
Z38	EGU2012-2887 <b>G. Milzer</b> , J. Giraudeau, J. Faust, J. Knies, S. Schmidt, and C. Rühlemann Benthic Foraminiferal Stable Isotope and Dinocyst Assemblages in Sediments of the Trondheimfjord Area (Mid-Norway): Proxies for Regional Oceanographic and Climate Changes?
Z39	EGU2012-2962 <b>T. Pados</b> and R. F. Spielhagen Modern distribution of planktic foraminifers in the Fram Strait (Arctic Ocean) compared to sea floor species assemblages
Z40	EGU2012-5112 <b>B. Sternal</b> , W. Szczuci?ski, M. Forwick, M. Zaj?czkowski, S. Lorenc, and T.O. Vorren Sedimentary record of postglacial variability in near-bottom currents, sediment supply and ice rafting on the continental shelf off SW Spitsbergen
Z41	EGU2012-2370 <b>M. M. Telesi?ski</b> and R. F. Spielhagen Late Glacial and Holocene paleoceanography of the central and northern Greenland Sea based on foraminifera, stable isotopes and sediments
Z42	EGU2012-4750 <b>K. Werner</b> , 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 <b>K. Werner</b> , 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 <b>G. Chepurin</b> and J. Carton Sub-arctic and Arctic sea surface temperature and its relation to ocean heat content 1982-2010
Z45	EGU2012-7017 <b>F. Greil</b> and A. Beszczynska-Möller Statistical analysis of oceanographic fields in Fram Strait
Z46	EGU2012-7881 <b>B. I. Moat</b> , 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, <b>A.V. Gusev</b> , 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 <b>C. Roth</b> , 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 <b>U. Schauer</b> , A. Beszczynska-Möller, T. Krumpen, F. Greil, and E. Fahrbach Warming of the Atlantic water in Fram Strait and its impact on the ice cover
Z50	EGU2012-2816 <b>F. Wobus</b> , G.I. Shapiro, J.M. Huthnance, and M.A.M. Maqueda The piercing of the Atlantic Layer by a dense water cascade in an idealised modelling study inspired by the Storfjorden overflow
Z51	EGU2012-8931 <b>M. Årthun</b> , T. Eldevik, L. H. Smedsrød, Ø. Skagseth, and R. B. Ingvaldsen Quantifying the influence of Atlantic heat on Barents Sea ice variability and retreat
Z52	EGU2012-3974 <b>N. Barrier</b> , D. Ferreira, and J. Marshall Impact of opening of the Central America Seaway on climate in a coupled atmosphere-ocean-sea-ice model

Z53	EGU2012-11354 <b>K. Braun</b> , M. Bar-Matthews, A. Ayalon, C. Marean, A. I. R. Herries, R. Zahn, and A. Matthews Influences of the Agulhas Current on South African terrestrial climate as inferred from speleothem stable isotope records
Z54	EGU2012-5484 <b>C. Brierley</b> and A Fedorov Can inter-ocean gateways explain long-term cooling since the early Pliocene?
Z55	EGU2012-5756 <b>E. Khadun</b> , J.v.d. Lubbe, T. Blanz, and R. Schneider 80 kyr record of palaeoceanographic conditions from southeastern Africa
Z56	EGU2012-8815 <b>G. Marino</b> , R. Zahn, P. Ziveri, M. Ziegler, I.R. Hall, and H. Elderfield Impact of the salt leakage through the Indian-Atlantic ocean gateway on the Atlantic MOC
Z57	EGU2012-10456 <b>M. Parari</b> and R. Zahn Do variations in Mozambique Channel hydrography impact the marine climatology of the Agulhas gateway between the Indian Ocean and Atlantic?
Z58	EGU2012-4522 <b>C. Purcell</b> , G. Knorr, I. Hall, and G. Lohmann The influence of Agulhas Leakage dynamics on the Atlantic Meridional Overturning Circulation during glacial-interglacial transitions
Z59	EGU2012-3276 <b>T. Qu</b> and T.-L. Chiang Northward intrusion of South Pacific intermediate water along the Philippine coast as seen from a global GCM
Z60	EGU2012-8133 <b>P. Scussolini</b> and F.J.C. Peeters Evolution of the southeast Atlantic thermocline during Marine Isotopic Stages 6-5: is it related to variations in the Agulhas Leakage?
Z61	EGU2012-344 <b>M. Simon</b> , I.R. Hall, S. Barker, and M. Ziegler Investigating the impact of millennial scale Agulhas Current System variability on global ocean circulation and climate
Z62	EGU2012-6144 <b>J. Steinhardt</b> , U. Fallet, R. Tjallingii, and G-J. A. Brummer Core top particle component analysis from the southwestern Indian Ocean
Z63	EGU2012-5248 <b>M. Ziegler</b> , 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

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**CL4.4 – Modern and Palaeomonsoon – Orals**

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

**Room: 13**

Chairperson: n.n.

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

09:45–10:00 EGU2012-8604

**A. Menon**, A. Levermann, and J. Schewe  
 Future increase of west African monsoon due to sea ice melt

**CL4.4 – Modern and Palaeomonsoon – Posters**

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

**Hall Z | Display Time 08:00–17:00**

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- Z64 EGU2012-187  
**S. Polanski**, F. Hanf, D. Befort, F. Menzel, U. Cubasch, and G.C. Leckebusch  
 Indian Summer Monsoon Variability and its Physical Mechanisms in the last Millennium
- Z65 EGU2012-2480  
**J. Schewe**, A. Levermann, and H. Cheng  
 A critical humidity threshold for monsoon transitions
- Z66 EGU2012-5777  
**K. Rehfeld**, N. Marwan, S. Breitenbach, and J. Kurths  
 Holocene monsoon variability as resolved in small complex networks from palaeodata
- Z67 EGU2012-9974  
**S. Wild**, G.C. Leckebusch, D.J. Befort, and U. Cubasch  
 South Asian Monsoon Variability and its Relation to Midlatitude Teleconnections
- Z68 EGU2012-13093  
**M. P. Karami**, A. Berger, N. Herold, and Q. Z. Yin  
 A climate model study of an intense Asian Monsoon in a La Niña-like climate of MIS-13
- Z69 EGU2012-227  
**S. P. Prizomwala**, N. Bhatt, A. M. Hirt, and W Winkler  
 High Resolution Mid to Late Holocene Paleoclimatic Reconstruction from the Mudflats of Gulf of Kachchh Coast, Western India
- Z70 EGU2012-701  
**F. A. Lechleitner**, S. F. M. Breitenbach, H. Cheng, J. F. Adkins, B. Plessen, and G. H. Haug  
 The last deglaciation in NE India reconstructed from a stalagmite from Mawmluh cave
- Z71 EGU2012-927  
**Y Dixit**, 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. Herzschuh  
 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  
 ÉNd IN SEAWATER RECORDS OCEAN TEMPERATURE CHANGES WITH A TIME DELAY
- Z77 EGU2012-6648  
**A. Anoop**, S. Prasad, R. Krishnan, R. Naumann, P. Dulski, S. Gärber, N. Basavaiah, K. Deenadayalan, and A. Brauer  
 Extreme events and spatiotemporal changes in the westerlies and Indian summer monsoon during the early-mid Holocene in NW Himalayas
- Z78 EGU2012-6660  
 X. Huang, H. Oberhänsli, M. Mathis, **S. Prasad**, and H. von Suchodoletz  
 A Holocene lacustrine record of Lake Sonkul: hydro-climatic changes in central Asia and possible interactions between westerlies and Asian monsoon

- Z79 EGU2012-8116  
**W.E. Piller**, M. Reuter, A.K. Kern, and M. Harzhauser  
 Miocene climate seasonality in southern India - first direct evidence for a weak Indian monsoon during the Middle Miocene Climate Optimum
- Z80 EGU2012-12692  
**M. Zech**, M. Tuthorn, R. Zech, F. Schlütz, W. Zech, and B. Glaser  
 A 16 ka lacustrine  $^{18}\text{O}$  record from High Himalaya reflecting the Indian Monsoon variability

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**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. García-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
- 14:15–14:30 EGU2012-12977  
**I. Polo**, B. W. Dong, and R. T. Sutton  
 Tropical Interannual Variability Changes from a Substantial Weakening of the Atlantic Meridional Overturning Circulation
- 14:30–14:45 EGU2012-533  
**J. Lopez-Parages** and B. Rodriguez-Fonseca  
 Multidecadal modulation of El Niño influence on the Euro-Mediterranean rainfall
- 14:45–15:00 EGU2012-6146  
**L. Terray**  
 Modes of forced and internal decadal variability in the Tropics and ExtraTropics from CMIP5 models  
 Chairperson: Belén Rodríguez and Irene Polo
- 15:30–15:45 EGU2012-10239  
**B.-M. Joseph**  
 Predictability of rainy season onset and cessation in east Africa
- 15:45–16:00 EGU2012-10340  
**PA. Monerie**, B. Fontaine, and P. Roucou  
 Future changes in the African monsoon through a pool of CMIP5 models
- 16:00–16:15 EGU2012-12365  
**B. Dieppois**, A. Durand, M. Fournier, A. Diedhiou, B. Fontaine, N. Massei, Z. Nouaceur, and D. Sebag  
 Low-frequency Sahel rainfall variability and Atlantic Sea Surface Temperatures during the last century
- 16:15–16:30 EGU2012-12670  
 B. Cook, J. Yoon, and **N. Zeng**  
 Future Drying of the Southern Amazon Projected by IPCC Climate Models
- 16:30–16:45 EGU2012-7225  
**B. Scherlin-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

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**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. García-Serrano, F. Kucharski, I. Polo

**Hall Z | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: Fred Kucharski and Irene Polo

Z81	EGU2012-980 <b>A. Fischel</b> , M.-S. Seidenkrantz, M. Kucera, and A. Kuipers Holocene climate variability in the tropics - high resolution records from the Anegada-Jungfern Passage, NE-Caribbean
Z82	EGU2012-5528 <b>V. Khon</b> , W. Park, M. Latif, I. Mokhov, and B. Schneider The Hadley and Walker circulations and changes of the hydrological cycle during the Holocene and Eemian from climate model simulations
Z83	EGU2012-4574 <b>H.-G. Lim</b> and S.-W Yeh Volcanic effect on the tropical sea surface temperature in a millennium coupled model simulation
Z84	EGU2012-4297 N.S. Fuckar, <b>R. Farneti</b> , S.P. Xie, E. Maroon, and D.M.W. Frierson Could changes in the extratropical ocean circulation modify the mean tropical climate and ITCZ?
Z85	EGU2012-4380 <b>M. Fujita</b> , M. Hara, and H. G. Takahashi Diurnal cycle of precipitation over the eastern Indian Ocean off Sumatra Island during different IOD phases
Z86	EGU2012-9584 <b>R. Farneti</b> , F. Kucharski, and F. Molteni On the mechanisms of Interdecadal Pacific Oscillation-type variability
Z87	EGU2012-12885 <b>I. Polo</b> , M. Martin-Rey, B. Rodriguez-Fonseca, C. R. Mechoso, and F. Kucharski Processes in the Influence of Tropical Atlantic Sea Surface Temperatures on Pacific la Nina Onset
Z88	EGU2012-13488 B. Rodríguez de Fonseca, I. Polo, T. Losada, <b>E. Mohino</b> , and R. Mechoso Non stationary impact of the Equatorial Atlantic on the El Niño Southern Oscillation
Z89	EGU2012-13050 <b>T. Losada</b> and B. Rodríguez-Fonseca Atmospheric Response to Changes in the Atlantic Equatorial Mode and in the Background State of SST.
Z90	EGU2012-8144 <b>A G Turner</b> , B M Harris, and E J Highwood Monsoon collapse following tropical super-volcanic eruptions
Z91	EGU2012-1362 <b>T. Bayr</b> and D. Dommgenet The Land-Sea Warming Contrast as the Driver of Tropical Sea Level Pressure Changes
Z92	EGU2012-2633 <b>F. Kucharski</b> , N. Zeng, and E. Kalnay A further assessment of vegetation feedback on decadal Sahel rainfall variability
Z93	EGU2012-5207 <b>D. Folini</b> , D. Baumgartner, and M. Wild 20th century precipitation changes in the Sahel region: sensitivity studies with ECHAM5-HAM
Z94	EGU2012-7561 <b>C. Seiler</b> Climate Variability and Trends in Bolivia
Z95	EGU2012-8305 <b>A G Turner</b> , M Joshi, E S Robertson, and S J Woolnough The effect of Arabian Sea optical properties on SST biases and the South Asian summer monsoon in a coupled GCM
Z96	EGU2012-10406 <b>C. Williams</b> , R. Allan, and D. Kniveton Comparing atmosphere-land surface feedbacks from models within the tropics (CALM). Part 1: Evaluation of CMIP5 GCMs to simulate the land surface-atmosphere feedback
Z97	EGU2012-10729 <b>S. Wild</b> , J.M. Eden, M. Widmann, and G.C. Leckebusch Spatial structure and potential predictability of summer precipitation in Ethiopia
Z98	EGU2012-13841 F.S. Syed, <b>H. Körnich</b> , and M. Tjernström On the fog variability over south Asia
Z99	EGU2012-313 <b>V. Platonov</b> , E. Semenov, and E. Sokolikhina Extreme La-Nina 2010/11 and the vigorous flood at the north-east of Australia.
Z100	EGU2012-1929 <b>J. Collins</b> , D. Roache, and J. Yoo Assessment of the 2011 Atlantic Hurricane Season

Z101	EGU2012-2426 <b>e. scoccimarro</b> , s. gualdi, and a. navarra Hurricanes interaction with the Arctic Climate
Z102	EGU2012-3177 <b>P. Braesicke</b> , S. H. Ooi, and A. A. Samah Borneo Vortices: A case study and its relation to climatology
Z103	EGU2012-5669 <b>J. Runge</b> and J. Kurths A model-free definition of coupling strength for assessing the influence between climatic processes
Z104	EGU2012-6320 <b>M. Jacques-Coper</b> and S. Brönnimann Summertime Climate Variability and Teleconnections over Southern South America during the 20th Century
Z105	EGU2012-6428 <b>I. Herceg Bulic</b> ENSO impact on North Atlantic/European region in a changing climate
Z106	EGU2012-6698 <b>E.-C. Chang</b> , 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 <b>S.-M. Lim</b> 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 <b>A.A. Ekaykin</b> , A.V. Kozachek, V.Ya. Lipenkov, Yu.A. Shibaev, and R. Vaikmae On the relationship between the climate variability in middle-low latitudes of the Southern Hemisphere and central Antarctica over the past 350 years

**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 <b>O. Khabarova</b> and I. Savin El Niño, global CO <sub>2</sub> and forest growth
15:45–16:00	EGU2012-5548 <b>M. Dury</b> , A. Hambuckers, P. Warnant, I. Jacquemin, W. Thuiller, and L. François Modelling the risk of ecosystem disruption in Europe with a dynamic vegetation model
16:00–16:15	EGU2012-1612 <b>R. Schuster</b> , B. Zeisler, and <b>W. Oberhuber</b> 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 <b>T. Marthews</b> , Y. Malhi, C. Girardin, J. Silva-Espejo, L. Aragão, D. Metcalfe, J. Rapp, L. Mercado, R. Fisher, D. Galbraith, J. Fisher, N. Salinas-Revilla, A. Friend, N. Restrepo-Coupe, and R. Williams Simulating forest productivity along a neotropical elevational transect: temperature variation and carbon use efficiency
16:30–16:45	EGU2012-2302 <b>B. Schuldt</b> , 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 <b>J. Chu</b> The impact of afforestation on projected climate in Australia during the 21st Century
17:00–17:15	EGU2012-13678 <b>B. Székely</b> , A. Kania, N. Pfeifer, H. Heilmeier, J. Tamás, N. Szöllősi, and W. Mücke 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

**Hall Z | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: Fabrizio D'Aprile

- 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  
**R. Pokorny**, O. Urban, P. Holisova, M. Sprtova, L. Sigut, and R. Slipkova  
 Growth strategy of Norway spruce under air elevated [CO<sub>2</sub>]
- 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. Mearns  
 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  
**A. A. Costa**, D. C. Sales, F. C. Vasconcelos Jr., M. M. Coutinho, L. M. Araújo Jr., and E. M. Silva  
 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. Hänsler**, 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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#### LUNCH BREAK

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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  
**A. S. Zakey**, A. K. Shalaby, F. Salmon, F. Giorgi, A. B. Tawfik, A. L. Steiner, and A. Baklanov  
 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

16:30–16:45 EGU2012-6080

**S. Somot**, P. Ruti and the MedCORDEX modelling Team

The Med-CORDEX initiative: towards fully coupled Regional Climate System Models to study the Mediterranean climate variability, change and impact

16:45–17:00 EGU2012-11696

**R. M. Cardoso**, P. M. M. Soares, P. M. A. Miranda, M. Belo-Pereira, and J. Medeiros  
Iberian mean and extreme precipitation climate: WRF-Cordex regional simulations**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. Juntila, K. Husum, J. Carroll, D. Klitgaard-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  $\delta^{13}\text{C}$  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. SchmiedlPaleoecology of benthic foraminifers 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 Sierro, G. Filippelli, and J.A. FloresThe 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

**A. Bornemann**, R. Walther, S. D'haenens, C. Joachim, R.P. Speijer, J. Mutterlose, and R.D. Norris  
Microfossil response to the PETM at DSDP Site 401 (eastern North Atlantic)

BG74	EGU2012-2373 <b>M. Saeidi Ortakand</b> and S. Hasegawa Biostratigraphy and paleoceanography of the Japan Sea in Joetsu Basin since 120 cal. kyr BP
BG75	EGU2012-5800 <b>D. Theobalt</b> and O. Mandic Badenian planktonic foraminifera as climate proxies at the southern margin of the Central Paratethys (Ugljevik, Bosnia and Herzegovina)
BG76	EGU2012-5401 <b>K. Zamelczyk</b> , 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 <b>S. lepure</b> , T. Namiotko, A. Montanari, E. Brugia paglia, 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 <b>I. Hessler</b> , 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 <b>V.M.P. Bouchet</b> , 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 <b>N. Dijkstra</b> , J. Juntila, 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 <b>E. Bertoni</b> , L. Bertello, L. Capotondi, C. Bergami, F. Giglio, M. Ravaioli, C. Rossi, and A. Ferretti Benthic foraminifera as indicators of hydrologic and environmental conditions in the Ross Sea (Antarctica)
BG82	EGU2012-11885 <b>J. Vidovi?</b> , V. ?osovi?, M. Jura?i?, and ?. Benac 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 <b>F. Fiorini</b> 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 <b>E. Salgueiro</b> , T. Rodrigues, F. de la Granda, N. Villacieros-Robineau, F. Alonso, D. Zuñiga, P. A Martin, C.G. Castro, A. Voelker, and F. Abrantes Temperature calibration along the NW Iberian margin: multi-proxy approach
BG85	EGU2012-564 <b>D. Evans</b> and W. Müller Foraminifera Mg/Ca palaeothermometry in a high CO <sub>2</sub> world - appropriate correction for secular change in seawater chemistry
BG86	EGU2012-5045 <b>T. Kuhnt</b> , 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 <b>K.A Koho</b> , E Pina-Ochoa, E. Geslin, and N. Risgaard-Petersen Vertical migration, nitrate uptake and denitrification: survival mechanisms of foraminifers ( <i>Globobulimina turgida</i> ) under low oxygen conditions
BG88	EGU2012-7745 A. Movellan, R. Schiebel, M.V. Zubkov, A. Smyth, H.. Howa, and <b>F. Jorissen</b> Quantification of individual foraminifer protein content using nano-spectrophotometry
BG89	EGU2012-5527 <b>C.-W. Chien</b> , C.-Y. Huang, H.-C. Lee, S.-D. Luo, S.-Y. Jiang, and C.-H. Liu Polymorphic authigenic carbonates and foraminifera taphonomical characteristics of a paleoseep, Southwestern Taiwan

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**HS7.2/AS1.20/CL5.16/NH1.3/NP3.6 – Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized) – Orals**

Convenor: R. Deidda | Co-Convenors: T. Bellerby, G. Grossi, A. Langousis, X. L. Wang, S. Vogl, P. Laux, H. Kunstmann

**Room: 33**

Chairperson: Roberto Deidda

08:30–08:45	EGU2012-1181 <b>E. Morin</b> To know what we cannot know: Global mapping of minimal detectable absolute trends in annual precipitation
08:45–09:00	EGU2012-7261 <b>H. J. D. Sørup</b> , 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 <b>V. Thiemig</b> , 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 <b>R. Roca</b> , 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 <b>T. Bellerby</b> Ensemble conditional precipitation simulation from spatiotemporally heterogeneous multiplatform satellite data sets.
09:45–10:00	EGU2012-1400 <b>S. Dance</b> and A. Seed Characterizing Radar Raingauge Errors for NWP Assimilation

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#### COFFEE BREAK

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Chairperson: Tim Bellerby

10:30–10:45	EGU2012-8146 <b>M.A. Sunyer</b> , 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 <b>S.C. van Pelt</b> , 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 <b>G.G.S. Pegram</b> and A. Bárdossy Multiscale spatial recorrelation of RCM precipitation downscaling to correct predictions over large areas and small
11:15–11:30	EGU2012-1280 <b>J. Chen</b> , F. Brissette, and D. Chaumont Uncertainty of empirical downscaling methods in quantifying the hydrological impact of climate change
11:30–11:45	EGU2012-13756 <b>F.S. Mpelasoka</b> , 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 <b>G. Mascaro</b> , R. Deidda, and M. Hellies Robust characterization of rainfall intermittency in Sardinia and identification of physical controls

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#### LUNCH BREAK

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Chairperson: Andreas Langousis

13:30–13:45	EGU2012-8190 <b>G.T. Diro</b> , A.M. Tompkins, and X. Bi Dynamical downscaling of ECMWF ensemble seasonal forecast over East Africa with RegCM3
13:45–14:00	EGU2012-8417 <b>A. Champion</b> , K. Hodges, and L. Bengtsson Dynamically Downscaling Precipitation from Extra-Tropical Cyclones
14:00–14:15	EGU2012-13440 <b>E. Brisson</b> , N.P.M. van Lipzig, and M. Demuzere Downscaling precipitation at convection resolving scale using COSMO-CLM.
14:15–14:30	EGU2012-4684 <b>A. Sharma</b> , 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
- 14:45–15:00 EGU2012-2478  
**P. Horton**, M. Jaboyedoff, and C. Obled  
Calibration of the analogue method for precipitation forecasting by means of genetic algorithms
- 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 EGU2012-10486  
**A. F. Prein**, A. Gobiet, M. Suklitsch, H. Truhetz, N. K. Awan, K. Keuler, and G. Georgievski  
Added Value of Convection Resolving Climate Simulations
- 16:15–16:30 EGU2012-2843  
**D. Cane**, S. Barbarino, L. Renier, and C. Ronchi  
Regional Climate Models Downscaling in the Alpine Area with Multimodel SuperEnsemble
- 16:30–16:45 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
- 16:45–17:00 EGU2012-10864  
**N. Addor**, N. Salzmann, T. Ewen, and J. Seibert  
Bias-correction conditioned on circulation patterns for ENSEMBLES precipitation simulations in mountainous regions

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#### **HS10.8/BG4.4 – Environmental and anthropogenic change affecting catchments and groundwater-dependent ecosystems (co-listed) – Orals**

Convener: S. J. Schymanski | Co-Conveners: S. Fatichi, B. Klöve, S. Manfreda, M. Sivapalan, C. Stumpf

**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. Reichenau**, 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

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#### **HS10.8/BG4.4 – Environmental and anthropogenic change affecting catchments and groundwater-dependent ecosystems (co-listed) – Posters**

Convener: S. J. Schymanski | Co-Conveners: S. Fatichi, B. Klöve, S. Manfreda, M. Sivapalan, C. Stumpf

**Hall A | Display Time 08:00–17:00**

Author in Attendance: 10:30–12:00

Chairperson: Simone Fatichi

A296	EGU2012-10825 <b>S. Pande</b> On Budyko curve as a consequence of climate-soil-vegetation equilibrium hypothesis
A297	EGU2012-3337 <b>X. Xu, D. Yang, and H. Yang</b> Impact of past climate variability and change on catchment ecohydrology in China
A298	EGU2012-14242 <b>S. J. Schymanski</b> , D. Or, M. L. Roderick, and M. Sivapalan Prediction under change: invariant model parameters in a varying environment
A299	EGU2012-5637 <b>g. ceccherini and f. castelli</b> Vegetation response to climate, eco-hydrological modeling at basin scale in water-limited ecosystems
A300	EGU2012-9983 <b>J.Z. Coletti and M.R. Hipsey</b> Ecohydrological feedbacks mediate wetland habitat response to climate variability
A301	EGU2012-8131 <b>G. Bertrand</b> , 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 ( $\delta^{18}\text{O}$ , $\delta^2\text{H}$ ): Pfyn Forest, Switzerland
A302	EGU2012-12928 <b>A. Sastre-Merlín</b> , 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 <b>Simon</b> , Mádl-Sz?nyi, and Weidinger Investigation of groundwater dependent ecosystems in a complex hydraulic situation
A304	EGU2012-3721 <b>U. Schneidewind</b> , 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, <b>P. Wachniew</b> , A. Zurek, and M. Dulinski Environmental water requirements of groundwater dependent ecosystems: conflict between nature and man
A306	EGU2012-802 <b>N. Welti</b> , D. Lockington, T. Jakeman, and R. Hunt Characterizing hot spots throughout the catchment
A307	EGU2012-12861 <b>T. Graeff</b> , 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 <b>G. Garner</b> , 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 <b>K. Khamis</b> , D.M Hannah, L.E Brown, and A.M Milner Sub-seasonal river heat flux partitioning in an alpine, glacierized basin
A310	EGU2012-1367 <b>N. Frasher</b> , N. Pano, A. Frasher, 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, <b>DE Kilić</b> , and A. Atalay Dutucu General Ecological Characteristics Based on GIS Methods in Poyrazlar Lake, Turkey
A312	EGU2012-11926 T. V. Sapelko, <b>K.V. Shemanaev</b> , 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. García, H. Mercier, P. Conde, P. Lherminier, F.F. Pérez, and M. Gilcoto

Interannual variability of water masses transports across A25-OVIDE section (subpolar atlantic gyre)

- XY312 EGU2012-1069  
**A.E. Vyazilova** and A.V. Smirnov  
Links between thermohaline anomalies in Northwest Atlantic and Nordic Seas
- XY313 EGU2012-5128  
**C. Denker**, D. Kieke, B. Klein, H. Klein, and M. Rhein  
Water mass properties on their way over the Mid-Atlantic-Ridge through the Faraday Fracture Zone
- XY314 EGU2012-4363  
**A. Smirnov** and A. Korablev  
Structure and long-term variability of oceanographic characteristics in the Nordic Seas derived from observed and gridded (DIVA software) datasets
- XY315 EGU2012-5810  
**A. Rubchenia**, A. Popov, A. Fedorova, and N. Lebedev  
Interpretation of time series (salinity and temperature) layers in North Atlantic from 1950 to 2011
- XY316 EGU2012-5570  
**E. Tzortzi**, C.P. Gommenginger, S. Josey, and M.A. Srokosz  
How does surface salinity and rain affect the North Atlantic ocean circulation?
- XY317 EGU2012-4967  
**C. Mielke**, E. Frajka-Williams, and J Baehr  
Observed and simulated seasonal variability of the AMOC at 26°N and 41°N
- XY318 EGU2012-6122  
**O. Khmelnitskaya**  
Using the optimum multiparameter analysis to study the water masses of the North Atlantic
- XY319 EGU2012-9770  
**E. Burrillon**, S.S. Drijfhout, and H.A. Dijkstra  
Cause and effect of variations in the sinking of deep water in the MOC
- XY320 EGU2012-12738  
**M.-j. Messias**, A. J. Watson, P. J. Brown, and B.A. King  
Evidence of Greenland Sea Water at 24 degrees N from the Greenland Sea Tracer Experiment
- XY321 EGU2012-13372  
**M. G. Magaldi** and T. W. N. Haine  
Hydrostatic and non-hydrostatic simulations of the East Greenland Spill Jet
- XY322 EGU2012-6282  
**L. Schneider**, D. Kieke, K. Jochumsen, M. Rhein, D. Quadfasel, E. Varotsu, N. Serra, E. Colbourne, and I. Yashayaev  
Export of Labrador Sea Water through Flemish Pass
- XY323 EGU2012-4708  
**M. Korhonen**, B. Rudels, U. Schauer, S. Pisarev, B. Rabe, and A Wisotzki  
Reduction of salinity and temperature observed in the Atlantic layer in the eastern Eurasian Basin of the Arctic Ocean in summer 2011
- XY324 EGU2012-5218  
**C. Troupin** and F. Machín  
Negative wind anomalies generated a diminution of productivity in the North Atlantic in 2010
- XY325 EGU2012-1953  
**A. Nummelin**  
Convection in the Greenland Sea in winter 2010-2011: Comparison between model and observations
- XY326 EGU2012-5900  
**N. C. Wells**  
MOC, Heat Storage and Surface Heat Flux in 2009/2010.
- XY327 EGU2012-2127  
**N. Daniault**, 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. Sandø  
Salt transport in the Irminger Current: a regional and a global model
- XY332 EGU2012-9630  
S.M. Olsen and **T. Schmitt**  
Greenland meltwater experiments

- XY333 EGU2012-8828  
**D. V. Sein, M. Gröger, E. Maier-Reimer, and U. Mikolajewicz**  
 Modeling anthropogenic Climate Change of the northwest European Shelves and the northeast Atlantic
- XY334 EGU2012-7148  
**B. Filyushkin, S. Moshonkin, S. Myslenkov, and N. Kozhelupova**  
 Simulation of interannual variability of overflow transport through the Denmark Strait
- XY335 EGU2012-10826  
**Y.-O. Kwon** and C. Frankignoul  
 Multi-decadal Variability of Atlantic Meridional Overturning Circulation in the Community Climate System Model 3
- XY336 EGU2012-5594  
**A. Born, T.F. Stocker, C.C. Raible, and A. Levermann**  
 Is the Atlantic subpolar gyre bistable in comprehensive coupled climate models?
- XY337 EGU2012-5884  
**A. Megann, A. New, and A Blaker**  
 Model representation of salinity anomalies and the stability of the North Atlantic overturning circulation
- XY338 EGU2012-6093  
**M. Sonnewald, J. J.-M. Hirschi, and R. Marsh**  
 Oceanic dominance of interannual subtropical North Atlantic heat content variability
- XY339 EGU2012-6482  
**M. Brunetti, E. Fenu, and M. Beniston**  
 Stability properties of the North Atlantic Ocean Circulation
- XY340 EGU2012-10074  
**Y. Ruprich-Robert** and C. Cassou  
 Mechanisms of the North Atlantic multidecadal internal variability in the CNRM-CM5 model
- XY341 EGU2012-3109  
**B. Tiedje, A. Köhl, and J. Baehr**  
 North Atlantic heat transport and AMOC: Potential predictability in the subtropical and subpolar gyre
- XY342 EGU2012-11526  
**H. Pillar, D. Marshall, and H. Johnson**  
 The Dependence of the Atlantic Overturning Circulation on Meridional Density Gradients
- XY343 EGU2012-4886  
**K. Shimizu**  
 Dynamics of long baroclinic Rossby waves along 26°N in the Atlantic
- XY344 EGU2012-2192  
**W. P. Sijp**  
 Characterising meridional overturning bistability as a dynamical system using a minimal set of state variables.
- XY345 EGU2012-3129  
**E. D. da Costa** and M 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. Añel, M. Blanco-Durán, L. Gimeno, and L. de la Torre**  
 Recovery of meteorological data for the observatory of A Guarda, Spain

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**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  
**J.W.H. Weijers**, P. Steinmann, E.C. Hopmans, N. Basiliko, S.A. Finkelstein, K.R. Johnson, S. Schouten, and J.S. Sinninghe Damst   
 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 Boltыш 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  
**S. A ?kal?n**, ? .  . Y?lmaz, F. Ocakoglu, H. B. Vonhof, A. Hakyemez, and J. Smit  
 Paleoceanographic trends in the Campanian-Maastrichtian Pelagic Succession, Mudurnu-Goynuk Basin, NW Turkey
- A374 EGU2012-498  
**S. J. Batenburg**, A. S. Gale, F. J. Hilgen, S. K. Husing, J. Laskar, X. Orue-Etxebarria, M. Sprovieri, and S. Voigt  
 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

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**SSP4.6 – Phanerozoic marginal and terrestrial palaeoenvironments as archives of biotic and climatic change: records and proxy developments (co-listed) – Orals**

Convener: S. Robinson | Co-Conveners: U. Heimhofer, A. Lukeneder, J. Whiteside, J. McElwain, R. Pancost

**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. Hauteville, 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.

14:45–15:00 EGU2012-13647

**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**

Convener: S. Robinson | Co-Conveners: U. Heimhofer, A. Lukeneder, J. Whiteside, J. McElwain, R. Pancost

**Hall A | Display Time 08:00–17:00**

Author in Attendance: 15:30–17:00

Chairperson: Stuart Robinson

A393 EGU2012-13424

**D.A.T. Harper**, E. Hammarlund, J.W. Hansen, A.T. Nielsen, J.A. Rasmussen, M.P. Smith, M. Stein, and J. Vinther

Biofacies and faunal dynamics through the Sirius Passet Lagerstätte (lower Cambrian),

A394 EGU2012-1882

**J. Vasi?kova**, E. Lukševi?s, ?. Stinkulis, and I. Zupi?š

Upper Devonian vertebrate taphonomy and sedimentology from the Klunas fossil site, Tervete Formation, Latvia

A395 EGU2012-73

**O. Kossovaya**

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. Et-Touhami

Excursions in Stable Carbon Isotopes at the End-Triassic Mass Extinction: Eastern North America and Morocco

A400 EGU2012-11358

Y. Hauteville, **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. Fay**, S. Robinson, J. McElwain, S. Hesselbo, G. Pedersen, R. Barclay, K. Amor, and P. Bown

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

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