

EGU General Assembly 2011
Programme Group Programme
AS – Atmospheric Sciences

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Monday, 04 April

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

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

Room: 14

Chairperson: n.n.

- 13:30–13:45 EGU2011-13883
Ray Bates
On the relevance of Charney-Drazin (1961) for our understanding of the dynamical influence of the stratosphere on the troposphere.
- 13:45–14:00 EGU2011-13792
Nathan Paldor
Laplace's Tidal Equations: Revisiting a 400 year old basic problem of GFD
- 14:00–14:15 EGU2011-13246
Riwal Plougonven and Chris Snyder
Gravity waves emitted from jets: lessons from idealized simulations
- 14:15–14:30 EGU2011-1950
Nils Wedi and Piotr Smolarkiewicz
A nonlinear perspective on the dynamics of the MJO: idealized large-eddy simulations
- 14:30–14:45 EGU2011-4391
Bruno Ribstein and Vladimir Zeitlin
Inertial instability in the 2 layer rotating shallow water model
- 14:45–15:00 EGU2011-7474
Anna Rabitti and Leo R. M. Maas
Internal inertial wave characteristic paths in a sphere and in a spherical shell
- Chairperson: Vanda Grubišić
- 15:30–15:45 EGU2011-8908
Andrew Stewart and Paul Dellar
A numerical study of cross-equatorial abyssal ocean currents with a complete representation of the Coriolis force
- 15:45–16:00 EGU2011-513
Gaele Perret, Thomas Dubos, and Alexandre Stegner
How oceanic anticyclones are favoured through large-scale and cyclogeostrophic barotropic instabilities
- 16:00–16:15 EGU2011-4070
Alexandre Stegner, Gaele Perret, Ayah Lazar, Rui Caldeira, and Charles Dong
Island wake dynamics: various parameters and regimes of asymmetry
- 16:15–16:30 EGU2011-910
Ayah Lazar, Eyal Heifetz, and Alexandre Stegner
Inertial instability in island wakes
- 16:30–16:45 EGU2011-2147
Rieke Heinze and Siegfried Raasch
Atmospheric vortex streets: structure and properties derived from large eddy simulations
- 16:45–17:00 EGU2011-7492
Rui Caldeira, Maxime Schmerber, and Pablo Sangrá
Oceanic eddy response to atmospheric forcing: near- and far-field consequences

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY1 EGU2011-8566
Ayah Lazar, Alexandre Stegner, Rui Caldeira, Samuel Viboud, and Henri Didelle
Stability of submesoscale wake vortices in a rotating and stratified shallow-water layer: laboratory experiments.
- XY2 EGU2011-10164
Rui Caldeira, Alain Chelius, Maxime Schmerber, and Pablo Sangrá
Contribution of island asymmetry and neighboring islands to the formation of oceanic wakes: a quasi-geostrophic study of near- and far-field implications

- XY3 EGU2011-10304
Luis C. Cana Cascallar, Diana Grisolia-Santos, and Leopoldo Álvarez
Firsts results on the modelling of the Gran Canaria atmospheric wake
- XY4 EGU2011-10328
Luis C. Cana Cascallar, Diana Grisolia-Santos, and Leopoldo Álvarez
Local flow under weak trade wind flow regime
- XY5 EGU2011-3478
Marion Kersalé, Alvaro J. Peliz, Andrea M. Doglioli, and Anne A. Petrenko
A numerical study on the collision of a Meddy with a seamount
- XY6 EGU2011-7405
Xavier Couvelard, Isabel B. Araujo, Rui Caldeira, and Ricardo Tome
Atmospheric-induced effects on the sea surface: Madeira Island wake case study
- XY7 EGU2011-3691
Vanda Grubišić, Johannes Sachsperger, and Rui Caldeira
The atmospheric wake of Madeira Island: i-WAKE Campaign
- XY8 EGU2011-7987
Uwe Harlander, Yongtai Wang, **Kiril Alexandrov**, Torsten Seelig, Christoph Egbers and the MetStröm rotating annulus Team
Intercomparison of numerical models simulating rotating annulus flows
- XY9 EGU2011-12553
Eckhard Dietze, Heiko Schmidt, Juan Pedro Mellado, and Bjorn Stevens
Comparison of LES and DNS results for a two-dimensional evaporatively driven cloud-top mixing layer
- XY10 EGU2011-2063
Fabian Senf and Ulrich Achatz
On generalized linear flows: from compressible to sound-proof dynamics
- XY11 EGU2011-5675
Michael Kurgansky
Dynamical and statistical characteristics of atmospheric dust devils
- XY12 EGU2011-12473
Haraldur Ólafsson, Hálfán Ágústsson, and Ólafur Rögnvaldsson
Patterns of the fine-scale wind climatology of Iceland from numerical downscaling
- XY13 EGU2011-14096
Andreas Will and **Jack Ogaja**
Convergence properties of the spatial schemes in the COSMO model and requirements on higher order spatial convergence
- XY14 EGU2011-11619
Marcin Kurowski, Bogdan Rosa, and Michal Ziemianski
Upstream effects of the atmospheric flow over a mountain ridge as represented by the anelastic nonhydrostatic model EULAG
- XY15 EGU2011-3323
Urs Schaefer-Rolffs and Erich Becker
Scale-invariant Horizontal Diffusion in a Global Circulation Model
- XY16 EGU2011-6565
Liang Sun
General stability criteria for inviscid rotating flow
- XY17 EGU2011-9297
Melitta Fiebig-Wittmaack, Wolfgang Boersch-Supan, Ingeborg Bischoff-Gauss, and Orlando Astudillo
Convergence acceleration for difference equations with flat grids: Application to incompressible atmospheric flow
- XY18 EGU2011-10221
Remi Tailleux
Compressibility effects in nearly incompressible turbulent stratified fluids: Do they matter or do they not?
- XY19 EGU2011-1535
Jose M. Redondo, Otman Ben Mahjoub, Roberto Castilla, Margarita Diez, and Emil Sekula
Mixing and diffusion in buoyancy driven self-similar flows
- XY20 EGU2011-3207
Richard Blender
Instability of planetary flows based on Riemannian geometry
- XY21 EGU2011-9967
Christoph Egbers, Marcus Gellert, Uwe Harlander, Yongtai Wang, and Günther Rüdiger
Investigation of Stratorotational Instability (SRI) in Taylor-Couette flows with axial temperature gradient

AS1.9 – The global monsoon system: variability and dynamics – Orals

Convener: Jianping Li | Co-Conveners: Andrew Turner, Annalisa Bracco, Pascal Terray

Room: 14

Chairperson: n.n.

- 08:30–08:45 EGU2011-5232
Xiaohong Liu, Yiquan Jiang, Xiuqun Yang, Minghui Wang, and Steve Ghan
Anthropogenic Aerosol Impacts on East Asia Summer Monsoon
- 08:45–09:00 EGU2011-4206
Liang Guo, Eleanor Highwood, Len Shaffrey, and Andrew Turner
Aerosol's effect on precipitation anomalies over East Asia
- 09:00–09:15 EGU2011-1928
Jacob Schewe and Anders Levermann
Non-linear reduction of Indian summer monsoon rainfall in response to global warming
- 09:15–09:30 EGU2011-1781
Jianping Li, Zhiwei Wu, Zhihong Jiang, and Jinhai He
Can global warming strengthen the East Asian Summer Monsoon?
- 09:30–09:45 EGU2011-6066
Annalisa Cherchi, Andrea Alessandri, Simona Masina, and Antonio Navarra
Effects of increased CO₂ levels on monsoons
- 09:45–10:00 EGU2011-5382
June-Yi Lee, Bin Wang, Kyung-Ja Ha, and Jong-Ghap Jhun
How Much Improvement Can Be Made for the Asian Winter Monsoon Prediction?

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-1579
Kyung-Ja Ha, Kyung-Sook Yun, and Kyong-Hwan Seo
Northward propagating ISOs dynamics over East Asia and an association with ENSO
- 10:45–11:00 EGU2011-1823
Xingwen Jiang and Jianping Li
Why is there an abrupt northward jump of the warmest SST axis in the monsoon region
- 11:00–11:15 EGU2011-10944
Ghyslaine Boschat, Pascal Terray, and Sébastien Masson
Robustness of SST teleconnections and precursory patterns associated with the Indian Summer Monsoon
- 11:15–11:30 EGU2011-4621
Fred Kucharski, Annalisa Bracco, Rondrotiana Barimalala, and Jin Ho Yoo
Contribution of the east-west thermal heating contrast to the South Asian Monsoon and consequences for its variability
- 11:30–11:45 EGU2011-13355
Pascal Terray, Sébastien Masson, and Kamala Kakitha
Role of the frequency of coupling in the simulation of the monsoon-ENSO relationship in a global coupled model
- 11:45–12:00 EGU2011-1007
Zhiwei Wu, Jianping Li, Zhihong Jiang, Jinhai He, and Xiaoying Zhu
Predictable Climate Dynamics of Abnormal East Asian Winter Monsoon: Once-in-a-century Snowstorms in 2007/08 Winter

AS1.9 – The global monsoon system: variability and dynamics – Posters

Convener: Jianping Li | Co-Conveners: Andrew Turner, Annalisa Bracco, Pascal Terray

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY22 EGU2011-2351
Hyung Jin Kim, Kumiko Takata, Bin Wang, Masahiro Watanabe, Masahide Kimoto, Tokuta Yokohata, and Tetsuzo Yasunari
Global monsoon, El Niño, and their interannual linkage simulated by MIROC5 and the CMIP3 CGCMs
- XY23 EGU2011-1681
Yanjie Li and Jianping Li
Propagation of Planetary Waves in the Horizontal Non-uniform Basic Flow and Interactions of the Asian-Australian Monsoon systems

- XY24 EGU2011-13932
Andrew Turner, Gill Martin, and Richard Levine
Analysis of the Asian monsoon response to ENSO in the Met Office GloSea4 seasonal hindcasts
- XY25 EGU2011-1545
Tong-mei Wang and Guo-xiong Wu
Land-Sea thermal contrast over south Asia and its influences on tropical monsoon circulation
- XY26 EGU2011-8681
Qing Bao, Guoxiong Wu, Pengfei Lin, Yongqiang Yu, Yimin Liu, Tianjun Zhou, Hailong Liu, Jiping Liu, Zhenya Song, and Zaizhi Wang
An introduction to the coupled model FGOALS2-s
- XY27 EGU2011-10672
Andreas Dobler and Bodo Ahrens
Climate change scenarios for the Indian summer monsoon
- XY28 EGU2011-1780
Juan Feng, Jianping Li, and Yun Li
A possible cause of decreasing summer rainfall in northeast Australia
- XY29 EGU2011-11933
Venkat Krishnamurthy
Variability of the South Asian monsoon during 1901-2004
- XY30 EGU2011-5326
Kyong-Hwan Seo, Ok Jung, and Jun-Hyeok Son
A New Assessment of the East Asian Summer Monsoon in the Future Climate
- XY31 EGU2011-5230
Dan Sun, Feng Xue, and Tianjun Zhou
The influence of the Southern Hemisphere circulation on summer rainfall in china under the different decadal background
- XY32 EGU2011-6947
Jing Yang
Intensified reduction in summertime light rainfall over mountains compared with plains in Eastern China
- XY33 EGU2011-1578
Kyung-Sook Yun and Kyung-Ja Ha
Interdecadal change in the sub-seasonal variability over the EASM
- XY34 EGU2011-1983
Peter Braesicke, Oliver Smith, Paul Telford, and John Pyle
Ozone concentration changes in the Asian Summer Monsoon anticyclone and lower stratospheric water vapour: an idealised model study
- XY35 EGU2011-5691
Soohyun Park, Kyung-On Boo, Young-Hwa Byun, Hyun-Suk Kang, and ChunHo Cho
Regional Climate Response to the Dust Aerosol Direct Forcing
- XY36 EGU2011-306
Jilong Chen
Bimodal Variability of East Asian Summer Monsoon Viewed as Atmospheric Hydrological Cycle
- XY37 EGU2011-9009
Paulina Ordóñez, Pedro Ribera, David Gallego, Cristina Peña-Ortiz, and Maria del Carmen Alvarez-Castro
Identification of the main moisture sources for India through a lagrangian approach
- XY38 EGU2011-9041
Paulina Ordóñez, Pedro Ribera, David Gallego, Cristina Peña-Ortiz, and Maria del Carmen Alvarez-Castro.
Moisture transports and synoptic patterns related to heavy rainfall events in India
- XY39 EGU2011-1079
Yunting Qiao, Wei huang, and Maoqiu Jian
Impacts of ENSO and local SST on Moisture Source in Asian-Australian Monsoon Region in Boreal Summer
- XY40 EGU2011-2850
Jung-Eun Chu and Kyung-Ja Ha
Identification of Nonlinear Coupled Intraseasonal Phases in the East Asian Summer Monsoon
- XY41 EGU2011-667
Krushna Chandra Gouda and Prashant Goswami
Advance Forecasting of Multiple-Criteria Dates of Onset of Monsoon Rainfall with a GCM
- XY42 EGU2011-7788
Maoqiu Jian
Characteristics of General Circulation Anomalies Related to the Drought Events in Fall in Southern China
- XY43 EGU2011-1834
Jong-Ghap Jhun, Sae-Rim Yeo, and WonMoo Kim
Intraseasonal Variability of Western North Pacific Subtropical High Based on the El Nino Influence and Its Relationship with East Asian Summer Monsoon

- XY44 EGU2011-1849
WonMoo Kim
What happened to the climatological intraseasonal evolution of the East Asian summer after the mid-1990s?
- XY45 EGU2011-4677
Arathy Menon, Debasis Sengupta, and Vuruputur Venugopal
Biennial oscillation of Indian summer monsoon and northern hemisphere surface climate at the turn of the century.
- XY46 EGU2011-12708
Vincent Moron, Andrew Robertson, and Michael Ghil
Impact of the modulated annual cycle and intraseasonal oscillation on daily-to-interannual rainfall variability across monsoonal India
- XY47 EGU2011-2807
Hui Yang, Jie Song, Hongming Yan, and Chongyin Li
Cause of the Severe Drought in Yunnan province During winter of 2009 to 2010

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

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

Room: 7

Chairperson: Marcus Dengler, Alban Lazar

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

COFFEE BREAK

Chairperson: Alban Lazar, Ping Chang

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

11:45–12:00 EGU2011-14168

Wan-Ling Tseng, Ben-Jei Tsuang, Noel Keenlyside, and Chia-Ying Tu
Investigating the impact of the diurnal cycle of SST on the atmosphere

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marcus Dengler, Alban Lazar

XY583 EGU2011-14197

Gilles Reverdin, Jacqueline Boutin, Simon Morisset, Nicolas Martin, Claire Hénocq, Fabienne Gaillard, and Nicolas Reul

Tropical near-surface stratification during intense rainfall

XY584 EGU2011-1713

Lili Zeng

Observed seasonal variability of barrier layer in the South China Sea, from meso to regional scales

XY585 EGU2011-5016

Henrick Berger, Anne-Marie Tréguier, Nicolas Reul, and Philippe Craneguy

Seasonal cycle of the low salinity waters in the gulf of Guinea described by satellite measurements and numerical modelling

XY586 EGU2011-5102

Christophe Maes, Joël Sudre, and Véronique Garçon

Detection of the eastern edge of the western Pacific warm pool

XY587 EGU2011-3866

Ali Belmadani, Vincent Echevin, and Boris Dewitte

Impact of intraseasonal equatorial Kelvin waves on eddy activity in an eddy-resolving model of the Humboldt system

XY588 EGU2011-13205

Olaf Duteil, Alban Lazar, and Andreas Oschlies

Realistic representation of light penetration in the upper ocean improves the representation of a structure coupled to the Atlantic Meridional Mode: the Guinea Dome

XY589 EGU2011-1110

Dongseon Kim and SangHwa ChoiSeasonal variability of sea-air CO₂ fluxes in the northern East China Sea

XY590 EGU2011-5911

Hervé Giordani and **Guy Caniaux**

A diagnostic of the vertical velocity for the Equatorial Atlantic

XY591 EGU2011-517

Moussa Diakhate, Alban Lazar, Gaelle de Coetlogon, and Amadou T. Gaye

Local interactions between Sea Surface Temperature and Winds in the Tropical Atlantic at intraseasonal timescales.

XY592 EGU2011-12287

Irene Polo, Alban Lazar, Belen Rodriguez-Fonseca, and Juliette Mignot

Analysis of the time evolution of the Atlantic Equatorial Mode mixed layer heat budget with a coupled GCM

XY593 EGU2011-6973

Charles Williams, Dominic Kniveton, and Russell Layberry

Idealized SST anomaly regional climate model experiments: A note of caution.

XY594 EGU2011-831

Alina Gainusa Bogdan and Pascale Braconnot

Evaluation of the IPSL-CM5 Earth System Model air-sea fluxes in tropical regions

XY595 EGU2011-11186

Jenny Glashoff, Hartmut Borth, and Klaus Fraedrich

Tropical sea surface temperature variability in an idealized atmosphere-ocean column

AS3.5 – Vertical and Long-Range Transport of Trace Gases and Aerosols – Orals

Convener: Mark G. Lawrence | Co-Conveners: Andreas Stohl

Room: 10

Chairperson: Andreas Stohl, Mark Lawrence

- 13:30–13:45 EGU2011-7685
Steve Arnold, Louisa Emmons, Kathy Law, Solene Turquety, Simone Tilmes, Sarah Monks, Idir Bouarar, Bryan Duncan, Johannes Flemming, Vincent Huijnen and the POLMIP Team
 Evaluation of impacts of short-lived pollutant transport to the Arctic in chemical-transport models: The POLARCAT Model Intercomparison Project (POLMIP)
- 13:45–14:00 EGU2011-9183
James Sloan, Thomas Kuhn, Richard Damoah, and Asan Bacak
 Long Range Transport of Aerosols into the Canadian High Arctic
- 14:00–14:15 EGU2011-2260
 Francesca Barnaba, Federico Angelini, **Gabriele Curci**, and Gian Paolo Gobbi
 An important fingerprint of wildfires on the European aerosol load
- 14:15–14:30 EGU2011-819
Achim Zien, Andreas Richter, Andreas Hilboll, and John P. Burrows
 A statistical evaluation of NO₂ long-range transport events using GOME-2 observations
- 14:30–14:45 EGU2011-12169
Kenneth Pickering, Lesley Ott, Jiann Shi, Wei-Kuo Tao, Celine Mari, and Hans Schlager
 Evaluation of Convective Transport in the GEOS-5 Chemistry and Climate Model
- 14:45–15:00 EGU2011-7049
Heiko Bozem and the GABRIEL Team
 Influence of cold corona discharge on the ozone budget in the tropical free troposphere: A case study of deep convection during GABRIEL

AS3.5 – Vertical and Long-Range Transport of Trace Gases and Aerosols – Posters

Convener: Mark G. Lawrence | Co-Conveners: Andreas Stohl

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Mark Lawrence, Andreas Stohl

- XY48 EGU2011-6463
Christoph Brühl, Holger Tost, Paul Crutzen, Jos Lelieveld, and Francois Benduhn
 Lower tropospheric COS as main source of stratospheric background aerosol, a CCM study
- XY49 EGU2011-8131
Anna Katinka Petersen, Guy Brasseur, Doug Kinnison, and Jean-Francois Lamarque
 Influence of Stratosphere-troposphere exchange on local budgets of ozone, studies with the Whole Atmosphere Community Climate Model (WACCM)
- XY50 EGU2011-12418
Alexis Merlaud, Nicolas Theys, Boris Quennehen, Alfons Schwarzenboeck, Matthieu Pommier, Gérard Ancellet, John F. Burkhardt, Andreas Stohl, Michel Van Roozendaal and the BIRA-IASB DOAS Team
 Airborne DOAS measurements of aerosol extinction and NO₂ profiles in Arctic: two cases studies and their transport interpretation
- XY51 EGU2011-10962
Boris Quennehen, Alfons Schwarzenboeck, Atsushi Matsuki, Julia Schmale, Harald Sodemann, Gérard Ancellet, Johannes Schneider, Andreas Stohl, Jacques Pelon, and Kathy Law
 Pollution transported to the Arctic during the POLARCAT-France spring and summer 2008 campaigns: source regions and aerosol properties.
- XY52 EGU2011-10521
Elisabeth Thiem, Alfred Wiedensohler, Wolfram Birmili, John Ogren, and Anne Jefferson
 Long-term measurements of Arctic aerosol number size distributions at Point Barrow
- XY53 EGU2011-9079
Alexandru Lupu, Norman T. O'Neill, Jacek W. Kaminski, Kirill Semeniuk, and John C. McConnell
 Transport of biomass burning emissions into the Arctic in April 2008: GEM-AQ simulation and comparison with aircraft observations from the ARCTAS and ARCPAC campaigns
- XY54 EGU2011-12885
Greg Roberts, Heike Wex, Katrin Mildenerger, Birgit Wehner, Florian Ditas, and Holger Seibert
 Aerosol-cloud interactions of trade wind cumuli in the sub-tropical ocean
- XY55 EGU2011-1653
Peter Israelevich, Eli Ganor, Pinhas Alpert, Pavel Kishcha, and Amnon Stupp
 Seasonal Variations of Sharan Dust Transport over the Mediterranean Sea to Europe
- XY56 EGU2011-1989
Romain Pilon
 Modelling trace species transport and scavenging in deep convective cloud using a general circulation model.
- XY57 EGU2011-5864
Alexander Archibald, Matt Ashfold, Alistair Manning, Andrew Robinson, Bryan Gostlow, Neil Harris, Simon O'Doherty, and John Pyle
 Studies of long range transport of halogenated substances in South America and South East Asia.

- XY58 EGU2011-7452
Zoe Fleming, Paul Monks, Roland Leigh, Alistair Manning, Lucy Carpenter, Katie Read, and James Lee
Untangling the influence of air mass origin on trace gas measurements using the NAME dispersion model
- XY59 EGU2011-8912
Danilo Custódio, Mário Cerqueira, Paulo Fialho, Casimiro Pio, Fátima Mirante, and Teresa Nunes
Wet deposition of particulate carbon to the central North Atlantic Ocean
- XY60 EGU2011-9590
Yu-Chi Lin, Chuan-Yao Lin, and Wei-Ting Hsu
Influence of Asian Continental Flow on the Lower Tropospheric Ozone and Carbon Monoxide over the Pacific Rim
- XY61 EGU2011-10855
Holger Baars, Dietrich Althausen, Ronny Engelmann, Detlef Müller, Albert Ansmann, Paulo Artaxo, Theotonio Pauliquevis, Rodrigo Souza, and Scot Martin
Long-range transport of dust and smoke towards and over the Amazon rain forest observed with lidar during the wet and dry season
- XY62 EGU2011-11744
Elsa Real, Karine Sartelet, Owen Cooper, Simos Koumoutsaris, Isabelle Bey, and Hans Schlager
Impact of forest fire long-range transport on European air composition
- XY63 EGU2011-12397
Christoforos Tsamalis, François Ravetta, Jurgen Fischer, Alexandros Papayannis, and Georgios Tsaknakis
Radiative effects of biomass burning aerosols in the Mediterranean region during ITOP 2004
- XY64 EGU2011-10048
Valentin Duflot, Jean-Luc Baray, Françoise Posny, and Jean-Louis Bonne
Analysis of the tropospheric ozone distribution at Kerguelen island (49°S, 69°E) in 2008-2009
- XY65 EGU2011-12425
Huixia He, David Tarasick, Junhua Zhang, Mike Moran, Paul Makar, Yves Rochon, Wayne Hocking, and Michel Bourqui
Transport Analysis of Ozone Enhancement in Southern Ontario during BAQS-Met
- XY66 EGU2011-10557
Michael Holloway, Stephen Arnold, Andrew Challinor, and Lisa Emberson
Impacts of intercontinental ozone transport on Northern Hemisphere yields of six major crop types.
- XY67 EGU2011-13455
Sandro Makowski, Ruetger Rollenbeck, Insa Otte, and Joerg Bendix
Spatial dynamics of atmospheric nutrient deposition in a tropical mountain forest: Analysis of new emission databases and satellite products

AS3.6 – Megacities: Air Quality and Climate Impacts from Local to Global Scales – Orals

Convener: Michael Gauss | Co-Conveners: Luisa Molina, Alexander Baklanov

Room: 12

Chairperson: Michael Gauss, Luisa Molina

- 08:30–08:45 EGU2011-9410
Gregor Stewart, Iq Mead, Olalekan Popoola, Mark Calleja, Mark Hayes, John Saffell, Peter Landshoff, and Rod Jones
Low-cost Sensor Networks for Improving Understanding of Urban Air Pollution
- 08:45–09:00 EGU2011-11888
Riley Duren, Charles Miller, and Philippe Ciais
Sustained monitoring of CO₂ emissions from megacities
- 09:00–09:15 EGU2011-5504
Lauri Laakso and the APSA Team
New continental African supersite for atmospheric observations
- 09:15–09:30 EGU2011-11199
Andreas Hilboll, Andreas Richter, Augustin Colette, and John P. Burrows
Assessment of decadal trends in tropospheric nitrogen dioxide over large European urban agglomerations by combining satellite measurements and model data
- 09:30–09:45 EGU2011-1412
Reza Shaiganfar, Steffen Beirle, Thierry Marbach, Ramesh Singh, Thomas Wagner, and Manish Sharma
Validation of satellite observations over New Delhi and Paris using mobile MAX-DOAS observations
- 09:45–10:00 EGU2011-4631
Andre S. H. Prevot, Monica Crippa, Spyros Pandis, Matthias Beekmann, Urs Baltensperger and the MEGAPOLI Team
Organic aerosols and their sources in Paris during the MEGAPOLI campaigns

COFFEE BREAK

Chairperson: Luisa Molina, Alexander Baklanov

- 10:30–11:00 EGU2011-2693
Gregory Carmichael, Sarika Kulkarni, Yafang Chen, Man Yu, Pallavi Marrapu, Pablo Saide, Scott Spak, and Min Huang
 Regional and Global Perspectives of Megacity Air Pollution
- 11:00–11:15 EGU2011-8710
Joanna Struzewska, Jacek W. Kaminski, and Pawel Regulski
 Impact of urban parameterization on high resolution meteorological and air quality simulations with the GEM/LAM-AQ model
- 11:15–11:30 EGU2011-1711
Chun-Ho Liu, Wai-Chi Cheng, Tracy Chung, and Colman Wong
 On the air pollutant removal mechanism from 2D urban street canyons
- 11:30–11:45 EGU2011-4776
Beata Czader, Xiangshang Li, Bernhard Rappenglueck, and Daewon W. Byun
 Air Quality Modeling Study of Ozone Radical Precursors in Houston
- 11:45–12:00 EGU2011-5744
Igor B. Kononov, Matthias Beekmann, Irina N. Kuznetsova, Anatoliy M. Zvyagintsev, and Alla Yurova
 The extreme air pollution episodes in the Moscow megacity region during the 2010 Russian wildfires: modelling and analysis

LUNCH BREAK

Chairperson: Michael Gauss, Luisa Molina

- 13:30–14:00 EGU2011-12568
Paul Monks and CityZen Team
 The changing impact of megacities
- 14:00–14:15 EGU2011-7243
Tayfun Kindap, Alper Unal, Maria Kanakidou, Ulas Im, and Mehmet Karaca
 Analysis of the Saharan dust transport to the Anatolian Peninsula: Megacity perspective
- 14:15–14:30 EGU2011-3177
Friederike Freutel and the MEGAPOLI Team
 Particle emissions of a Megacity (Paris, France): Results from the MEGAPOLI 2009 summer campaign
- 14:30–14:45 EGU2011-5421
Renyi Zhang, Jun Zheng, Min Hu, and Tong Zhu
 Measurements of Organic and Inorganic Compounds during 2008 Summer Olympic Games in Megacity Beijing
- 14:45–15:00 EGU2011-3808
Myrto Valari, Lucio Martinelli, Edouard Chatignoux, and James Crooks
 Timescale dependent effects in the relationship between air-pollution and mortality
- Chairperson: Alexander Baklanov, Michael Gauss
- 15:30–16:00 EGU2011-3985
Spyros Pandis, Alexandra Tsimpidi, Vlassis Karydis, Christos Fountoukis, Athanasios Megaritis, Christodoulos Pilinis, Kristina Wagstrom, and Benjamin Murphy
 Aerosol Formation and Transport to and from Polluted Megacities
- 16:00–16:15 EGU2011-14080
Hugo Denier van der Gon and the MEGAPOLI EMISSIONS Team
 Comparison and analysis of European, national and local bottom-up emission inventories for European Megacities
- 16:15–16:30 EGU2011-6882
Nicolas Moussiopoulos and the MEGAPOLI WP4 Team
 MEGAPOLI WP4: Megacity air quality
- 16:30–16:45 EGU2011-12112
 Sandro Finardi, **Camillo Silibello**, Paola Radice, and Alessio D'Allura
 Analysis of Po Valley emission influence on the surrounding region air quality in winter and summer circulation regimes

16:45–17:00 EGU2011-12519

Sabine Eckhardt, Andreas Stohl, Mark Lawrence, Tim Butler, and Jean-Pierre Cammas
The impact of Eastern U.S. megapolis emissions on carbon monoxide and ozone concentrations over Europe

AS3.6 – Megacities: Air Quality and Climate Impacts from Local to Global Scales – Posters

Convener: Michael Gauss | Co-Conveners: Luisa Molina, Alexander Baklanov

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michael Gauss, Luisa Molina, Alexander Baklanov

- XY68 EGU2011-764
Zadie Stock, Maria Russo, and John Pyle
The impact of megacities on regional and global atmospheric composition: a modelling study
- XY69 EGU2011-1247
Meri Hannukainen, Pekka Kolmonen, Bill Collins, Anu-Maija Sundström, Larisa Sogacheva, Edith Rodriguez, and Gerrit de Leeuw
Comparison between the AOD derived from a global climate model HadGEM2 and from satellite observations
- XY70 EGU2011-1364
Jongmin Yoon, Wolfgang von Hoyningen-Huene, Marco Vountas, and John Philip Burrows
Linear Long-term Trend of Aerosol Optical Thickness derived from SeaWiFS and MERIS using BAER over Several Regions
- XY71 EGU2011-1365
Jongmin Yoon, Wolfgang von Hoyningen-Huene, Alexander Kokhanovsky, Marco Vountas, and John Philip Burrows
Trend Analysis of the Aerosol Optical Thickness and Ångström Exponent Derived from the Global AERONET Spectral Observations
- XY72 EGU2011-4420
Sabina Stefan, Laurentiu Zagar, Raluca Barladeanu, and Gilda Rusu-Zagar
Trends in Surface Ozone Concentrations at Bucharest, Romania from 2005 to 2007
- XY73 EGU2011-4514
Esther Coz, Gary S. Casuccio, Traci Traci Lersch Traci Lersch, and Begoña Artífano
Characteristics of the nanoparticles in soot aggregates from Barcelona (Spain) during DAURE winter campaign: the closure of a complex state of mixture
- XY74 EGU2011-4696
Pei-Hua Tan, Chia Chou, and Pen-Yuan Chen
Factors controlling the strength of holiday effect
- XY75 EGU2011-5471
Hye Jung Shin, Jong Choon Kim, Suk Jo Lee, and Yong Pyo Kim
Contributions of VOCs to the ozone and secondary organic aerosol formation in Seoul, Korea
- XY76 EGU2011-6071
Ulas Im and the CITYZEN East Mediterranean Team
Quantification of air pollution levels and its sources in the Eastern Mediterranean: A megacity perspective
- XY77 EGU2011-6199
Pavlos Kalabokas, Anastasios Adamopoulos, and Loizos Viras
Comparative analysis of atmospheric concentration measurements of PM10 particles, nitrogen oxides and ozone in the Mediterranean urban areas of Athens and Thessaloniki, Greece.
- XY78 EGU2011-6562
Felicita Russo, Alberto Maurizi, and Francesco Tampieri
The current state of regional import/export budget and air quality modelling in the Po Valley
- XY79 EGU2011-6716
Tim Butler, Hugo Denier van der Gon, Maria Russo, Zadie Stock, and Mark Lawrence
Emission Scenarios for Global Megacity Impact Studies
- XY80 EGU2011-7610
Gerd Folberth, **Steven Rumbold**, Timothy Butler, and William Collins
Global Radiative Forcing from Megacities - Results From MEGAPOLI
- XY81 EGU2011-7611
Cristina Dolgorouky, Valerie Gros, Roland Sarda-Esteve, Bernard Bonsang, Vinayak Sinha, and Jonathan Williams
The effect of the ambient nitrogen monoxide (NO) on the quantification of the total OH reactivity levels in Paris (MEGAPOLI winter campaign 2010).
- XY82 EGU2011-7797
Agustin Garcia-Reynoso, Manuel Suarez-Lastra, Ernesto Caetano, Daniela Cruz-Pastrana, Luis-Gerardo Ruiz-Suarez, Javier Delgado, and Aron Jazcilevich
Ozone Concentrations Exposure Assessment in a Climate Scenario for Mexico Megacity

- XY83 EGU2011-7915
Tzu-Ling Lai and Robert W. Talbot
A decadal ozone trends in the rural sites of New England in the United States
- XY84 EGU2011-9644
Sun Young Lee, Ji Yi Lee, Seung Muk Yi, and Yong Pyo Kim
Characteristic of water-soluble organic carbon in PM10 measured in Seoul, Korea
- XY85 EGU2011-9689
Se Jin Kim, Ji Yi Lee, Seung-Muk Yi, and Yong Pyo Kim
Characteristics of carbonaceous species in the ambient particles measured at Seoul, Korea
- XY86 EGU2011-10219
Barend Leendert van Drooge, Claudia Mohr, Marco Pandolfi, Andres Alastuey, Xavier Querol, Andre Prevot, Jose-Luis Jimenez, and Joan O. Grimalt
Urban and regional background levels of organic compounds in winter atmospheric fine particulate matter from the western Mediterranean region
- XY87 EGU2011-10345
Killian Miet, Vincent Michoud, Agnès Borbon, Aurélie Colomb, Nadir Amarouche, Noël Grand, Qijie Zhang, Hervé Petetin, Jean-François Doussin, and Matthias Beekmann
Airborne study of photo-oxidant chemistry in Paris plume during MEGAPOLI summer campaign
- XY88 EGU2011-10563
Vincent Michoud, Aurélie Colomb, Agnès Borbon, Warda Ait-Helal, Nadine Locoge, Killian Miet, Alexandre Kukui, Charbel Afif, Jean-François Doussin, and Matthias Beekmann
A photochemical study with a focus on O₃/NO_y/HO_x observations during MEGAPOLI summer campaign in the Greater Paris Area
- XY89 EGU2011-11333
Rita Pongracz, Judit Bartholy, Eniko Lelovics, and Zsuzsanna Dezso
Differences and similarities of the satellite- and ground-based urban heat island effects
- XY90 EGU2011-12260
Luisa Molina, **Wenfang Lei**, Guohui Li, Christine Wiedinmyer, and Bob Yokelson
Model assessing the impact of biomass burning on air quality in the Mexico City Metropolitan Area
- XY91 EGU2011-12362
Guohui Li, Naifang Bei, Xuexi Tie, and Luisa Molina
Aerosol effects on photochemistry in Mexico City during MCMA-2006/MILAGRO Campaign
- XY92 EGU2011-12916
Luis A. Hernández-González and **Rodrigo Jiménez**
Development of a spatially-resolved mobile source carbon dioxide emission inventory for Bogota, Colombia
- XY93 EGU2011-1562
Iratxe Gonzalez Aparicio, Roman Nuterman, Ulrik Korsholm, Alexander Mahura, Julia Hidalgo, and Alexander Baklanov
Urban scale modelling for a megacity and a medium size city: evaluating sulphate aerosol indirect effects
- XY94 EGU2011-2900
Philippe Royer, Patrick Chazette, Karine Sartelet, Matthias Beekmann, Qijie Zhang, and Jean-Christophe Raut
Lidar-derived PM10 concentrations and comparison with regional modelling in the frame of MEGAPOLI
- XY95 EGU2011-5921
Ulas Im and the CITYZEN East Mediterranean Team
Temperature changes impact on summer time air quality in the Eastern Mediterranean
- XY96 EGU2011-4193
Ariela D'Angiola, Erika von Schneidemesser, Claire Granier, Kathy Law, and Paul Monks
Employing observational VOC:CO ratios from megacities to improve VOC emissions inventories
- XY97 EGU2011-6037
Salamanca Francisco, Martilli Alberto, and Yagüe Carlos
A numerical study of the urban boundary layer over Madrid during the DESIREX (2008) campaign using two different turbulent schemes with WRF
- XY98 EGU2011-6497
Alberto Maurizi, **Felicita Russo**, Massimo D'Isidoro, and Francesco Tampieri
Scale bridging in atmospheric composition simulation for air quality studies
- XY99 EGU2011-6828
Ioannis Douros, Gerold Halmer, George Tsegas, and **Nicolas Moussiopoulos**
Study of the direct aerosol effect in the Paris metropolitan area using a coupled meteorological - chemical transport model
- XY100 EGU2011-6998
Øivind Hodnebrog, Frode Stordal, and Sverre Solberg
A model study of the Eastern Mediterranean ozone and PM levels during the hot summer of 2007
- XY101 EGU2011-8400
Konstantinos Grigoropoulos and the K.N. Grigoropoulos Team
Chemical analysis of PM1 and NP in human tissues, from polluted districts of Athens

- XY102 EGU2011-9269
Konstantinos Grigoropoulos, Christos Panagopoulos, George Ferentinos, Michael Gerazounis, Panagiotis Nastos, Ekaterini Thoma, John Papadopoulos, Nikolaos Tzatzadakis, Aleksandra Stankovi?, and Maja Nikoli?
PM movements inside the human organism.
- XY103 EGU2011-10244
petetin herve, beekmann matthias, michoud vincent, doussin jean-françois, colomb aurélie, schwarzenboeck alfons, ven der gon hugo, honoré cécile, and wiedensohler alfred
Evaluating NOY and BC emission inventories for the Paris region from MEGAPOLI aircraft measurements
- XY104 EGU2011-11045
Evelyn Freney, Karine Sellegri, Suzanne Crumeyrolle, Christelle Barbet, Jean-Marc Pichon, and Alfons Schwarzenboeck
Time- and size-resolved characterization of submicron aerosol particles collected in during MEGAPOLI in Paris, France using an Aerodyne Aerosol Mass Spectrometer.
- XY105 EGU2011-11389
Fulvio Amato, Mar Viana, Agnes Richard, Markus Furger, André Prevot, Silvia Nava, Franco Lucarelli, Xavier Querol, Andrés Alastuey, and Cristina Reche
Size and time-resolved roadside enrichment of atmospheric particulate pollutants
- XY106 EGU2011-11625
Augustin Colette and the CityZen Modelling Team
A first multi-model assessment of Air Quality trends in Europe.
- XY107 EGU2011-12066
Qijie Zhang, **Matthias Beekmann** and the MEGAPOLI- AMS and Modelling Team
Simulated organic aerosol partition during the MEGAPOLI Campaign in the Greater Paris Region
- XY108 EGU2011-12090
Marco Pandolfi, Xavier Querol, Andrés Alastuey, Jose Luís Jimenez, Jorge Pey, Michael Cusack, Cristina Reche, Claudia Mohr, Peter DeCarlo, Amber Ortega and the DAURE Team
Impact of the Emissions from the Barcelona Metropolitan Area on the Levels and Composition of Fine Aerosols at both Urban and Regional Scale in the Western Mediterranean Basin: Preliminary Results of the DAURE Campaign.
- XY109 EGU2011-13521
Tomas Halenka, Peter Huszar, and Michal Belda
Air quality - Climate Interaction in Urban Environment by RegCM/CAMx Couple for MEGAPOLI Project in High Resolution
- XY110 EGU2011-13844
Mikhail A. Lokoshchenko
Results of long-term sodar measurements of wind profiles above Moscow city

AS3.7 – Source apportionment of air pollutants in atmospheric science – Orals

Convener: Andre S. H. Prevot | Co-Conveners: Xavier Querol

Room: 8

Chairperson: Andre Prevot, Xavier Querol

- 08:30–08:45 EGU2011-7031
Roy M. Harrison, David C. Beddows, and Manuel Dall'Osto
Source Apportionment by PMF of Wide Range Particle Size Spectra
- 08:45–09:00 EGU2011-13531
Claudio Belis and Federico Karagulian
Source Apportionment with Receptor Models: needs, trends and prospects
- 09:00–09:15 EGU2011-6162
David Simpson, Celia Alves, Robert Bergstrom, Stefano Decesari, Gyula Kiss, Eiko Nemitz, Andre Prevot, Erik Swietlicki and the EUCAARI partners Team
Tracer-based source-apportionment from the EUCAARI project and comparison with the EMEP model
- 09:15–09:30 EGU2011-14063
Barbara D'Anna, **Nicolas Marchand**, Jean-Luc Jaffrezo, Christian George, Olivier Favez, Antoinette Boréave, Imad El Haddad, Henry Wortham, Alexandre Armengaud, and Catherine Chauvel
Source apportionment of fine aerosol in Marseille city
- 09:30–09:45 EGU2011-6378
Eleonora Simona Cuccia, Vera Bernardoni, Dario Massabo', Paolo Prati, Gianluigi Valli, and Roberta Vecchi
Size distribution of airborne particulate matter concentration without multi-stage cascade impactors
- 09:45–10:00 EGU2011-7505
Christine Piot, Julie Cozic, Lucie Polo, Imad El Haddad, Jean-Luc Besombes, Nicolas Marchand, Aurélie Charron, Christoph Hueglin, Matthias Gianini, and Jean-Luc Jaffrezo
Source apportionment of PM in urban and rural alpine valleys sites using different approaches

10:00–10:15 EGU2011-1474
 Ralph Delfino, Norbert Staimer, Thomas Tjoa, Mohammad Arhami, Andrea Polidori, Daniel Gillen,
 Michael Kleinman, James Schauer, and **Constantinos Sioutas**
 Association of Biomarkers of Systemic Inflammation with Organic Components and Source Tracers in
 Quasi-Ultrafine Particles

AS3.7 – Source apportionment of air pollutants in atmospheric science – Posters

Convener: Andre S. H. Prevot | Co-Conveners: Xavier Querol

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Xavier Querol, Andre Prevot

- XY111 EGU2011-1879
Jean Sciare, Roland Sarda-estève, Valérie Gros, Olivier Favez, and Nicolas Bonnaire
 Evidence a major source of water insoluble secondary organic aerosols in the region of Paris (France) during
 wintertime
- XY112 EGU2011-10288
Julie Cozic, Christine Piot, Jean-Luc Besombes, Jean-Luc Jaffrezo and the Particul'air Team
 Particul'Air: a multi rural site experiment on aerosol chemistry in rural France
- XY113 EGU2011-2403
Matthias Gianini, Christoph Hueglin, Robert Gehrig, Andrea Fischer, Adrian Wichser, and Andrea Ulrich
 Chemical composition and source apportionment of PM10 at different Swiss locations 2008/2009 compared to
 1998/1999
- XY114 EGU2011-6861
Claudia Mohr, René Richter, Peter F. DeCarlo, Roberto Chirico, Maarten F. Heringa, Monica Crippa, José L.
 Jiménez, Xavier Querol, André S. H. Prévôt, and Urs Baltensperger
 Sources of ambient submicron aerosol in the Barcelona metropolitan area: Applying PMF on AMS mobile and
 stationary data
- XY115 EGU2011-7902
Iakovos Barmpadimos, Mirjam Nufer, Daniel C. Oderbolz, Johannes Keller, Sebnem Aksoyoglu, Christoph
 Hueglin, and Andre S. H. Prevot
 The weekly cycle of ambient concentrations and traffic emissions of coarse (PM10 - PM2.5) atmospheric
 particles.
- XY116 EGU2011-13038
Katja Dzepina, Frank Drewnick, Diane Ciaparra, Neil Schofield, and Stephan Borrmann
 Characterisation of emissions and ambient air in the vicinity of an integrated steelmaking site with a Mobile
 Laboratory
- XY117 EGU2011-11258
Fulvio Amato and Philip K. Hopke
 Source Apportionment of the Ambient PM2.5 in East St. Louis using Constrained Positive Matrix Factorization
- XY118 EGU2011-11344
Fulvio Amato, Marco Pandolfi, Markus Furger, Xavier Querol, Andrés Alastuey, André S. H. Prévôt, Jorge
 Pey, Agnes Richard, Nicolas Bukowiecki, and Urs Baltensperger
 Sources of inhalable road dust particles in different European cities
- XY119 EGU2011-4201
Jovana-Maria Diesch, Sören Rasmus Zorn, Sarah-Lena von der Weiden, Frank Drewnick, and Stephan
 Borrmann
 Comparison of regional pollution and background air characteristics in coastal Southern Spain
- XY120 EGU2011-12239
Xavier Querol, Manuel Dall'Osto and the SAPUSS Team
 SAPUSS! Solving Aerosol Problems by Using Synergistic Strategies
- XY121 EGU2011-12304
Cristina Reche, Xavier Querol and the 6CTYs Team
 Variability of levels of PM, black carbon and particle number concentration in selected European cities
- XY122 EGU2011-8499
Silvia Nava, Franco Lucarelli, Giulia Calzolari, Massimo Chiari, Silvia Becagli, Roberto Udisti, Martina
 Giannoni, Francesca Pieri, and Alessandra Cincinelli
 PMF source apportionment of PM2.5 daily and hourly aerosol data in Tuscany (Italy)
- XY123 EGU2011-14064
Maria Grazia Perrone, Bo Larsen, Luca Ferrero, Sangiorgi Giorgia, Gennaro De Gennaro, Roberto Udisti,
 Robert5a Zangrando, Andrea Gambaro, and Ezio Bolzacchini
 Chemical composition and molecular markers for source estimation of PM2.5 from North of Italy

- XY124 EGU2011-13368
Federico Karagulian, Lorenza Emblico, Friedrich Lagler, Maurizio Barbieri, Richard Connolly, and Claudio Belis
 Particulate matter (PM) formation during summertime in the Po valley: mechanisms and source apportionment
- XY125 EGU2011-7763
Haroldo Fraga de Campos Velho, Fabiana Paes, and Fernando M. Ramos
 Artificial neuralnetworks forestimating the atmospheric pollutant sources
- XY126 EGU2011-6468
Mika Vestenius, Pia Anttila, Sirkka Leppänen, Katarina Hansson, Eva Brorström-Lunden, and Hannele Hakola
 Source apportionment of atmospheric pollutants at Pallas, Finland during 1996-2009
- XY127 EGU2011-5198
Jorge Herrera, Susana Rodriguez, José Félix Rojas, Arturo Campos, Salvador Blanco, Felipe Ángeles, and Beatriz Cardenas
 Chemical characterization of PM2.5 particles in cities of Mexico and Costa Rica: comparison between megacities and less developed urban centers
- XY128 EGU2011-5215
Arturo Campos, Jorge Herrera, Salvador Blanco, Felipe Angeles, and Beatriz Cardenas
 Use of multivariate statistic tools in order to identify emission sources that contributes to the chemical composition of PM2.5 in four industrial cities in Mexico.
- XY129 EGU2011-12527
Hafize Melike Celebi, Ali Deniz, Huseyin Toros, Abdullah Kahraman, Ismail Sezen, Ali Ozturk, and Selahattin Incecik
 Characterization of air pollution in Kagithane creek valley (Golden Horn) of Istanbul, Turkey: Temporal variations, air quality standard exceedances and dependence on meteorological conditions
- XY130 EGU2011-12562
Ali Öztürk
 PM10 air quality variations in urbanized areas and industrialized creek valley in Istanbul
- XY131 EGU2011-3174
Pepijn Veefkind, Folkert Boersma, Ronald van der A, Gerard Hoek, and Pieternel Levelt
 Monitoring the NOx Emissions for the EC National Emissions Ceiling Directive using Satellite Remote Sensing
- XY132 EGU2011-11645
Martin Horbanski, Denis Pöhler, and Ulrich Platt
 Determination of nitrogen dioxide distributions in urban areas with a mobile CE- DOAS instrument

AS3.8 – Polar Ozone and Polar Stratospheric Clouds – Orals

Convener: Geir O. Braathen | Co-Conveners: Bjoern-Martin Sinnhuber, Farahnaz Khosrawi, Marc von Hobe, Michael Pitts

Room: 8

Chairperson: Björn-Martin Sinnhuber and Geir Braathen

- 13:30–13:45 EGU2011-3435
Andreas Dörnbrack, Michael C. Pitts, and Lamont R. Poole
 The Winter Arctic Stratosphere in 2009/2010 - Overview, Gravity Wave Activity and Predictability of Sudden Stratospheric Warmings
- 13:45–14:00 EGU2011-11771
C. Michael Volk, Elisabeth Hösen, Marcel vom Scheidt, Johannes Wintel, Jens-Uwe Grooß, Gebhardt Günther, and Kaley A. Walker
 Airborne tracer observations in the Arctic stratosphere during RECONCILE 2010: Quantification of transport and mixing
- 14:00–14:15 EGU2011-8461
Elisabeth Hösen, C. Michael Volk, Johannes Wintel, Marcel vom Scheidt, Alexey Ulanovsky, Fabrizio Ravegnani, Jens-Uwe Grooß, and Kaley Walker
 Ozone Loss within the 2010 Arctic Vortex derived from in situ observations with the Geophysica
- 14:15–14:30 EGU2011-837
Wolfgang Woiwode, Hermann Oelhaf, Thomas Gulde, Christof Piesch, Andreas Ebersoldt, and Johannes Orphal
 Probing the polar vortex for two-dimensional chemical and dynamical features with MIPAS-STR measurements in January and March 2010 during the RECONCILE Campaign
- 14:30–14:45 EGU2011-10843
Christoph Kalicinsky and the CRISTA-NF/CLaMS Team
 First Retrieval Results of the CRISTA-NF Measurements during RECONCILE
- 14:45–15:00 EGU2011-7964
Jens-Uwe Grooß, Katrin Brauttsch, Robert Pommrich, Susan Solomon, and Rolf Müller
 Stratospheric ozone chemistry at very low ozone concentrations in the Antarctic

Chairperson: Farahnaz Khosrawi and Marc von Hobe

- 15:30–15:45 EGU2011-9465
Hideaki Nakajima, Manami Ohya, Kosuke Saeki, and Michael C. Pitts
 Relationship between ozone destruction efficiency and PSC types characterized by ground-based FTIRs at Syowa Station, Antarctica and at Ny-Ålesund, Norway and CALIPSO data
- 15:45–16:00 EGU2011-472
Ines Engel, Christopher R. Hoyle, Beiping P. Luo, Frank G. Wienhold, Michael C. Pitts, Lamont R. Poole, Jens-Uwe Grooß, Sergey Khaykin, Holger Vömel, and Rigel Kivi
 Towards heterogeneous ice and NAT nucleation rates based on PSC observations in the Arctic winter 2009/2010
- 16:00–16:15 EGU2011-7192
Ralf Weigel, Martin Ebert, Sergej Molleker, Wiebke Frey, Gebhard Günther, C. Michael Volk, Hans Schlager, Francesco Cairo, Guido Di Donfrancesco, and Stephan Borrmann
 The abundance, shape and chemical composition of non-volatile particles in the Arctic winter Stratosphere and their potential activation by Polar Stratospheric Cloud elements.
- 16:15–16:30 EGU2011-9038
Isla Young, Craig Murray, Chris Blaum, Tony Cox, Rod Jones, and Francis Pope
 Determining the ClOOCl absorption spectrum: Removal of the molecular chlorine spectral impurity using broadband cavity enhanced absorption spectroscopy
- 16:30–16:45 EGU2011-3196
Olga Sumińska, Fred Stroth, Ralph Lehmann, Tobias Wegner, Jens-Uwe Grooß, and Marc von Hobe
 ClOOCl photolysis at high solar zenith angles: Analysis of RECONCILE self-match flight
- 16:45–17:00 EGU2011-11682
Tobias Wegner and the RECONCILE Team
 Using an active Match approach to estimate ozone loss in January

AS3.8 – Polar Ozone and Polar Stratospheric Clouds – Posters

Convener: Geir O. Braathen | Co-Conveners: Bjoern-Martin Sinnhuber, Farahnaz Khosrawi, Marc von Hobe, Michael Pitts

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michael Pitts

- XY133 EGU2011-10742
Rigel Kivi, Esko Kyrö, and Pauli Heikkinen
 Stratospheric ozone observations over northern Finland from 1989 to 2009
- XY134 EGU2011-10542
Claudio Casiccia, Félix Zamorano, Elian Wolfram, Neusa Paes Leme, Eduardo Quel, Roberta Viana, and Jacobo Salvador
 Vertical Distribution of Ozone at Punta Arenas, Chile 2009-2010
- XY135 EGU2011-6168
Florence Goutail and the Ozone Loss Team
 Total ozone loss during the 2010/11 Arctic winter and comparison to previous years
- XY136 EGU2011-6150
Greg Bodeker
 Indicators of Antarctic ozone depletion: 1979 to 2010
- XY137 EGU2011-13899
Geir O. Braathen and the ozone-hole-team Team
 Observations of the Antarctic Ozone Hole from 2003 to 2010
- XY138 EGU2011-9341
Jayanarayanan Kuttippurath, Sophie Godin-Beekmann, and Andrea Pazmino
 Signatures of the Antarctic ozone loss saturation in the late 1980s
- XY139 EGU2011-2189
Marc von Hobe and the RECONCILE Science Team
 How complete is our understanding of polar ozone depletion?
- XY140 EGU2011-9716
Gebhard Günther, Jens-Uwe Grooß, and C. Michael Volk
 Quantification of Transport and Mixing During the Arctic Winter 2009/2010
- XY141 EGU2011-10696
Rolf Mueller, Tobias Wegner, and Katja Drdla
 Temperature thresholds for polar stratospheric ozone loss
- XY142 EGU2011-11609
Tobias Wegner, Jens-Uwe Grooß, Marc von Hobe, Fred Stroth, Michael Volk, and Rolf Mueller
 How significant is chlorine activation on cold binary aerosol?
- XY143 EGU2011-13211
Fred Stroth, Olga Suminska, Florian Heinecke, Marc von Hobe, and Tobias Wegner
 A New Calibration Method for the HALOX In-Situ ClO Dimer Measurement

- XY144 EGU2011-1216
Gerald Wetzel, Hermann Oelhaf, Felix Friedl-Vallon, Oliver Kirner, Anne Kleinert, Guido Maucher, Hans Nordmeyer, Johannes Orphal, and Roland Ruhnke
 Reactive chlorine and nitrogen compounds observed by MIPAS-B around sunrise inside the strong January 2010 Arctic vortex
- XY145 EGU2011-8031
Valentin Mitev
 Airborne lidar observation of Polar Stratospheric Clouds during RECONCILE Campaign
- XY146 EGU2011-3768
Lamont Poole, Michael Pitts, Wiebke Frey, Sergej Molleker, Ralf Weigel, and Stephan Borrmann
 Comparison of PSC Measurements from CALIPSO and the M-55 Geophysica During the 2010 RECONCILE Field Campaign
- XY147 EGU2011-3557
Michael Pitts, Lamont Poole, Andreas Dörnbrack, Larry Thomason, and Alyn Lambert
 CALIPSO PSC Observations During the 2009-2010 Arctic Winter: Implications for PSC Nucleation Mechanisms
- XY148 EGU2011-10508
Peggy Achtert, Mikaela Karlsson Andersson, Farahnaz Khosrawi, and Jörg Gumbel
 Do tropospheric clouds influence PSC formation in the Arctic?
- XY149 EGU2011-8276
Sébastien Viscardy, Quentin Errera, Michael C. Pitts, and Frank Daerden
 A 3D-CTM with detailed online PSC microphysics : analysis of the Antarctic winter 2007 by comparison with CALIPSO satellite observations
- XY150 EGU2011-6303
Farahnaz Khosrawi, Joachim Urban, Michael C. Pitts, Peter Völger, Peggy Achtert, Misha Khaplanov, Donal P. Murtagh, and Karl-Heinrich Fricke
 The Arctic winter 2009/2010: Denitrification and polar stratospheric cloud formation
- XY151 EGU2011-8469
Jens-Uwe Groöf, Rolf Müller, Hans Schlager, C. Michael Volk, Peter Bernath, Chris Boone, and Kaley A. Walker
 Vertical redistribution of NO_y in the polar stratosphere in winter 2009/2010
- XY152 EGU2011-10648
Laura Thölix, Leif Backman, Rigel Kivi, and Esko Kyrö
 Water vapour in the Arctic lower stratosphere
- XY153 EGU2011-3699
Sven Kühn, Janis Pukite, Steffen Dörner, Patrick Jöckel, and Thomas Wagner
 Satellite observations of OCIO from 1995 to 2010 in comparison to ECMWF data and EMAC simulations
- XY154 EGU2011-1384
Ole Kirner and Roland Ruhnke
 The development of the stratospheric polar ozone distribution performed in EMAC-long term simulations with different boundary conditions for CO₂, CH₄ and N₂O

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Roland von Glasow

- XY155 EGU2011-226
Geert C. M. Vinken, K. Folkert Boersma, Daniel J. Jacob, and Ernst W. Meijer
 Accounting for non-linear chemistry of shipping plumes in the GEOS-Chem global chemistry transport model
- XY156 EGU2011-5302
Hyun Soo Kim, Chul Han Song, Roland von Glasow, Peter Brimblecombe, Jhoon Kim, Rokjin Park, Jung Hun Woo, and Yong Hoon Kim
 A numerical study on elevated levels of HCHO within ship-plumes: Source identification and budget analysis
- XY157 EGU2011-5314
Yonghoon Kim, Hyun Soo Kim, and Chul Han Song
 Ship-plume sulfur chemistry in the ITCT 2K2 experiment
- XY158 EGU2011-10764
Niklas Berg and Johan Mellqvist
 Remote ship emission measurements of sulfur dioxide (SO₂) and nitrogen dioxide (NO₂) from airborne platforms

- XY159 EGU2011-10794
Mattia Righi, Carolin Klinger, Veronika Eyring, Johannes Hendricks, Axel Lauer, and Andreas Petzold
The climate impact of biofuels in shipping: global model studies of the aerosol indirect effect
- XY160 EGU2011-11568
Stig B. Dalsøren, Magnus S. Eide, Bjørn H. Samset, Gunnar Myhre, and Øyvind Endresen
Climate and environmental impacts of CO2 reduction from shipping using a cost-effectiveness criterion
- XY161 EGU2011-11706
Nele Veldeman, Stijn Janssen, Felix Deutsch, Kris Vanherle, Pieter Lodewijks, Jan Duerinck, and Paul Campling
Integrated Assessment of an Emission Trading Scheme to reduce emissions from international shipping and the related environmental impact over Europe
- XY162 EGU2011-11840
Samuele Masieri, Margherita Premuda, Ivan Kostadinov, Fabrizio Ravegnani, Daniele Bortoli, Andrea Petritoli, and Giorgio Giovanelli
Flow rate emission and global impact study of ships plumes in Venice lagoon area
- XY163 EGU2011-12317
Jerome Hilaire and David Lee
Towards a better representation of ship plume chemistry in a Global Chemistry-Transport Model
- XY164 EGU2011-12822
Jana Moldanova
Parameterisation of ship plumes for regional and global models

NH1.2/AS4.7/HS12.6 – Hydrometeorological modeling and Earth observations under extremes: issues of scale, dependence and robust frameworks for collective risk assessment (co-organized) – Orals

Conveners: Andras Bardossy, Douglas Cripe | Co-Conveners: Antonio Parodi, Efi Foufoula, Murugesu Sivapalan, Boyko Dodov, Giorgio Boni, Roberto Rudari

Room: 10

Chairperson: Andras Bardossy

- 08:30–08:45 EGU2011-2216
Alberto Viglione, Günter Blöschl, Murugesu Sivapalan, and Bruce Rhoads
Estimation of flood peak frequencies at river confluences
- 08:45–09:00 EGU2011-12649
Witold F. Krajewski, Ricardo Mantilla, Luciana K. Cuhna, and James A. Smith
Multi-scale Analysis of Extreme Flooding in Iowa, USA
- 09:00–09:15 EGU2011-14026
Cecilia Svensson, Caroline Keef, and Jonathan A. Tawn
Spatial dependence in floods and extreme precipitation
- 09:15–09:30 EGU2011-13430
Iouliia Tchiguirinskaia, Daniel Schertzer, Tuan Hoang, and Shaun Lovejoy
Multifractal Extremes and Adaptation of Water Management to Climate Change
- 09:30–09:45 EGU2011-6344
Florian Pappenberger
Forecast (in)consistency in a hydro-meteorological chain: Curse or blessing?
- 09:45–10:00 EGU2011-7242
Jun She
Tropical storm forecast verification using a mesoscale NWP model HIRLAM

COFFEE BREAK

Chairperson: Douglas Cripe

- 10:30–10:45 EGU2011-9940
Geraldine Wong and Lena M Tallaksen
A comparison of spatial and temporal methodologies for the analysis of European drought
- 10:45–11:00 EGU2011-12751
Giorgio Boni and the The OPERA Team
Operational flood risk monitoring and prediction systems: the experience of the OPERA project of the Italian Space Agency
- 11:00–11:15 EGU2011-14037
Stella Hubert, Guenter Strunz, Michael Nyenhuis, and Stephanie Göbel
Earth Observation contributions to Disaster Management of Floods - Status quo, gaps and ways forward

- 11:15–11:30 EGU2011-4313
John Mejia, Darko Koracin, and Benjamin Hatchett
 Impact of variable horizontal resolution of the regional WRF climate model and biases in the global climate models on precipitation simulated over the western U.S.
- 11:30–11:45 EGU2011-11980
Guillaume Thirel, Peter Salamon, Peter Burek, Milan Kalas, Vera Thiemig, and Jutta Thielen
 Use of satellite based observations in Continental Flood Alert System in Europe and Africa
- 11:45–12:00 EGU2011-11754
Nazzareno Pierdicca, Luca Pulvirenti, Marco Chini, Leila Guerriero, and Laura Candela
 Spaceborne Radar For Mapping Floods: A Pre-Operational Approach Integrating Models And Ancillary Data Applied To COSMO-SkyMed Images

NH1.2/AS4.7/HS12.6 – Hydrometeorological modeling and Earth observations under extremes: issues of scale, dependence and robust frameworks for collective risk assessment (co-organized) – Posters

Conveners: Andras Bardossy, Douglas Cripe | Co-Conveners: Antonio Parodi, Efi Foufoula, Murugesu Sivapalan, Boyko Dodov, Giorgio Boni, Roberto Rudari

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY360 EGU2011-6019
 Tatiana Ghizzoni, Giorgio Roth, and **Roberto Rudari**
 Information entropy concepts for collective flooding hazard model selection
- XY361 EGU2011-2478
Nicol Pereckova and Zdenek Macka
 Applications of hydromorphological monitoring in the assessment of channel network in the urban and suburban environment - an example from the City of Brno, Czech Republic
- XY362 EGU2011-6688
Elke Hertig and Jucundus Jacobeit
 Assessment of extreme events in the Mediterranean area
- XY363 EGU2011-9025
Sandra G. García Galiano, Juan D. Giraldo Osorio, and Claudia N. Tetay Botía
 Assessing the spatial-temporal patterns of frequency and severity of extreme rainy events under a changing climate: case study of the Segura River Basin (Spain)
- XY364 EGU2011-9822
Albert Comellas, Maria-Carmen Llasat, Luca Molini, Antonio Parodi, Franco Siccardi, and Jordi Cunillera
 Predictability and predictive ability of severe rainfall events over Catalonia for year 2008
- XY365 EGU2011-10052
Nicola Reborà, Luca Molini, Roberto Rudari, and Fabio Castelli
 An ensemble approach for spatial interpolation of precipitation fields
- XY366 EGU2011-10533
Alessandro Bonazzi, Stephen Cusack, Stephen Jewson, and Christos Mitas
 European Wind Storms: an extreme value analysis of joint wind gust measured by anemometers across major cities.
- XY368 EGU2011-10451
William Collins, Fuyu Li, Michael Wehner, David Williamson, and Jerry Olson
 Response of precipitation extremes to global warming in an aqua-planet climate model: Towards robust projection from regional to global scales
- XY369 EGU2011-2549
Sergio Rosim, Eymar Silva Sampaio Lopes, João Ricardo de Freitas Oliveira, Camilo Daleles Rennó, Alexandre Copertino Jardim, and Eric Silva Abreu
 Combining TerraHidro and SISMA DEN Open Source Systems to Warn Extreme Natural Disasters
- XY370 EGU2011-5905
Ioannis Tsanis, Ioannis Daliakopoulos, Kostas Seiradakis, and Aristeidis Koutroulis
 Improving flood risk assessment using a satellite stereo-pair high resolution DEM
- XY371 EGU2011-8994
pedro chambel-leitao, António Araujo, António Tabasco Cabezas, and Ramiro Neves
 Merging Hydrologic models and EO data for reliable information on Water - MyWater
- XY372 EGU2011-10637
Fabio Castelli, Lorenzo Campo, Francesca Caparrini, and Roberto Rudari
 Impact of LST-Based Soil Moisture Index on an Operational Flood Forecasting System
- XY373 EGU2011-11512
Mehmet Coskun and Luis Samaniego
 Trend analysis of Meteorological data in Germany

- XY374 EGU2011-11491
Giorgio Boni and the The OPERA Team
 Assessment of impact of storms at large scale: the potential of coupling modelling and remote sensing observations.
- XY375 EGU2011-11644
Mariapia Faruolo, Irina Coviello, Teodosio Lacava, Nicola Pergola, and Valerio Tramutoli
 A multi-sensor RST based approach for flooded areas detection and monitoring: the November 2010 Veneto region flood.
- XY376 EGU2011-13323
Stephan Seeling and Hugo Hellebrand
 Assessing the long-term ecohydrology evolution of a meso-scale catchment in central Europe employing a combination of different monitoring techniques
- XY377 EGU2011-14046
Simone Gabellani, Silvestro Francesco, Fabio Delogu, Giorgio Boni, and Roberto Rudari
 A Fully Distributed Model for Water Management and Flood Forecasting exploiting Satellite Observations

HS7.1/AS4.8/NH1.10/NP3.9 – Precipitation: from measurement to modelling and application in catchment hydrology (co-organized) – Orals

Convener: Remko Uijlenhoet | Co-Conveners: Alin Andrei Carsteanu, Chris Onof, Alexis Berne, Paolo Burlando, Tim Bellerby, Roberto Deidda, Giovanna Grossi, Andreas Langousis

Room: 33

Chairperson: Remko Uijlenhoet and Tim Bellerby

- 08:30–08:45 EGU2011-804
Auguste Gires, Ioulia Tchiguirinskaia, Daniel Schertzer, Christian Onof, Cedo Maksimovic, Nuno Simoes, and Shaun Lovejoy
 Quantifying the uncertainty on urban runoff associated to unmeasured small-scale rainfall variability: a comparison of two cases study
- 08:45–09:00 EGU2011-2805
Geoff Pegram, Xavi Lloret, and Daniel Sempere-Torres
 Separating signal and noise in radar-rainfall fields to generate meaningful ensembles
- 09:00–09:15 EGU2011-3138
Juan Duan, Neil McIntyre, and Christian Onof
 Statistical modelling of rainfall for drought risk assessment in southeast England
- 09:15–09:30 EGU2011-10368
Andràs Bàrdossy and Geoffrey Pegram
 Rainfall interpolation and simulation in hilly and mountainous regions using spatial copulas
- 09:30–09:45 EGU2011-13396
Jean-Marie Lepioufle and Kolbjørn Engeland
 Spatial and temporal block conditioned rainfall simulation; an application using an hourly punctual raingauges network and an instantaneous 1km²-pixel estimated precipitation from weather radar
- 09:45–10:00 EGU2011-13006
Jose Luis Salinas and Rafael Garcia Bartual
 Analysis and stochastic modelling of extreme rainfall events. Application in the spanish mediterranean region

COFFEE BREAK

Chairperson: Tim Bellerby and Remko Uijlenhoet

- 10:30–10:45 EGU2011-11093
Jose D Fuentes, Marcia S. DeLonge, Paul A. Kucera, Everette Joseph, and Seydi Ababacar Ndiaye
 Attributes of West African convective storms during 2006
- 10:45–11:00 EGU2011-6140
Sander Vandenberghe, Willem Jan Vanhaute, Karolien Scheerlinck, Christian Onof, Bernard De Baets, and Niko Verhoest
 How to improve the calibration of Bartlett-Lewis stochastic point rainfall models in order to better simulate extreme rainfall events?
- 11:00–11:15 EGU2011-5153
Seth Westra, Ashish Sharma, and Rajeshwar Mehrotra
 Continuous rainfall simulation: A regionalised non-parametric approach

- 11:15–11:30 EGU2011-5947
Robert Krier, Patrick Matgen, Klaus Görden, Laurent Pfister, Lucien Hoffmann, Stefan Uhlenbrook, Hubert Savenije, and James Kirchner
 Semi-distributed rainfall rates inferred from discharge observation networks
- 11:30–11:45 EGU2011-13384
Aart Overeem, Hidde Leijnse, and Remko Uijlenhoet
 Measuring urban rainfall using microwave links
- 11:45–12:00 EGU2011-11266
Carlo de Michele and Massimiliano Ignaccolo
 Statistical collapse of stratiform and convective drop diameter distributions at the ground

HS7.1/AS4.8/NH1.10/NP3.9 – Precipitation: from measurement to modelling and application in catchment hydrology (co-organized) – Posters

Convener: Remko Uijlenhoet | Co-Conveners: Alin Andrei Carsteanu, Chris Onof, Alexis Berne, Paolo Burlando, Tim Bellerby, Roberto Deidda, Giovanna Grossi, Andreas Langousis

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Remko Uijlenhoet and Tim Bellerby

- A367 EGU2011-374
Roberto Moncho
 A generalization of the log-logistic distribution for the probability of daily precipitation
- A368 EGU2011-1927
Renji Remesan, Tim Bellerby, Asnor Ishak, and Dawei Han
 Uncertainties in hydrological prediction using input ensembles from different cumulus parameterization schemes (CPSs)
- A369 EGU2011-2214
Brandon Parkes
 Improvements in early flood forecasting using a 1-hour gridded precipitation dataset to drive a hydrological model. A case study of the summer floods in the Upper Severn, UK
- A370 EGU2011-2548
Christopher Skinner, Helen Greatrex, Tim Bellerby, and David Grimes
 Impact of Rainfall Estimation Uncertainty on Hydrological Modelling of the Senegal River Basin
- A371 EGU2011-2747
Daniel Lindsey
 An Objective Probabilistic Prediction Product for Severe Hail Using Satellite Observations
- A372 EGU2011-3044
Hannes Müller and Uwe Haberlandt
 Effect of different temporal rainfall disaggregation methods on derived flood frequency analysis
- A373 EGU2011-5993
Ioannis Sideris, Marco Gabella, Urs Germann, Rebekka Erdin, and Christoph Frei
 Real-time radar-raingauge spatiotemporal combination in Switzerland.
- A374 EGU2011-6123
Marielle Gosset and Julien Viarre
 evaluation of satellite rainfall products used for hydrological applications in West Africa
- A375 EGU2011-6143
 Max Kigobe, Ann van Griensven, Yunqing Xuan, **Giuliano Di Baldassarre**, Neil Mc Intyre, and Howard Wheeler
 Stochastic Rainfall Modelling in the Upper Nile
- A376 EGU2011-6428
Mojca Sraj and Urska Bajc
 Calculations and analyses of systematic errors in precipitation measurements
- A377 EGU2011-7737
Maurizio Savina and Paolo Burlando
 Precipitation field driven weather radar conversion
- A378 EGU2011-7761
Ageel Bushara, Mekonnen Gebremichael, Thomas Over, Riccardo Rigon, and Christa D. Peters-Lidard
 Utility of remotely-sensed precipitation products for hydrological simulations at basin scale
- A379 EGU2011-9165
Francesco Lo Conti, Kuo-lin Hsu, Soroosh Sorooshian, and Leonardo V. Noto
 Evaluation and comparison of satellite precipitation estimates with reference to a local area
- A380 EGU2011-9438
Limin Wu, John Schaake, Julie Demargne, James Brown, and Robert Hartman
 Using the GFS Ensemble Mean to Generate Medium-range Precipitation Ensemble Forecasts for Hydrologic Ensemble Prediction

- A381 EGU2011-10423
Martinus van den Berg, Bernard de Baets, and Niko Verhoest
Copula-based downscaling of rainfall
- A382 EGU2011-10791
Fabrizio Fenicia, Laurent Pfister, Patrick Matgen, and Lucien Hoffmann
Estimating rainfall with microwave links. Insight from an experimental setup in Luxembourg-City
- A383 EGU2011-6217
Dionysia Panagoulia and Chrys Caroni
Modelling maximum monthly precipitation in temporal climate evolution
- A384 EGU2011-7379
Muhammad Rehan Anis and Michael Rode
An improved method for the temporal disaggregation of rainfall at a finer time scale
- A385 EGU2011-7861
Klaus Haslinger, Barbara Chimani, and Reinhard Boehm
Solid and Liquid Precipitation in major river catchments originating in the European Alps
- A386 EGU2011-8798
David Ian Francis Grimes, Helen Greatrex, and Tim Wheeler
Ensemble approach to disaggregation of seasonal rainfall forecasts in the context of crop yield prediction. Case study: maize yield in Ethiopia.
- A387 EGU2011-9816
Marcus Malsy, Tim aus der Beek, and Martina Flörke
Sensitivity of water availability in Central Asia with respect to various climate datasets in particular the input parameter precipitation
- A388 EGU2011-11378
Reinhard Teschl, Walter L. Randeu, and Franz Teschl
Investigating the variability of precipitation in a mountainous catchment using data-driven approaches
- A389 EGU2011-12743
Sadegh Ghazanfari, Aa Alizadeh, Aa Farid, and Mm Bannayan
Comparison the PERSIANN model with interpolation methods to estimate daily precipitation (A case study: North-Khorasan, Iran)
- A390 EGU2011-12834
Li-Pen Wang, Christian Onof, and Cedo Maksimovic
An improved discrete cascade method for sub-daily rainfall modelling
- A391 EGU2011-13482
Yisak Abdella, Kolbjørn Engeland, Jean-Marie Lepioufle, and Knut Alfredsen
Distributed modelling of catchment hydrology using radar derived precipitation
- A392 EGU2011-13640
Maurice Schmeits and Kees Kok
A comparison between raw ensemble output, (modified) Bayesian model averaging and extended logistic regression using ECMWF ensemble precipitation reforecasts
- A393 EGU2011-12262
Nan Yu, Pieter Hazenberg, Guy Delrieu, Brice Boudevillain, and Remko Uijlenhoet
The parameterization of the general raindrop size distribution by the gamma probability density function

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

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

Room: 18

Chairperson: S. Zerbini and D. Mencin

- 15:30–15:45 EGU2011-9002
Erricos C. Pavlis
GGOS Global Geodetic Networks: Their Impact on WEGENER
- 15:45–16:00 EGU2011-1795
Chopo Ma
The IVS and its impact on geodesy and geophysics
- 16:00–16:15 EGU2011-3569
Carine Bruyninx, Juliette Legrand, Nicolas Bergeot, and Eric Pottiaux
Measuring long-term ground deformations using GNSS: Experiences from the EPN
- 16:15–16:30 EGU2011-5865
Douglas Cripe
GEOSS: Observe, Share, Inform
- 16:30–16:45 EGU2011-1974
Frank Flechtner, Jens Wickert, Srinivas Bettadpur, Byron Tapley, and Mike Watkins
GRACE: A highly successful satellite mission supporting the goals of the WEGENER project

16:45–17:00 EGU2011-11427
C.k. Shum and Chungyen Kuo
 WEGENER Project After Three Decades: Regional and Global Sea-Level Rise

AS4.28 – Infrasound monitoring for atmospheric studies – Orals

Convener: Alexis Le Pichon | Co-Conveners: Láslo G. Evers, Tormod Kvaerna

Room: 8

Chairperson: n.n.

10:30–10:45 EGU2011-3763
Michael Hedlin, Catherine de Groot-Hedlin, and Kris Walker
 Studies of infrasonic propagation using dense seismic networks

10:45–11:00 EGU2011-3547
David Green, Julien Vergoz, Robin Matoza, and Alexis Le Pichon
 Acoustic Observations of Stratospheric Solar Tides: Examples from the Eruption of Eyjafjallajökull, Iceland, April-May 2010

11:00–11:15 EGU2011-1237
Christoph Pilger and Michael Bittner
 Infrasonic signatures due to severe weather in mesopause airglow observations

11:15–11:30 EGU2011-4552
Wei Su and Songyong Yuan
 The seismo-acoustic array of Tengchong in southwest of China and its record analysis

11:30–11:45 EGU2011-10441
Lars Ceranna, Alexis Le Pichon, and David Green
 On estimating the radiated source energy from remote infrasound recordings

11:45–12:00 EGU2011-11582
Jean-Marie Lalonde, Olivier Sèbe, Mathieu Landès, Robin Matoza, Alexis Le Pichon, Elisabeth Blanc, and Philippe Blanc-Benon
 Infrasound data inversion for atmospheric remote sensing

AS4.28 – Infrasound monitoring for atmospheric studies – Posters

Convener: Alexis Le Pichon | Co-Conveners: Láslo G. Evers, Tormod Kvaerna

Halls XY | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY165 EGU2011-2040
Tereza Sindelarova, Jaroslav Chum, Frantisek Hruska, and Jiri Base
 Seasonal dependence of noise level in the Czech microbarograph network

XY166 EGU2011-2204
Martin Henneton, Jean Varnier, Olaf Gainville, and François Coulouvrat
 Computational fluid dynamics simulations of infrasound generation process by meteorites

XY167 EGU2011-2544
Constantin Ionescu and Daniela Ghica
 Infrasound Events Detection Using Plostina Seismo-Acoustic Array

XY168 EGU2011-2649
Andrianiaina Tahina Rakotoarisoa, Fanomezana Randrianarinosy, Jean Bernardo Andrianaivoarisoa, Andry Harifidy Ramanantsoa, Gérard Rambolamanana, and Alexis Le Pichon
 Infrasonic study of lightning in Madagascar using I33mg data

XY169 EGU2011-3445
Mathieu Landès, Lars Ceranna, Alexis Le Pichon, and Robin Matoza
 Localization of infrasonic sources generated by the swell

XY170 EGU2011-4471
Julius Fricke, Elmer Ruigrok, Láslo Evers, Dick Simons, and Kees Wapenaar
 LAIA - A Large Aperture Infrasound Array for interferometric studies

XY171 EGU2011-5029
Steven Gibbons
 The infrasonic wavefield at regional distances from repeating seismo-acoustic events

XY172 EGU2011-5475
Il-Young Che and Geunyoung Kim
 Infrasound observation from a deep focus earthquake

XY173 EGU2011-5567
Thomas Farges and Robin Matoza
 Infrasound from lightning: 8 years of measurements in Ivory Coast

- XY174 EGU2011-11354
Pierre Gaillard, Julien Vergoz, and Alexis Le Pichon
Categorization of infrasound detections
- XY175 EGU2011-11467
Elisabeth Blanc, Alain Hauchecorne, and Michael Bittner
Synergy between infrasound, lidar and airglow layer observation networks for atmospheric studies
- XY176 EGU2011-12386
Nicolau Wallenstein, João Luís Gaspar, Alfred Kramer, Juraci Carvalho, Paola Campus, Georgios Haralabus, João Gregório and the IS42 Team
IS42 Graciosa (Azores): A new IMS certified infrasound station in the North Atlantic
- XY177 EGU2011-13633
Christophe Haynes and Christophe Millet
The Carancas meteor fall (2007): probability that the meteor fragmented before impact.
- XY178 EGU2011-13732
Abdelwaheb Agrebi and Atef Blel
Data analysis of a portable station versus permanent
- XY179 EGU2011-12044
Lars Ceranna, Alexis Le Pichon, and Julien Vergoz
Experiences made using PMCC as an infrasound signal detector

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Orals

Convener: Thorvaldur Thordarson | Co-Conveners: Susan Loughlin, Sigrun Hreinsdóttir, Halldór Björnsson, Séverine Moune

Room: 4

Chairperson: n.n.

- 13:30–13:45 EGU2011-12542
Magnus T Gudmundsson, Armann Hoskuldsson, Gudrun Larsen, Thor Thordarson, Bjorn Oddsson, Thordis Hognadóttir, Ingibjörg Jonsdóttir, Halldor Bjornsson, Nina G Petersen, and Eyjolfur Magnusson
Eyjafjallajökull April-June 2010: An explosive-mixed eruption of unusually long duration
- 13:45–14:00 EGU2011-12221
Sigurlaug Hjaltadóttir, Kristin S Vogfjörð, and Ragnar Slunga
A Seismological Image of the Eyjafjallajökull Plumbing System during 2009-2010
- 14:00–14:15 EGU2011-11656
Rikke Pedersen, Freysteinn Sigmundsson, Andrew J. Hooper, Sigrún Hreinsdóttir, Thóra Árnadóttir, Matthew J. Roberts, Páll Einarsson, Erik Sturkell, and Kurt L. Feigl
Imaging the magmatic plumbing system at Eyjafjallajökull volcano, Iceland, through 18 years of surface deformation observations
- 14:15–14:30 EGU2011-12589
Olgeir Sigmarsson
The dynamic magma mixing during the 2010 eruption of Eyjafjallajökull, Iceland.
- 14:30–14:45 EGU2011-9855
Jakob Kloeve Keiding and Olgeir Sigmarsson
Geothermobarometry of the 2010 Eyjafjallajökull eruption
- 14:45–15:00 EGU2011-4184
Séverine Moune, Olgeir Sigmarsson, Pierre Schiano, Thorvaldur Thordarson, and Chris Hayward
Volatile characterisations of Eyjafjallajökull volcano (Iceland): from the magmatic source at depth to the surface
- 15:00–15:15 EGU2011-11242
Michael Burton, Giuseppe Salerno, Alessandro La Spina, Andri Stefansson, and Hanna H. Kaasalainen
Measurements of volcanic gas emissions during the first phase of eruptive activity of Eyjafjallajökull, April 2010

Chairperson: n.n.

- 15:30–15:45 EGU2011-14165
Ármann Höskuldsson and the Eyjafjallajökull eruption Team
Eruption dynamics of the 2010 summit eruption at the Eyjafjallajökull volcano (Iceland): Magma fragmentation, tephra stratigraphy and transport
- 15:45–16:00 EGU2011-7983
Gudrun Nina Petersen, Þórður Arason, and Halldór Björnsson
Observed interaction of the Eyjafjallajökull eruption plume and the ambient atmosphere

- 16:00–16:15 EGU2011-3476
Costanza Bonadonna, Genco Riccardo, Gouhier Mathieu, Pistolesi Marco, Alfano Fabrizio, Cioni Raffaello, Hoskuldsson Armann, and Ripepe Maurizio
 Tephra sedimentation during the 2010 Eyjafjallajökull eruption (Iceland) from deposit, radar and satellite observations
- 16:15–16:30 EGU2011-11112
 Julie Calkins, Claire Natrass, Ellie Harris, Marie Detienne, Nicola Myers, Leon van den Berg, and **Pierre Delmelle**
 Environmental impacts of ash deposition following the 2010 eruption of Eyjafjallajökull volcano, Iceland
- 16:30–16:45 EGU2011-2598
Claire Horwell, Peter Baxter, Sarah Hillman, and David Damby
 Respiratory health hazard assessment of ash from the 2010 eruption of Eyjafjallajökull volcano, Iceland.
- 16:45–17:00 EGU2011-13041
Andy Russell, Rob Duller, Andy Large, Anne-Sophie Mériaux, Matthew Roberts, Stuart Dunning, Qiuhua Liang, Jonathan Carrivick, Fiona Tweed, and Málfríður Ómarsdóttir
 The sedimentary impact of jökulhlaups of contrasting rheology generated by the April 2010, Eyjafjallajökull eruption

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Posters

Convener: Thorvaldur Thordarson | Co-Conveners: Susan Loughlin, Sigrun Hreinsdóttir, Halldór Björnsson, Séverine Moune

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY378 EGU2011-12212
Thorvaldur Thordarson, Ármann Höskuldsson, Olgeir Sigmarsson, Magnús Guðmundsson, Eyjólfur Magnússon, and Freysteinn Sigmundsson
 The 20 March to 12 April basaltic Fimmvörðuháls flank eruption at Eyjafjallajökull volcano, Iceland: course of events
- XY379 EGU2011-10618
Armann Hoskuldsson, Thor Thordarson, Olgeir Sigmarsson, Magnús T Guðmundsson, Guðrún Larsen, Björn Oddsson, Eyjólfur Magnússon, and Þórdís Högnadóttir
 The Fimmvörðuháls flank eruption 2010 Iceland, complex emplacement of basaltic lava flow onto ice and snow.
- XY380 EGU2011-6792
Antonio Castro, Rocío Pedreira, and Joan Andújar
 Phase equilibria and fractionation of 2010 Eyjafjallajökull flank basaltic eruption
- XY381 EGU2011-3713
Haraldur Páll Gunnlaugsson, Kristine Albers Olsen, Sigurdur Steinthorsson, and Per Nørnberg
 Mössbauer Spectroscopy and Electron Microscope Imaging of Samples from the 2010 Flank Eruption at Eyjafjallajökull
- XY382 EGU2011-12147
 Thorvaldur Thordarson, **Chris Hayward**, Séverine Moune, Margaret Hartley, Olgeir Sigmarsson, Ármann Höskuldsson, Magnús T. Guðmundsson, and Freysteinn Sigmundsson
 The 20 March - 12 April 2010 Fimmvörðuháls eruption, Eyjafjallajökull volcano, Iceland: Volatile contents and magma degassing.
- XY383 EGU2011-1371
Andreas Stohl and the Inversion Team
 Time- and height-resolved fine ash emissions from the Eyjafjallajökull eruption
- XY384 EGU2011-11612
 Nicola Pergola, Gianluca Arcomano, Carolina Filizzola, Teodosio Lacava, Francesco Marchese, and **Valerio Tramutoli**
 Satellite monitoring of Eyjafjallajökull (Iceland) volcano by means of Robust Satellite Techniques (RST)
- XY385 EGU2011-3128
 Patrick Chazette, **Marc Bocquet**, Philippe Royer, Victor Winiarek, Jean-Christophe Raut, Philippe Labazuy, Mathieu Gouhier, Melody Lardier, and Jean-Pierre Cariou
 Lidar and modelling to study the Eyjafjallajökull ash concentrations
- XY386 EGU2011-5484
Piet Stammes, Marc Allaart, Arnoud Apituley, Dave Donovan, Marijn de Haij, Wouter Knap, Deborah Stein Zweers, Gijs Tilstra, Olaf Tuinder, and Daan Vogelesang
 Characterization of the Eyjafjallajökull volcanic ash cloud over the Netherlands from remote sensing observations

- XY387 EGU2011-4255
Ina Mattis, Albert Ansmann, Matthias Tesche, Annett Skupin, Patric Seifert, Dietrich Althausen, Holger Baars, Anja Hiebsch, Jörg Schmidt, and Ulla Wandinger
 Temporal development of the Eyjafjallajökull volcanic plume observed over Leipzig by Raman lidar and AERONET sun photometer
- XY388 EGU2011-10359
Franco Marengo, Kate Turnbull, Ben Johnson, Jim Haywood, Stuart Newman, Alan Vance, James Dorsey, and Martin Gallagher
 Airborne observations of volcanic ash in May 2010 from the FAAM research aircraft, using remote sensing and in-situ probes
- XY389 EGU2011-8223
Fei Gao, Samo Stani?, Klemen Bergant, Tanja Bolte, Franco Coren, Tingyao He, Andrej Hrabar, Ana Mladenovi?, Janja Turši?, and Darko Veberič
 Measurement Campaign of Icelandic Volcanic Ash During its Arrival to Slovenia in April 2010
- XY390 EGU2011-3496
Christian Rolf, Martina Krämer, and Cornelius Schiller
 Ash particles and ice clouds during the Eyjafjalla eruption: Lidar observations and model simulations
- XY391 EGU2011-11698
Alan Vance, Franco Marengo, Sean Milton, Kate Turnbull, Mike Bush, and Andy Bushell
 Stratosphere-Troposphere Exchange Involving the Eyjafjallajökull Volcanic Plume
- XY392 EGU2011-6512
Roland von Glasow, Alan Vance, Andrew J. S. McGonigle, Alessandro Aiuppa, Jeffrey L. Stith, and Kate Turnbull
 Strong ozone loss in atmospheric plume of Eyjafjallajökull
- XY393 EGU2011-11178
Stefano Corradini, Luca Merucci, Alessandro Piscini, and Simona Scollo
 SO₂ and ash simultaneous retrievals on 2010 Eyjafjallajökull eruption by using IR multispectral measurements. Insights into explosive volcanic processes.
- XY394 EGU2011-2115
Robin Champion, Lieven Clarisse, and Alain Bernard
 Measuring SO₂ emissions of Eyjafjallajökull with the infrared images of ASTER satellite.
- XY395 EGU2011-7838
Klaus-Peter Heue and the CARIBIC Volcano Team
 SO₂ and BrO observation in the plume of the Eyjafjallajökull volcano 2010: CARIBIC and GOME-2 retrievals

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

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

Room: 24

Chairperson: Dr. Frank Veroustraete/ Dr. Inge Jonckheere

- 13:30–13:45 EGU2011-8376
Jouni Jussila and Uwe Rascher
 Developments of Hyperspectral Remote Sensing Systems for Vegetation Research
- 13:45–14:00 EGU2011-1299
Vasileios Kalogirou, Paolo Ferrazzoli, Leila Guerriero, and Andrea Della Vecchia
 Coupling the Tor Vergata microwave scattering model with a plant architectural model
- 14:00–14:15 EGU2011-9160
Stefan Kraft, Bernardo Carnicero Dominguez, Matthias Drusch, Jean-Loup Bezy, Roland Meynart, Luis Guanter, Luis Alonso, and Jose Moreno
 Remote Sensing of Vegetation Fluorescence from Space within the ESA Earth Explorer Programme
- 14:15–14:30 EGU2011-11332
Gabriel Hmimina, Eric Dufrière, Nicolas Delpierre, and Kamel Soudani
 Tower-Based Photochemical Reflectance Index measurements to assess ecophysiological responses in a mature deciduous forest.
- 14:30–14:45 EGU2011-1437
 Malcolm Davidson, **Dirk Schuettemeyer**, Remo Bianchi, and Klaus Scipal
 Campaigns in Support of ESA'S Earth Candidate Mission Concept BIOMASS
- 14:45–15:00 EGU2011-6011
Jasper Van doninck, Jan Peters, Bernard De Baets, Eva M. De Clercq, Els Ducheyne, and Niko E.C. Verhoest
 Topographic normalization of thermal infrared data

Chairperson: Dr. Willem Verstraeten/ Dr. Wolfgang Wagner

- 15:30–15:45 EGU2011-173
Bernard Pinty, Jean-Luc Widlowski, Ioannis Andredakis, Michel Verstraete, Olivier Arino, Marco Clerici, Thomas Kaminski, and Malcolm Taberner
 Snowy backgrounds enhance the absorption of visible light in forest canopies
- 15:45–16:00 EGU2011-6710
Peter Caccetta, John Raison, Robert Waterworth, and Gary Richards
 Linking remote-sensing, ground observations and ecosystem models for improved GHG accounting in land systems
- 16:00–16:15 EGU2011-10704
Iryna Khlystova, Andreas Richter, Folkard Wittrock, Heinrich Bovensmann, John P. Burrows, Silvia Kloster, and Martin Schultz
 Emission Ratios from satellite measurements
- 16:15–16:30 EGU2011-11534
Eva Boegh and the NEU_C4 Team
 Mapping leaf nitrogen and leaf area index in European landscapes using high spatial resolution satellite data and the REGularized canopy reFLEctance (REGFLEC) model
- 16:30–16:45 EGU2011-8685
Sanna Kaasalainen, Teemu Hakala, Juha Suomalainen, and Eetu Puttonen
 Active hyperspectral LiDAR for the study of vegetation
- 16:45–17:00 EGU2011-5684
 Pasi Raumonon, **Mikko Kaasalainen**, Sanna Kaasalainen, and Harri Kaartinen
 Approximation of volume and branch size distribution of trees from laser scanner data

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

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

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

Author in Attendance: 17:30–19:00

Chairperson: Dr. Klaus Scipal

- BG20 EGU2011-11663
Klaus Scipal and the BIOMASS Mission Advisory Group Team
 Measuring biomass from space - ESA'S BIOMASS Earth Explorer mission candidate
- BG21 EGU2011-12531
Temilola Fatoyinbo, Rafael Rincon, Guoqing Sun, and K. Jon Ranson
 EcoSAR: a P-band Interferometric Synthetic Aperture Radar for Forest structure and biomass measurements
- BG22 EGU2011-3288
Patrick Chazette, Kamel Soudani, Philippe Royer, Joseph Sanak, Melody Lardier, Tristan Allouis, Marc Bouvier, and Sylvie Durrieu
 Forest canopy attributes derived from airborne lidar above the Barbeau/Fontainebleau forest
- BG23 EGU2011-8801
Brenner Silva, Lukas Lehnert, Andreas Fries, and Jörg Bendix
 Monitoring vegetation growth in an experimental plot using balloon-air-photography
- BG24 EGU2011-6244
 Dimitry Van der Zande, **Willem W. Verstraeten**, and Pol Coppin
 A 3D model of the light interception in heterogeneous forest canopies
- BG25 EGU2011-13990
 Ali Reza Khavaninzadeh, **Frank Veroustraete**, Karen Wuyts, Fatima Kardel, and Roeland Samson
 Dorsiventral leaf reflectance properties of *Carpinus betulus* L.: An indicator of urban habitat quality
- BG26 EGU2011-6184
Willem Verstraeten, Miguel Barrios, Piet Maes, Jan Clement, Jean-Marie Aerts, Marc Van Ranst, and Pol Coppin
 Relating the satellite derived EVI and meteorology with the incidence of Lyme Disease in Belgium
- BG27 EGU2011-6115
 Miguel Barrios, **Willem W. Verstraeten**, Piet Maes, Jan Clement, Jean-Marie Aerts, Marc Van Ranst, and Pol Coppin
 Spatio-temporal patterns of Nephropathia epidemica and Lyme disease incidence in Belgium
- BG28 EGU2011-10677
Karol Szymankiewicz, Jaroslaw Zawadzki, and Karol Przewdziecki
 Forest type inventory using MODIS and MERIS remote sensing images. Study case: Janowskie forest
- BG29 EGU2011-7566
Angela Harris and Jaduandan Dash
 A new approach for estimating northern peatland gross primary productivity using a satellite sensor derived chlorophyll index

- BG30 EGU2011-9455
Karsten Kotte and Fabian Löw
Rapid change detection and salt classification as a promising tool to estimate emission of naturally produced organohalogens from saline ecosystems
- BG31 EGU2011-1729
Amani Al Abri and Ray N. Merton
use of Hyperspectral imagery for mapping and monitoring coral reefs of Galapagos Island, Ecuador
- BG32 EGU2011-763
Alireza Sadeghi, Tilman Dinter, Marco Vountas, and Astrid Bracher
Remote sensing of coccolithophore blooms in selected oceanic regions using PhytoDOAS method applied to hyper-spectral satellite data
- BG33 EGU2011-7369
Meiting Hou, Shunqian Zhang, Xiaodong Yan, and Qingtao Qing
Remote sensing detection of droughts and impact assessment based on temperature vegetation dryness index: A case study in Sichuan province, China
- BG34 EGU2011-13684
Frank Veroustraete, Willem W. Verstraeten, Qin Li, Chen Xi, Anming Bao, Qinghan Dong, Tie Liu, and Patrick Willems
Soil Moisture Content Retrieval based on Apparent Thermal Inertia for the Xinjiang province in China
- BG35 EGU2011-128
Armi May Torrechilla-Guzman
Use of Geospatial Technologies in the Assessment of Coral Reefs and Abalone Distribution in Sagay Marine Reserve, Central Philippines
- BG36 EGU2011-13303
Tiziana Simoniello, Maria Lanfredi, Rosa Coppola, Vito Imbrenda, and Maria Macchiato
Estimation of persistence properties of vegetation activity trends at regional scale
- BG37 EGU2011-9251
Daniel Doktor, Arlena Brosinsky, Angela Lausch, and Ines Merbach
Comparison of imaging and non-imaging hyperspectral sensors observing vegetation in the laboratory
- BG38 EGU2011-7407
Inge Jonckheere, Danae Maniatis, and Danilo Mollicone
Misrepresenting REDD+ to promote specific technological RS options

GI-3 – Atmospheric and meteorological instrumentation (co-listed) – Orals

Convener: Jothiram Vivekanandan | Co-Conveners: David Parsons, Mike Rose, Christoph Waldmann

Room: 42

Chairperson: Mike Rose

- 15:30–15:45 EGU2011-5995
Marie-Noëlle Bouin, Dominique Legain, Olivier Traullé, Sophie Belamari, Annie Fiandrino, Franck Lagarde, Joël Barrié, Eric Moulin, and Gilles Bouhours
Scintillometry: a new tool to retrieve sensible heat fluxes over sea and lakes
- 15:45–16:00 EGU2011-6219
Dominik Michel, Regula Gehrig, Mathias Rotach, and Roland Vogt
Experimental investigation of birch pollen emissions (MicroPoem) and the influence of sensor orientation and meteorological factors on the inlet sampling characteristics of volumetric bioaerosol samplers
- 16:00–16:15 EGU2011-7890
Wesley Sluis, Marc Allaart, Ankie Piters, and Lou Gast
The nitrogen dioxide sonde
- 16:15–16:30 EGU2011-10173
Chris Rella, Colm Sweeney, Wade McGillis, Anna Karion, and Eric Crosson
Evaluation of the G2301-f Picarro methane and carbon dioxide flux analyzer for micrometeorological applications*
- 16:30–16:45 EGU2011-7990
J?nis Pu??te, Sven Kühn, Tim Deutschmann, Steffen Beirle, Patrick Jöckel, Steffen Dörner, and Thomas Wagner
Improving 2D tomography for trace gas retrievals combining SCIAMACHY limb and nadir measurements
- 16:45–17:00 EGU2011-8718
Gerrit Maschwitz, Ulrich Löhnert, Susanne Crewell, Thomas Rose, and David D. Turner
Investigation of gas absorption models from 22 to 183 GHz observed at low water vapor concentrations and 530 hPa in the Atacama Desert in Chile
- 17:00–17:15 EGU2011-8509
J. (Vivek) Vivekanandan, Eric Loew, Scott Spuler, Bruce Morley, Wen-Chau Lee, and Edwin Eloranta
Airborne Cloud Radar and Lidar for Sensing Aerosol and Clouds

GI-3 – Atmospheric and meteorological instrumentation (co-listed) – Posters

Convener: Jothiram Vivekanandan | Co-Conveners: David Parsons, Mike Rose, Christoph Waldmann

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Christopher Waldmann

- A78 EGU2011-11
George Burba, Jason Hupp, Dayle McDermitt, and Robert Eckles
Field examination of low temperature control setting for mediating surface heating effect in open-path flux measurements under cold conditions
- A79 EGU2011-12
George Burba, Andres Schmidt, Russell Scott, Gerardo Fratini, James Kathilankal, Beverly Law, Dayle McDermitt, and Chad Hanson
Comparison of CO₂ and H₂O eddy fluxes derived from density and from mixing ratio measured by an enclosed gas analyzer
- A80 EGU2011-2845
Yung-Yao Lan, Ben-Jei Tsuang, Yu Chi Lin, Mao-Lin Shen, and Sheng Fong Lin
How to prevent the interference of ship itself exhaust emissions when measurement air pollutants over the South China Sea during 2010
- A81 EGU2011-5333
Jeonghoon Lee
A Mach Zehnder Interferometer as a Tool for Measuring Aerosol Light Absorption
- A82 EGU2011-8634
Hans-Jürg Jost, James Scherer, and Joshua Paul
Measurements of carbon monoxide and methane at ppb level using Mid-IR Laser based sensor
- A83 EGU2011-9586
Min-Suk Bae, James Schwab, Wei-Nai Chen, Brian Frank, Aaron Pulaski, Min-Hwa Lim, Ji-Ah Kim, and Kenneth Demerjian
Thermal Optical Detection of Controlled Combustion Aerosol with a Carbon Analyzer
- A84 EGU2011-11363
Felix Herma, Jochen Seidel, and András Bárdossy
Measurement of temperature and humidity profiles on a cable car as a tool for the determination of atmospheric stability
- A85 EGU2011-12365
Neil Humpage, John Remedios, Alex Wishart, Thomas McCoy, Hugh Mortimer, Kevin James, and Clive Arthurs
TIDAS-SPU: Development and testing of a system for infrared FTS imaging of the atmosphere
- A86 EGU2011-12862
Dominique Lambert and the CORSiCA Team
CORSiCA: a Mediterranean atmospheric and oceanographic observatory in Corsica within the framework of HyMeX and ChArMEx
- A87 EGU2011-13116
Cecilia Tirelli, Tatiana Di Iorio, Marco Cacciani, Alcide di Sarra, Virginia Ciardini, and Daniele Fuà
A novel MFRSR radiometer calibration approach for accurate aerosol optical depth retrieval: application to urban and maritime test sites.
- A88 EGU2011-13376
Gloria Jacobson, Chris Rella, and Eric Crosson
Measuring CO, CH₄, CO₂ & H₂O Simultaneously; Using New CM-CRDS Technology to Characterize Urban Plumes & the Well-Mixed Atmosphere
- A89 EGU2011-1239
Juan Carlos Gómez Martín, Janis Blahins, Uldis Gross, Trevor Ingham, Andrew Goddard, Anoop Sharad Mahajan, Arnolds Ubelis, and Alfonso Saiz-López
ROFLEX: Resonance and Off-Resonance Fluorescence by Lamp Excitation for in situ detection of atomic and molecular iodine.
- A90 EGU2011-14212
Julia Remmers, Steffen Beirle, Sven Krautwurst, Kornelia Mies, Reza Shaiganfar, and Thomas Wagner
First results from novel 4-azimuth MAX-DOAS measurements in Mainz, Germany

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Tobias Sauter

- XY524 EGU2011-1174
amadou Idrissa bokoye
Assessment of the influence of the calibration period choice on empirical statistical downscaling modeling
- XY525 EGU2011-4753
Pascal Horton, Michel Jaboyedoff, and Charles Obled
The Analogs method in the framework of severe rainfall forecasting in the Swiss Alps
- XY526 EGU2011-4806
Jiri Miksovsky, Petr Stepanek, Ales Farda, and Michal Belda
Inter-variable relationships in the outputs of dynamical and statistical downscaling models
- XY527 EGU2011-5500
Alexandru Dumitrescu, **Aristita Busuioc**, Baci Madalina, Sorin Cheval, and Liana Cazacioc
ENSEMBLE RCM performance in reproducing temperature and precipitation regime in Romania. Application for Banat and Oltenia Plains.
- XY528 EGU2011-7632
Douglas Maraun
How robust is bias correction under climate change? Assessing the direct approach for temperature and precipitation in a pseudo reality ?
- XY529 EGU2011-7699
Douglas Maraun, Fredrik Wetterhall, Martin Widmann, Sven Kotlarski, and Erika Coppola
VALUE - A European wide network for the validation and development of downscaling methods
- XY530 EGU2011-8659
Anahita Amiri Farahani, Douglas Maraun, and Juerg Luterbacher
Large-scale atmospheric circulation characteristics and their relations to local daily precipitation extremes in Hesse, central Germany
- XY531 EGU2011-8668
Bruno Emanuela, Portoghese Ivan, Guyennon Nicolas, Iacobellis Vito, and Vurro Michele
Stochastic rainfall scenarios for hydrological impact studies
- XY532 EGU2011-9208
Aristita Busuioc, Alexandru Dumitrescu, Madalina Baci, Liana Cazacioc, and Sorin Cheval
Estimation of changes in monthly temperature and precipitation over the Banat and Oltenia Plains in Romania. Comparison between statistical and dynamical downscaling techniques
- XY533 EGU2011-9216
Marlis Hofer, Ben Marzeion, and Thomas Mölg
Skill assessment of reanalysis data for local-scale, daily air temperature on a tropical, glaciated mountain range (Peru)
- XY534 EGU2011-9536
Martin Dubrovsky, Martin Hirschi, and Christoph Spirig
HOWGH: an hourly weather generator for pests modeling in present and future climates
- XY535 EGU2011-10037
Laura Mariotti, Erika Coppola, M.Bamba Sylla, Filippo Giorgi, and Claudio Piani
Regional climate model simulation of projected 21st century climate change over an all-Africa domain: Comparison analysis of nested and driving model results.
- XY536 EGU2011-10522
Claudio Piani and Jan Haerter
Grid point bias correction of climate models: remaining problems and suggested solutions.
- XY537 EGU2011-10693
Rabea Haas and **Kai Born**
Probabilistic Downscaling of Precipitation Data in a Subtropical Mountain Area: A two-step approach
- XY538 EGU2011-11796
Christoph Matulla, Claudia Springer, Emma Watson, Sebastian Wagner, Wolfgang Schöner, and Reinhold Steinacker
Downscaled GCM projections of winter and summer mass balance for Central European glaciers (2000-2100) from ensemble simulations with ECHAM5- MPIOM
- XY539 EGU2011-11961
Marco Turco, Pere Quintana Seguí, Maria-Carmen Llasat, Sixto Herrera, and José Manuel Gutiérrez
The analog method as a MOS-like downscaling for ENSEMBLES RCM-precipitation: application over Spain
- XY540 EGU2011-12218
Michaela Bray, Dawei Han, and Roger Falconer
Comparative Study of Meso-Scale Numerical Weather Models for Water System Analysis
- XY541 EGU2011-13501
Douglas Maraun and the Review Team
Precipitation Downscaling under Climate Change
- XY542 EGU2011-13807
Cui Chen, Jan Haerter, Stefan Hagemann, and **Claudio Piani**
A comparative study of uncertainty, originating from bias correction and other sources, in scenario discharge time series

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

Convener: Reik Donner | Co-Conveners: Susana Barbosa

Room: 13

Chairperson: Reik Donner, Susana Barbosa

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

COFFEE BREAK

Chairperson: Reik Donner, Susana Barbosa

- 10:30–10:45 EGU2011-6440
Andreas Groth and Michael Ghil
Robust identification of phase synchronization clusters via multivariate singular spectrum analysis
- 10:45–11:00 EGU2011-4367
Nishant Malik, Yong Zou, Norbert Marwan, and Jürgen Kurths
Employing nonlinear similarities to identify distinct dynamical regimes in short palaeo records
- 11:00–11:15 EGU2011-8408
Jobst Heitzig and Jakob Runge
Entropy train diagrams for information-based measures of statistical association
- 11:15–11:30 EGU2011-8056
Jin Chen, Marion Jegen-Kulcsar, Max Moorkamp, and Bjoern Heincke
Using Empirical Mode Decomposition (EMD) for the processing of marine MT data
- 11:30–11:45 EGU2011-4493
Mahmoud El Araby, Noelle Odling, and Roger Clark
Borehole water level response to barometric pressure fluctuations as an indicator of semi confined aquifer vulnerability: application to the East Yorkshire Chalk aquifer, UK
- 11:45–12:00 EGU2011-10331
Sylvain Mangiarotti, Laurent Drapeau, Raphaël Coudret, and Lionel Jarlan
Low-dimensional modeling of the dynamics of rainfed wheat in semi-arid region of Settat (Morocco), from NDVI satellite data

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

Convener: Reik Donner | Co-Conveners: Susana Barbosa

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Norbert Marwan

- XY543 EGU2011-13461
Sarah Hallerberg, Alexander Ruzmaikin, and Joan Feynman
Can high-energy proton events in solar wind be predicted via classification of precursory structures?

- XY544 EGU2011-5242
Alejandro Ramírez-Rojas and Elsa Leticia Flores-Marquez
Non-extensivity analysis of seismicity occurred within four subduction regions in Mexico.
- XY545 EGU2011-5779
Nasim Karamzadeh, Peter Voss, Gholam Javan Doloei, and Alireza Moghaddamjoo
Local Earthquake Onset Detection Based on Short Time Fourier Transform
- XY546 EGU2011-8942
Octavian G. Dulu and Nelida Florea
19 years of continuous observation of Radon and Thoron emissions: a Time Series Analysis
- XY547 EGU2011-13643
Susana Barbosa, Hovav Zafir, Gideon Steinitz, Uri Malik, and Oksana Piatibratova
Scale-based analysis of simultaneous ^{222}Rn and ^{220}Rn particles time series from subsurface radon
- XY548 EGU2011-13660
Manuel Scotto, Susana Barbosa, and Andres Alonso
Clustering analysis of air temperature time series over Europe: quantile regression approach
- XY549 EGU2011-1985
António R. Tomé and Pedro M. A. Miranda
Piecewise continuous trends of time series
- XY550 EGU2011-14013
Reik Donner and Marieke Lewanzik
Nonparametric quantile regression for assessing the nonstationarity of extreme values in geoscientific time series
- XY551 EGU2011-13911
Reik Donner and Maria Koch
Linear and nonlinear spatio-temporal dependences of precipitation and river runoffs in a catchment
- XY552 EGU2011-8392
Carlos Pires
Estimation of Mutual Information from Maximum Entropy distributions and its application to geophysical time series
- XY553 EGU2011-11552
Jakob Runge, Jobst Heitzig, and Jürgen Kurths
Information-theoretic methods to find possible causalities and relevant time lags between multiple time series
- XY554 EGU2011-4516
Robin Crockett
Innate Cycle Correlation.
- XY555 EGU2011-10681
Elena Szolgayova
Modelling and forecasting daily river discharge considering autoregressive heteroscedasticity
- XY556 EGU2011-2149
Xavier Lana, August Burgueño, Dolores Martinez, and Carina Serra
NONLINEAR ANALYSIS OF THE NORTH ATLANTIC (NAO), ATLANTIC MULTIDECADAL (AMO) AND WESTERN MEDITERRANEAN (WeMO) OSCILLATIONS FOR THE COMMON PERIOD 1856-2009
- XY557 EGU2011-5014
Kreso Pandzic and Tanja Likso
Comparing the Palmer Drought Index and the Standardized Precipitation Index for Pannonian Part of Croatia
- XY558 EGU2011-10210
Tamara Shulgina, Elena Genina, and Evgeny Gordov
Selection of a dataset to characterize climate dynamics in Siberia
- XY559 EGU2011-2274
Michael Friedel and Keith Long
A data-driven economic filter for mineral resource assessments

Tuesday, 05 April

AS1.3 – Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (General Session) – Orals

Convener: Silas Michaelides | Co-Conveners: Vincenzo Levizzani, Arthur Hou, Kenji Nakamura

Room: 14

Chairperson: S.Michaelides, A. Becker,

- 15:30–15:45 EGU2011-8293
Kurtulus Ozturk, Ali Tokay, and Paul G. Bashor
 An experimental study of small-scale variability of rainfall
- 15:45–16:00 EGU2011-11240
Christian Klepp, Karl Bumke, Stephan Bakan, and Axel Andersson
 Precipitation Ground Validation over the Oceans
- 16:00–16:15 EGU2011-6166
Bahjat Alhammoud, Chantal Claud, Beatriz M. Funatsu, Karine Beranger, and Jean-Pierre Chaboureau
 Moderate and heavy precipitation 2001-2010 climatology over the European-Mediterranean region: an inter-comparison of several satellite observational data sets and atmospheric reanalyses
- 16:15–16:30 EGU2011-3186
Andreas Becker, Udo Schneider, Anja Meyer-Christoffer, Markus Ziese, Peter Finger, and Bruno Rudolf
 The Global Precipitation Climatology Centre serving the hydro-climatology community
- 16:30–16:45 EGU2011-1809
Pingping Xie, Soo-Hyun Yoo, Robert Joyce, and Yelena Yarosh
 Bias-Corrected CMORPH: A 13-Year Analysis of High-Resolution Global Precipitation
- 16:45–17:00 EGU2011-5375
Munehisa Yamamoto, Atsushi Higuchi, and Masamitsu Hayasaki
 Characteristics of cloud/precipitation distribution revealed by Cloudsat data

AS1.3 – Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (General Session) – Posters

Convener: Silas Michaelides | Co-Conveners: Vincenzo Levizzani, Arthur Hou, Kenji Nakamura

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: V.Bliznak, M.Ziese, P.Nastos

- XY1 EGU2011-13746
Diofantos Hadjimitsis and the AIRSPACE Project Team
 Air Pollution Monitoring from Space in Cyprus - The 'AIRSPACE' Project
- XY2 EGU2011-1508
Kenji Nakamura, Masanori Nishikawa, Haruya Minda, Shuji Shimizu, Katsuhiko Nakagawa, and Hiroshi Hanado
 Dual Ka-band radar experiment for GPM DPR algorithm development
- XY3 EGU2011-1633
Grant Petty
 Locally optimized passive microwave detection of precipitation over heterogenous surfaces
- XY4 EGU2011-1682
Fumie Furuzawa, Hirohiko Masunaga, and Kenji Nakamura
 Experiment of Rain Retrieval over Land Using Surface Emissivity Map Derived from TRMM TMI and JRA25 (II)
- XY5 EGU2011-1716
Vojtech Bliznak and Zbynek Sokol
 The exploitation of Convective Rainfall Rate algorithm from SAF NWC for the area of the Czech Republic
- XY6 EGU2011-2258
Rebekka Erdin, Christoph Frei, and Hans R. Künsch
 Geostatistical combination of radar and rain gauges - does data transformation improve uncertainty estimates?
- XY7 EGU2011-2401
Toshihisa Matsui, Takamichi Iguchi, Xiaowen Li, and Wei-Kuo Tao
 Synthetic GPM Simulator Development using GV measurements: Current Status
- XY8 EGU2011-2585
Sukumaran Sandeep and Frode Stordal
 Recent Changes in the Wet and Dry Patterns Over the Tropics
- XY9 EGU2011-2656
 Tayeb Raziei, Abbas Mofidi, **João A. Santos**, and Isabella Bordi
 Seasonal regimes of daily precipitation in Iran

- XY10 EGU2011-2659
Tim Bellerby
Probabilistic Interpolation of Multiplatform Microwave Satellite Rainfall Estimates
- XY11 EGU2011-2746
Carina Serra de Larrocha, M. Dolores Martínez Santafé, Xavier Lana Pons, and Augusto Burgueño Rivero
Trends of dry spells in Europe (1951-2000)
- XY12 EGU2011-3259
Markus Ziese, Udo Schneider, Anja Meyer-Christoffer, Peter Finger, Andreas Becker, and Bruno Rudolf
Gridded analysis products provided by the Global Precipitation Climatology Centre (GPCC)
- XY13 EGU2011-3335
Udo Schneider, Meyer-Christoffer Anja, Ziese Markus, Finger Peter, Becker Andreas, and Rudolf Bruno
GPCC's data base and quality-control for the new gridded global precipitation analyses
- XY14 EGU2011-3746
Carlos Frederico Bastarz, Luis Gustavo de Goncalves, and Joao Gerd Zell de Matos
Spatiotemporal Variability of Precipitation and Modeled Soil Moisture in South America
- XY15 EGU2011-3761
Joao Gerd Zell de Mattos, Luis Gustavo de Goncalves, and Carlos Frederico Bastarz
Drought Characterization over South America within the Recent Observational Record
- XY16 EGU2011-3813
Jainn Shi, **Wei-Kuo Tao**, Toshihisa Matsui, Arthur Hou, Stephan Lang, and Christa Peters-Lidard
WRF simulations of snow storms: sensitivity tests of microphysics schemes and initial conditions, and the comparison to an array of different observations.
- XY17 EGU2011-3818
Takamichi Iguchi, Toshihisa Matsui, Xiaowen Li, Jainn. J. Shi, and Wei-Kuo Tao
Numerical experiment of lake-effect snowstorm in C3VP campaign using the WRF model coupled with spectral bin microphysics
- XY18 EGU2011-4006
Tieh Yong Koh, Chee Kiat Teo, Chun Fung Lo, and Bhuwan Bhatt
Principal Component Analysis of observed and modelled diurnal rainfall in the Maritime Continent
- XY19 EGU2011-4432
Olga Zolina, Clemens Simmer, **Pavel Shabanov**, and Sergey Gulev
New high resolution gridded regional daily precipitation data set: first results from STAMMEX project
- XY20 EGU2011-4805
Nobuyuki Utsumi, Taikan Oki, Shinta Seto, Shinjiro Kanae, and Eduardo Eiji Maeda
Relationships between extreme daily precipitation intensity and temperature over the world based on in-situ observation data
- XY21 EGU2011-5214
Ana Nunes and Isimar de Azevedo Santos
A Reconstruction of South American Hydroclimatology
- XY22 EGU2011-5256
Chung-Chieh Wang, Hung-Chi Kuo, and Yu-Han Chen
Effects of Asymmetrical Latent Heating on Typhoon Movement Crossing Taiwan: Morakot (2009) and Fanapi (2010)
- XY23 EGU2011-5431
Ana M. Ruiz Leo, Sara Queralt, and Gregorio Maqueda
Comparison between Precipitation Components Trends in two zones of Spain.
- XY24 EGU2011-5946
Zacharov Petr and Rezacova Daniela
Spatial QPF verification of the forecasts produced by ALADIN model
- XY25 EGU2011-14142
Diofantos Hadjimitsis, Dimitris Alexakis, **Silas Michaelides**, Adrianos Retalis, Ioannis Tsanis, Charalambos Demetriou, Athos Agapiou, Kyriacos Themistocleous, Stelios Pashiardis, and Filippos Tymvios
SATFLOOD project: An integrated use of satellite remote sensing and hydraulic modeling for flood risk assessment at catchment scale in Cyprus
- XY26 EGU2011-6050
Reinhard Schiemann, Marie-Estelle Demory, Matthew Mizielski, Malcolm Roberts, Len Shaffrey, and Pier Luigi Vidale
The present-day precipitation climate in a series of GCM experiments at different horizontal resolution
- XY27 EGU2011-6313
Tianbao Zhao
Evaluation of TRMM 3B42 Products Using a New Gauge-Based Analysis of Daily Precipitation over China
- XY28 EGU2011-6755
Jean-Pierre Chaboureau and Hannah Clark
Verification of precipitation forecasts over the Mediterranean with satellite observations

- XY29 EGU2011-7016
Panagiotis T. Nastos, Athanasios G. Paliatsos, and Constantine M. Philandras
 The impact of particulate matter on the precipitation in Athens, Greece
- XY30 EGU2011-7134
Uwe Pfeifroth, Bodo Ahrens, Richard Müller, and Jennifer Lenhardt
 A new global precipitation dataset for climate monitoring based on rain-gauge and satellite observations
- XY31 EGU2011-7183
Panagiotis T. Nastos, John Kapsomenakis, and Kostas C. Douvis
 Comparison of satellite precipitation extremes from TRMM 3B42 Products with high-resolution gridded data set (E-OBS dataset) over Mediterranean region
- XY32 EGU2011-7494
Susanne Hipp, Uwe Siart, Christian Chwala, Harald Kunstmann, and Thomas Eibert
 Rainfall Noise Modeling for Sensing the Atmosphere by Microwaves
- XY33 EGU2011-7647
Maurizio Savina and Paolo Burlando
 Precipitation measurements in the Alpine environment by a cost-effective X-band weather radar
- XY34 EGU2011-7684
Jan-Bernd Schröder, Ali Tokay, Clemens Simmer, and Paul G. Bashor
 An Experimental Study of the Small-Scale Variability of Raindrop Size Distribution
- XY35 EGU2011-7732
Christian Chwala, Harald Kunstmann, Wei Qui, Susanne Hipp, Uwe Siart, Jörg Seltmann, Martin Pohl, Alexander Bradt, and Jürgen Fritz
 Wet/dry-estimation algorithm for commercial backhaul link attenuation data to derive precipitation intensity in alpine terrain

AS1.11 – Dynamical coupling between the stratosphere and the troposphere – Orals

Convener: Thomas Reichler | Co-Conveners: Olivia Martius, Bo Christiansen

Room: 8

Chairperson: Bo Christiansen

- 15:30–15:45 EGU2011-674
Blanca Ayarzagüena, Ulrike Langematz, Anne Kubin, Janna Abalichin, and Encarna Serrano
 Will climate change affect future major stratospheric sudden warmings?
- 15:45–16:00 EGU2011-5292
Lon Hood and Boris Soukharev
 Stratospheric Response to 11-Year Solar Forcing: Evidence for Coupling to the Troposphere-Ocean Response
- 16:00–16:15 EGU2011-10122
Isabel Zubiaurre and Natalia Calvo
 ENSO Modoki signal in the stratosphere
- 16:15–16:30 EGU2011-9120
Lawrence Mudryk and Paul Kushner
 Sources of Annular Mode Timescales
- 16:30–16:45 EGU2011-8063
Hylke de Vries and Wim Verkley
 Dynamics of stratosphere troposphere singular vectors
- 16:45–17:00 EGU2011-11409
Maarten Ambaum and Yvonne Hinssen
 Relation between the 100 hPa heat flux and stratospheric potential vorticity

AS1.11 – Dynamical coupling between the stratosphere and the troposphere – Posters

Convener: Thomas Reichler | Co-Conveners: Olivia Martius, Bo Christiansen

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bo Christiansen

- XY36 EGU2011-1129
Margaret Hurwitz, Chaim Garfinkel, Paul Newman, Luke Oman, and In-Sun Song
 Stratospheric Response to La Niña in the GEOS CCM
- XY37 EGU2011-1776
Judah Cohen and Justin Jones
 Tropospheric precursors and stratospheric warmings

- XY38 EGU2011-5811
Shuting Yang and **Bo Christiansen**
Influence of stratospheric dynamics on the extra-tropical circulation: Comparison of High-top/Low-top versions of a climate model
- XY39 EGU2011-6578
Pauline Maury and François Lott
Impacts of the convection parameterization scheme on the Stratospheric Equatorial waves simulated by the GCM LMDz.
- XY40 EGU2011-8330
Miguel Gómez-Escolar, Thomas Flannaghan, Stephan Fueglistaler, and Natalia Calvo
Structure of the zonal mean northern hemispheric tropopause height variability
- XY41 EGU2011-10108
Janna Abalichin, Anne Kubin, Ulrike Langematz, and Patrick Joeckel
Modulation of the Stratosphere-Troposphere Coupling in the Southern Hemisphere by Solar and Ozone Effects
- XY42 EGU2011-10608
Andrew Orr, Thomas Bracegirdle, Scott Hosking, Thomas Jung, Joanna Haigh, and Tony Phillips
A dynamical mechanism for Southern Hemisphere climate change due to the ozone hole
- XY43 EGU2011-10660
Marine Bonazzola, Geneviève Sèze, and Bernard Legras
Transport of water vapour at the tropical tropopause
- XY44 EGU2011-10933
Felix Bunzel and Hauke Schmidt
Planetary waves and their role in stratosphere-troposphere coupling under a changing climate - simulations with ECHAM6
- XY45 EGU2011-11126
Ingo Kirchner, Axel Gabriel, Hans-F. Graf, Ines Hoeschel, and Dieter H.W. Peters
Effects of asymmetric ozone changes in a coupled ocean-middle-atmosphere-model under present day conditions

AS1.12 – Dynamics and chemistry of the upper troposphere and stratosphere: observations and models – Orals

Conveners: Peter Braesicke, Peter Hoor | Co-Conveners: Thomas Birner, Harald Boenisch, Ulrike Langematz, Johannes Laube, Cornelius Schiller

Room: 14

Chairperson: Harald Boenisch

- 08:30–09:00 EGU2011-3673
Andrew Gettelman, Peter Hoor, Laura Pan, William Randel, Michaela Hegglin, and Thomas Birner
An integral view of Extratropical Upper Troposphere / Lower Stratosphere Chemistry, Dynamics and Transport
- 09:00–09:15 EGU2011-13597
John Gille, Svetlana Karol, Valery Yudin, Lesley Smith, Douglas Kinnison, and Bruno Nardi
Seasonal Variation of Effective Diffusivity on Isentropic Surfaces in the UTLS and the Annual March of Stratosphere-Troposphere Exchange of Ozone
- 09:15–09:30 EGU2011-8629
Tanya Phillips and John Gille
Analysis of seasonal and regional variability in double tropopause activity investigated using HIRDLS observations and re-analysis data
- 09:30–09:45 EGU2011-717
Katja Weigel, Alexei Rozanov, Mark Weber, Heinrich Bovensmann, Gabriele Stiller, and John P. Burrows
Time series of water vapor in the upper troposphere and lower stratosphere from SCIAMACHY limb measurements
- 09:45–10:00 EGU2011-13221
Maximilien Bolot, Bernard Legras, and Elisabeth Moyer
Meaning of the D/H ratio of vapor in the tropical UTLS

COFFEE BREAK

Chairperson: Peter Hoor

- 10:30–10:45 EGU2011-6107
Stephan Borrmann, Ralf Weigel, Jan Kazil, Andreas Minikin, Andreas Stohl, James C. Wilson, Daniel Kunkel, Marian de Reus, Wiebke Frey, Edward R. Lovejoy and the C. Michael Volk (6), Silvia Viciani (7), Francesco Cairo (8), Kathy S. Law (9), Joachim Curtius (1,10) Team
 The role of clouds and of neutral as well as ion induced pathway for the new particle formation in the tropical upper troposphere: In-situ measurements from continental South America and West Africa
- 10:45–11:00 EGU2011-2640
Felix Ploeger, Paul Konopka, Stephan Fueglistaler, Rolf Müller, and Martin Riese
 Impact of quasi-horizontal transport from the extratropics (in-mixing) on the seasonality of the trace gas composition in the TTL
- 11:00–11:15 EGU2011-10267
Robyn Schofield, Stephan Fueglistaler, Ingo Wohltmann, and Markus Rex
 The implications of TTL transport processes for trace gas delivery to the stratosphere
- 11:15–11:30 EGU2011-10750
Johannes Laube, Paul Fraser, Carl A. M. Brenninkmeijer, Tanja J. Schuck, Michel Bolder, Thomas Röckmann, David E. Oram, and William T. Sturges
 Additional contributors to stratospheric ozone depletion
- 11:30–11:45 EGU2011-7629
Steffen Dörner, Sven Kühl, Janis Pukite, Patrick Jöckel, Marcel Dorf, and Thomas Wagner
 Eight Years of Stratospheric BrO and NO₂ Profiles from SCIAMACHY Compared to ECHAM5/MESy2 Atmospheric Chemistry (EMAC) Simulations
- 11:45–12:00 EGU2011-2502
Christina Schnadt Poberaj, Johannes Staehelin, and Dominik Brunner
 Missing stratospheric ozone depletion at Southern Hemisphere midlatitudes after Mt. Pinatubo

LUNCH BREAK

Chairperson: Peter Braesicke

- 13:30–13:45 EGU2011-611
Stefanie Meul, Sophie Oberländer, Ulrike Langematz, and Volker Grewe
 The evolution of stratospheric ozone in sensitivity studies with the Chemistry-Climate-Model EMAC-FUB
- 13:45–14:00 EGU2011-11585
Gregor Kieseewetter, Bjoern-Martin Sinnhuber, Mark Weber, and John P. Burrows
 Attribution of modelled column ozone trends to chemistry and dynamics: Signs of recovery?
- 14:00–14:15 EGU2011-9604
Jane Liu, David Tarasick, Vitali Fioletov, Chris McLinden, Guiping Liu, Christopher Sioris, Huixia He, and Jinjian Jin
 A Stratospheric Ozone Climatology From Global Ozone Soundings and Trajectory Statistics
- 14:15–14:30 EGU2011-8436
Harald Rieder, Linda Frossard, Johannes Staehelin, Mathieu Ribatet, Stefania Di Rocco, Jörg A. Maeder, Thomas Peter, Anthony C. Davison, Philipp Weihs, and Franz Holawe
 A comparison of spatial patterns in mean and extreme values of total ozone at mid-latitudes and the relationship to atmospheric dynamics and chemistry
- 14:30–14:45 EGU2011-7102
Deniz Demirhan Bari, Axel Gabriel, and Dieter H.W. Peters
 Zonal asymmetries in atmospheric transport and their effects on stratospheric ozone and water vapor
- 14:45–15:00 EGU2011-6438
Anne Kubin, Janna Abalichin, Klereti Tourpali, Ulrike Langematz, and Patrick Jöckel
 Modeling the 11-year Solar Signal in the Troposphere

AS1.12 – Dynamics and chemistry of the upper troposphere and stratosphere: observations and models – Posters

Conveners: Peter Braesicke, Peter Hoor | Co-Conveners: Thomas Birner, Harald Boenisch, Ulrike Langematz, Johannes Laube, Cornelius Schiller

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Johannes Laube

- XY46 EGU2011-1127
Andrea Keil, Harald Bönisch, Andreas Engel, and Sophie Oberländer
 Evaluation of a new method to detrend stratospheric tracer mixing ratios

- XY47 EGU2011-11454
Ignacio Pisso, Peter Haynes, and Kathy Law
Emission location dependent ozone depletion potentials for very short-lived halogenated species
- XY48 EGU2011-3960
Wookap Choi and Hyesun Choi
Zonal Asymmetry of Tracer Distributions in the Equatorial Mid-Stratosphere in the Boreal Winter
- XY49 EGU2011-175
Sophie Oberländer, Stefanie Meul, and Ulrike Langematz
The Brewer-Dobson Circulation in sensitivity simulations for the past and future with the Chemistry Climate Model EMAC-FUB
- XY50 EGU2011-7704
Dominik Scheiben, Corinne Straub, Klemens Hocke, Peter Forkman, and Niklaus Kämpfer
Middle atmospheric ozone and water vapor anomalies during a sudden stratospheric warming in January 2010 as observed by different ground-based microwave radiometers
- XY51 EGU2011-2652
Felix Ploeger, Stephan Fueglistaler, Jens-Uwe Grooß, Gebhard Günther, Paul Konopka, Sue Liu, Rolf Müller, Cornelius Schiller, Fabrizio Ravagnani, and Martin Riese
Insight from water vapour and ozone on transport in the TTL
- XY52 EGU2011-1512
Suginori Iwasaki, Takashi Shibata, Hiroshi Ishimoto, and Hisayuki Kubota
Possibility of stratospheric hydration by overshooting analyzed with space-borne
- XY53 EGU2011-7885
Jean-Pierre Pommereau, Jean-Paul Vernier, and Philippe Ricaud
Importance of tropical convective overshooting on troposphere-to-stratosphere transport at the global scale
- XY54 EGU2011-12529
Ceyhan Kahya, Selahattin Incecik, and Sema Topcu
An Assessment of the Laminated Ozone Characteristics in European mid-latitudes through 1997-2008
- XY55 EGU2011-7000
Cristina Peña-Ortiz, Pedro Ribera, David Gallego, **Paulina Ordoñez**, and María del Carmen Álvarez
Long-term trends of the extratropical jet streams through objective analysis
- XY56 EGU2011-1918
Michal Kozubek, Jan Lastovicka, and Peter Krizan
Detail comparison of wind characteristics from ECMWF and NCEP/NCAR reanalysis in the middle latitude stratosphere
- XY57 EGU2011-7498
Axel Gabriel, Deniz Demirhan Bari, Dieter H.W. Peters, Ingo Kirchner, Ines Hoeschel, and Hans-F. Graf
Stationary waves in middle atmospheric ozone and water vapour derived from observations and model simulations
- XY58 EGU2011-8672
Gennadi Milinevsky and Asen Grytsai
Quasi-stationary zonal wave in total ozone distribution: long-term changes during Antarctic spring and summer
- XY59 EGU2011-2721
Marianne Bügelmayer, Axel Gabriel, and Dieter H.W. Peters
The influences of planetary waves induced by longitude dependent ozone on the variability of the circulation in the boreal stratosphere - model study
- XY60 EGU2011-6295
Jian Xu, Franz Schreier, Adrian Doicu, Peter Vogt, and Thomas Trautmann
First Results of Inversion for Far Infrared Limb Sounding
- XY61 EGU2011-7089
Tilman Hüneke, Sabrina Ludmann, and Klaus Pfeilsticker
A novel UV/vis/near IR optical spectrometer for limb and nadir measurements of atmospheric radiation and trace gases
- XY62 EGU2011-13381
Mohamadou Diallo, Bernard Legras, and Alain Chédin
Comparison between ACE-FTS stratospheric CO₂ profiles and Lagrangian simulations
- XY63 EGU2011-9032
Stefan Versick, Thomas Reddmann, Gabriele Stiller, Thomas von Clarmann and the IMK-ASF Team
Comparison of H₂O₂ model results with different reaction rates to MIPAS observations
- XY64 EGU2011-8995
Stefan Versick, Thomas Reddmann, Gabriele Stiller, and Bernd Funke
A new ion rate dependent parameterization for HNO₃ buildup on water cluster ions
- XY65 EGU2011-10057
Alkiviadis Bais, Kleareti Tourpali, Konstantinos Fragkos, Andreas Kazantzidis, Ulrike Langematz, Eugene Rozanov, Theodore Shepherd, and Anne Kubin
Projections of springtime surface UV-B radiation over southern high latitudes using ozone and clouds derived from chemistry-climate models

- XY66 EGU2011-10628
Ole Kristian Kvissel, Yvan J. Orsolini, Frode Stordal, Varavut Limpasuvan, Jadwiga Richter, and Dan R. Marsh
 Mesospheric intrusion and anomalous chemistry during and after a major stratospheric sudden warming
- XY67 EGU2011-10862
António Ferreira, José Castanheira, and Luis Gimeno
 Ozone, water vapour and temperature features of the extratropical tropopause region
- XY68 EGU2011-11766
Enzo Papandrea, Massimo Carlotti, Elisa Castelli, Enrico Arnone, Bianca Maria Dinelli, Margherita Premuda, and Andrea Petritoli
 Sounding the UTLS with MIPAS/ENVISAT and SCIAMACHY/ENVISAT limb measurements using a tomographic approach
- XY69 EGU2011-11578
David Plummer, Cathy Reader, and John Scinocca
 The seasonal cycle of ozone in the lowermost stratosphere from CMAM and ozonesondes
- XY70 EGU2011-4727
Yosuke Niwa, Yousuke Sawa, Prabir Patra, Toshinobu Machida, Hidekazu Matsueda and the CONTRAIL-TMI Team
 CO₂ seasonal variations in the UT/LS region as observed by CONTRAIL and four transport models
- XY71 EGU2011-14135
Peter Hoor, Heini Wernli, Michaela Hegglin, and Harald Bönisch
 On the temporal structure of the extratropical UTLS
- XY72 EGU2011-4318
Koji Yamazaki and Kohei Yoshida
 Tropical cooling in the case of stratospheric sudden warming in January 2009: focus on the tropical tropopause layer
- XY73 EGU2011-11669
Elisa Palazzi and Federico Fierli
 TIL and tropopause ozone distribution in the tropics

AS3.4 – Air Pollution Modelling – Orals

Convener: Jørgen Brandt | Co-Conveners: Hilde Fagerli, Jeremy Silver

Room: 12

Chairperson: Jørgen Brandt

- 08:30–08:45 EGU2011-652
Vivien Bright, William Bloss, and Xiaoming Cai
 Urban Street Canyons: Coupling Dynamics, Chemistry and Atmospheric Pre-processing
- 08:45–09:00 EGU2011-10516
Irina Nikolova, Stijn Janssen, Peter Vos, Vinit Mishra, and Patrick Berghmans
 CFD dispersion modelling of ultrafine particles in urban street canyon
- 09:00–09:15 EGU2011-9381
Elisa Goulart, Simon Branford, T Glyn Thomas, Omduth Coceal, and Stephen Belcher
 Dispersion of a point-source release of a passive scalar through an array of cubes
- 09:15–09:30 EGU2011-2016
Colman C.C. Wong and Chun-Ho Liu
 Pollutant Removal, Dispersion and Entrainment over Two-Dimensional Idealized Street Canyons: an LES Approach
- 09:30–09:45 EGU2011-3365
Hamaoui-Laguel Lynda, Meleux Frédéric, Beekmann Matthias, Bessagnet Bertrand, and Générmont Sophie
 Improving ammonia emissions in air quality models
- 09:45–10:00 EGU2011-12032
Imen Braham, Nicolas Viovy, Isabelle Chuine, Dmitry V. Khvorostyanov, and Michel Thibaudon
 Mechanistic Approach for estimating pollen emissions in France

COFFEE BREAK

Chairperson: Ayoe Buus Hansen

- 10:30–10:45 EGU2011-3958
Tony Christian Landi and Gabriele Curci
 Modeling Aerosol Optical Properties with AODEM: accounting for non-sphericity of dust particles

- 10:45–11:00 EGU2011-3255
Andrea Pozzer, Alexander de Meij, Kirsty Pringle, Holger Tost, Ulrike Doering, John van Aardenne, and Jos Lelieveld
 Aerosol simulation with EDGAR-CIRCE emissions with the EMAC model
- 11:00–11:15 EGU2011-11583
Hilel Dergaoui, Christian Seigneur, Karine Sartelet, Edouard Debry, Bertrand Bessagnet, and Laurence Rouïl
 A new method to simulate coagulation of an externally mixed particle population
- 11:15–11:30 EGU2011-4229
Sara Basart, Maria Teresa Pay, Carlos Pérez, Oriol Jorba, and Jose Maria Baldasano
 Aerosol surface levels, chemical composition and optical depth over Europe in the CALIOPE air quality modelling system
- 11:30–11:45 EGU2011-10803
Marion Devilliers, Christian Seigneur, Karine Sartelet, Edouard Debry, Bertrand Bessagnet, and Laurence Rouïl
 A New Algorithm to Solve Condensation/Evaporation Growth and Coagulation of Nanoparticles
- 11:45–12:00 EGU2011-13707
Stefano Galmarini, Michael Moran, and S. Trivikrama Rao
 The AQMEII Two-Continent Regional Air-Quality Model Evaluation and Intercomparison

LUNCH BREAK

Chairperson: Jeremy D. Silver

- 13:30–13:45 EGU2011-2390
Marc Bocquet
 Parameter field estimation for atmospheric dispersion: application to the Chernobyl accident using 4D-Var
- 13:45–14:00 EGU2011-5199
Xiao Tang, Jiang Zhu, and Zifa Wang
 Ensemble data assimilation for ozone forecast: Uncertainty identification and constraint
- 14:00–14:15 EGU2011-8507
Benjamin Gaubert, Adriana Coman, Gilles Forêt, Anthony Ung, Frédéric Meleux, Anne Boynard, and Matthias Beckmann
 Ensemble Kalman Filter for surface ozone data assimilation, application to the regional Chemistry-Transport Model (RCTM) CHIMERE
- 14:15–14:30 EGU2011-6941
Lars Peter Nieradzik and Hendrik Elbern
 Four dimensional variational data assimilation of tropospheric aerosols
- 14:30–14:45 EGU2011-7785
Ayoe Buus Hansen, Eigil Kaas, Jesper H Christensen, and Jørgen Brandt
 Test of Semi-Lagrangian Methods for Advection in the Danish Eulerian Hemispheric Model.
- 14:45–15:00 EGU2011-13219
Mathias Ritter and Mathias D. Müller
 Air pollution modeling over complex terrain: WRFchem applied for Switzerland
- Chairperson: Jørgen Brandt and Jeremy D. Silver
- 15:30–15:45 EGU2011-11621
Pedro Jiménez-Guerrero, Juan José Gómez-Navarro, Sonia Jerez, Zaida Hernández, Raquel Lorente-Plazas, Juan Andrés García-Valero, and Juan Pedro Montávez
 Linking meteorology and air quality under a changing climate: future European air pollution under several IPCC scenarios
- 15:45–16:00 EGU2011-5998
Azimeh Zare, Jørgen Brandt, and Jesper H. Christensen
 Integration of the Model of Emissions of Gases and Aerosols from Nature (MEGAN) into the DEHM Model
- 16:00–16:15 EGU2011-4708
Anne Sofie Lansoe, Camilla Geels, Rita Wania, and Jesper H. Christensen
 Possible changes in atmospheric chemistry due to increased methane fluxes in a future climate
- 16:15–16:30 EGU2011-9783
Christoph Bergemann and Julian Meyer-Arnek
 Photolysis rates for the POLYPHEMUS/DLR air quality model

- 16:30–16:45 EGU2011-8284
Roberto Kretschmer, Christoph Gerbig, and Frank-Thomas Koch
 Uncertainty characterization of tracer vertical mixing in the atmospheric transport model WRF-VPRM
- 16:45–17:00 EGU2011-7181
Bernd C. Krüger and Irene Schicker
 Model calculations about effects of regenerative fuels on air quality

AS3.4 – Air Pollution Modelling – Posters

Convener: Jørgen Brandt | Co-Conveners: Hilde Fagerli, Jeremy Silver

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jørgen Brandt and Jeremy D. Silver

- XY74 EGU2011-673
Paweł Reguński, Joanna Struzewska, Jacek W. Kaminski, and Karol Szymankiewicz
 Distribution of PM10 concentrations over Southern Poland in winter period - observations and GEM-AQ model results
- XY75 EGU2011-2119
Maja Telišman Prtenjak, Valentina Mačarević, Lidija Srnec, and Renata Peternel
 Analysis of meteorological conditions during maximum pollen concentrations in Zagreb, Croatia
- XY76 EGU2011-2201
Alexander de Meij, Andrea Pozzer, Kirsty Pringle, Holger Tost, and Jos Lelieveld
 EMAC model evaluation in calculated aerosol and aerosol optical properties
- XY77 EGU2011-2665
Saskia Buchholz, Klaus Görger, and Günther Heinemann
 Sources and development of photochemical episodes in Central Europe: An evaluation study of the WRF-Chem model
- XY78 EGU2011-3618
Michael Memmesheimer, Hermann J. Jakobs, Sabine Wurzler, Heike Hebbinghaus, Elmar Friese, Georg Piekorz, and Adolf Ebel
 Emission scenarios for Central Europe with emphasis on the Benelux region and North-Rhine-Westphalia
- XY79 EGU2011-4237
Alba Badia and Oriol Jorba
 Evaluation of the NMMB/BSC-CHEM gas-phase results at global scale for summer 2004
- XY80 EGU2011-3234
Anthony Ung, Laure Malherbe, Frédéric Meleux, and Bertrand Bessagnet
 A new statistical approach to improve air quality forecasts in the framework of CITEAIR and PREV'AIR
- XY81 EGU2011-4584
Yi-Ming Kuo, Sheng-Wei Wang, and Hwa-Lung Yu
 Temporal common trends of ambient pollutants at four supersites in Kaohsiung, Taiwan
- XY82 EGU2011-5477
Marcus Hirtl, Bernd C. Krüger, Erwin Petz, and Claudia Flandorfer
 Assimilation of Ground Based Ozone Measurements to Improve the Air Quality Forecasts For Austria
- XY83 EGU2011-7350
Ujjwal Kumar, Koen De Ridder, Lefebvre Wouter, and Stijn Janssen
 Data Assimilation of surface air pollutants in a high resolution air quality model AURORA
- XY84 EGU2011-4767
Jeremy Silver, Jørgen Brandt, and Matthias Ketzler
 Dynamical parameter estimation for a street-canyon air pollution model
- XY85 EGU2011-6675
 Gitte Brandt Hedegaard, Jesper H. Christensen, Allan Gross, Wilhelm May, Camilla Geels, Kaj M. Hansen, and **Jørgen Brandt**
 The relative importance of impacts from climate change vs. emissions change on air pollution levels in the 21st century
- XY86 EGU2011-6704
 Gitte Brandt Hedegaard, Allan Gross, Jesper H. Christensen, Wilhelm May, Camilla Geels, Kaj M. Hansen, and **Jørgen Brandt**
 Modelling the Impacts of Climate Change on Tropospheric Ozone over three Centuries
- XY87 EGU2011-6615
Jørgen Brandt, Jeremy D. Silver, Lise M. Frohn, Jesper H. Christensen, Mikael S. Andersen, Camilla Geels, Allan Gross, Ayoe B. Hansen, Kaj M. Hansen, and Gitte B. Hedegaard
 Assessment of Present and Future Health-Cost Externalities of Air Pollution in Europe using the EVA Model System

- XY88 EGU2011-11404
Kaj Mantzius Hansen, Jesper H. Christensen, Jørgen Brandt, Lise M. Frohn, Camilla Geels, Ayoe B. Hansen, Gitte B. Hedegaard, and Carsten A. Skjøth
 Model evaluation of two decades of atmospheric concentrations of persistent organic pollutants
- XY89 EGU2011-5362
 Hwa-Lung Yu, **Yuan-Chien Lin**, and Bellie Sivakumar
 Study of temporal dynamics of aerosols at Hsin-Chuang supersite in Taipei (Taiwan) using dynamic factor analysis and correlation dimension method
- XY90 EGU2011-5606
Yuliya Bunyakova, Alexander Glushkov, and Alexey Dudinov
 Short-range forecast of atmospheric pollutants using non-linear prediction method
- XY91 EGU2011-8843
Katerina Zemankova, Peter Huszar, Jan Bednar, and Josef Brechler
 Update of biogenic VOC emission inventory and its application in the atmospheric chemistry/aerosol model CAMx
- XY92 EGU2011-10578
Ádám Leel?ssy, Róbert Mészáros, István Lagzi, and Tibor Kovács
 Statistical application of ALOHA local scale air dispersion model for non-radioactive accidental releases at Paks Nuclear Power Plant
- XY93 EGU2011-12321
Pedro Jiménez-Guerrero, Oriol Jorba, and Alba Badia
 Global chemical regimes for ozone formation in a global on-line chemical weather prediction model (NMMB/BSC-CHEM)
- XY94 EGU2011-13454
Cristian D. Arango, Rodrigo Jiménez, and J. Alejandro Peña
 Linking regional atmospheric circulation patterns and air quality in the Sogamoso Valley, Colombia
- XY95 EGU2011-13609
Marie-Louise Siggaard-Andersen
 Evaluation of environmental impacts from air pollution in CEEH
- XY96 EGU2011-1191
Athanasios G. Megaritis, Christos Fountoukis, and Spyros N. Pandis
 Response of fine particulate matter to changes of emissions in Europe
- XY97 EGU2011-1539
Qi Fan, Wei Yu, Xuyu Luo, Shaojia Fan, Yerong Feng, and Ruiquan Feng
 Analysis and numerical simulation on a server air pollution episode in Pearl River Delta Region, China
- XY98 EGU2011-3459
Lin Wu and Marc Bocquet
 Network design for ozone monitoring
- XY99 EGU2011-3729
Zivorad Radonjic, Doug Chambers, Bosko Telenta, and Zavisja Janjic
 COUPLED NMM-CALMET Meteorology Development for the CALPUFF Air Dispersion Modelling in Complex Terrain and Shoreline Settings
- XY100 EGU2011-4334
Chuan-yao Lin, Chihchung Chang, Hsiaoming Hsu, Yenhuei Lee, and Allen Chu
 Characteristics of springtime profiles and sources of ozone in the low troposphere over northern Taiwan: data analysis and modeling study
- XY101 EGU2011-4791
Bernhard Rappenglueck, Sergio Alvarez, Julia Golovko, Graciela Lubertino, Beata H. Czader, Luis Ackermann, Richard Fuller, and Leonardo Pedemonte
 Emissions of Radical Precursors and Related Species from Urban Highway Traffic in Houston, Texas - Implications for Air Quality Modeling
- XY102 EGU2011-5584
Kostadin Ganev, Angelina Todorova, Dimiter Syrakov, and Nikolai Miloshev
 Bulgarian system for emergency response to accidental release of hazardous pollutants in the atmosphere
- XY103 EGU2011-5608
Astrid Manders, Bert Van Ulft, Erik Van Meijgaard, Andrea Mues, and Martijn Schaap
 Modelling of air quality in a changing climate
- XY104 EGU2011-5954
Tim Vlemmix, Henk Eskes, Ankie Piters, and Pieter Levelt
 Comparison of Tropospheric NO₂ Columns from the LOTOS-EUROS Regional Air Quality Model and Ground Based MAX-DOAS Observations
- XY105 EGU2011-8664
Joanna Struzewska and Jacek W. Kaminski
 Application of Model Output Statistics technique to a high resolution air quality forecast

- XY106 EGU2011-9900
Etienne Terrenoire, Bertrand Bessagnet, Guido Pirovano, Markus Amann, Augustin Colette, Chris Heyes, Wolfgang Schoepp, Anthony Ung, and Laurent Letinois
 An original method to determine the urban increment for primary PM_{2.5} using WRF/CHIMERE
- XY107 EGU2011-11655
Augustin Colette, Frédéric Meleux, Bertrand Bessagnet, Claire Granier, Øivind Hodnebrog, Guido Pirovano, and Sophie Szopa
 On the impact of chemical boundary conditions on air quality modelling.
- XY108 EGU2011-12119
Gerhard Wotawa
 Airborne radioactivity during the Russian Forest Fires in August 2010
- XY109 EGU2011-2017
Ka Kit Leung and Chun-Ho Liu
 Laboratory Measurements of Local Mass Transfer Coefficients Over Idealized Two-Dimensional Urban Street Canyon Models
- XY110 EGU2011-25
 Tracy Nga Hang Chung and **Chun-Ho Liu**
 Favorable Street Canyon Aspect Ratios for Pollutant Removal- a Large-Eddy Simulation Approach
- XY111 EGU2011-7791
Peter Vos, Irina Nikolova, and Stijn Janssen
 A high-order size-resolved ultrafine particle model for a traffic tunnel

AS3.10 – Halogens in the Troposphere – Orals

Convener: Roland von Glasow | Co-Conveners: Rolf Sander

Room: 10

Chairperson: Roland von Glasow

- 13:30–13:45 EGU2011-2220
Carlos Ordóñez, Jean-Francois Lamarque, Douglas E. Kinnison, Simone Tilmes, John Orlando, Gabriela Sousa Santos, Elliot Atlas, Donald R. Blake, Guy Brasseur, and Alfonso Saiz-Lopez
 Global oceanic emissions of very short-lived (VSL) halocarbons in a chemistry-climate model
- 13:45–14:00 EGU2011-2716
John Roscoe, Matthias Olzmann, Binod Giri, Núria González-García, John M. H. Lo, Robert Marriott, Mariusz Klobukowski, and W. James Frazee
 Reactions of Cl and Br With Selected VOCs: Kinetic Measurements and Theoretical Analysis
- 14:00–14:15 EGU2011-8192
Joelle Buxmann, Natalja Balzer, Sergej Bleicher, Robert Holla, Karsten Kotte, Ulrich Platt, and Cornelius Zetzsch
 Bromine explosion in smog chamber experiments above a model salt pan
- 14:15–14:30 EGU2011-3376
Angela Baker, Armin Rauthe-Schöch, Tanja J. Schuck, Carl A. M. Brenninkmeijer, Peter F. J. van Velthoven, and David E. Oram
 Investigation of chlorine radical chemistry in the Eyjafjallajökull volcanic plume using depletions in non-methane hydrocarbons
- 14:30–14:45 EGU2011-5119
Holger Sihler, Thomas Wagner, Lars Kaleschke, Hella Riede, Steffen Beirle, Steffen Dörner, Udo Frieß, Rolf Sander, and Ulrich Platt
 Arctic tropospheric bromine activation as seen from space and how it is related to meteorology, sea ice properties and surface observations
- 14:45–15:00 EGU2011-9600
Paul B. Shepson, Chelsea Stephens, Alexandra Steffen, Jan Bottenheim, Jin Liao, and Greg Huey
 A Study of the role of halogen radicals in the oxidation of gaseous elemental mercury
- Chairperson: Rolf Sander
- 15:30–15:45 EGU2011-9732
 Birgit Quack, **Kirstin Krüger**, Susann Tegtmeier, Elliot Atlas, Katja Grossmann, Markus Rex, Roland von Glasow, Roberto Sommariva, and Douglas Wallace
 Halocarbon sources and emissions over the Western Pacific
- 15:45–16:00 EGU2011-758
Enno Peters, Katja Grossmann, Udo Frieß, Folkard Wittrock, Andreas Richter, and John P. Burrows
 MAX-DOAS IO and BrO measurements in the western pacific boundary layer
- 16:00–16:15 EGU2011-10878
Helmke Hepach, Birgit Quack, Elliot Atlas, Kirstin Krüger, Astrid Bracher, Steffen Fuhlbrügge, Franziska Wittke, Hermann Bange, and Douglas Wallace
 Diurnal variations of halocarbons in and above the tropical Atlantic

- 16:15–16:30 EGU2011-11586
Jens Tschritter, Denis Pöhler, Katja Grossmann, Robert Holla, Johannes Lampel, Markus Anthofer, Udo Frieß, and Ulrich Platt
 Spectroscopic measurements of reactive halogen compounds at the Cape Verde Islands, over the Eastern Tropical North Atlantic and at the Mauritanian coast
- 16:30–16:45 EGU2011-13678
Rainer Volkamer, Sean Coburn, Barbara Dix, Michael Lechner, Roman Sinreich, Tiffany Duhl, and Alex Guenther
 Dissolved organic matter in the surface microlayer: a heterogeneous iodine source over the open ocean
- 16:45–17:00 EGU2011-9457
Joel Thornton and Theran Riedel
 On the relationship between nitryl chloride and molecular chlorine and their relative importance as Cl-atom sources from simultaneous ship-borne observations in coastal California

AS3.10 – Halogens in the Troposphere – Posters

Convener: Roland von Glasow | Co-Conveners: Rolf Sander

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Roland von Glasow

- XY112 EGU2011-1234
James Levine, Eric Wolff, Anna Jones, and Louise Sime
 The role of atomic chlorine in glacial-interglacial changes in the carbon-13 content of atmospheric methane
- XY113 EGU2011-11843
Anja Schoenhardt, Andreas Richter, Folkard Wittrock, Mathias Begoin, and John P. Burrows
 Analysing satellite data for IO vertical columns in polar and tropical regions
- XY114 EGU2011-3921
Olga Puentedura, Manuel Gil-Ojeda, Mónica Navarro-Comas, and Alberto Redondas
 Iodine Monoxide in the Subtropical Free Troposphere.
- XY115 EGU2011-5834
Alfonso Saiz-Lopez, Jean-Francois Lamarque, Douglas Kinnison, Carlos Ordonez, and Simone Tilmes
 Halogen-driven ozone radiative impact in the tropical marine troposphere
- XY116 EGU2011-13293
Ryan Hossaini, Martyn Chipperfield, Wuhu Feng, and Tom Breider
 Modelling the chemistry and transport of short-lived halocarbons in the tropical tropopause layer
- XY117 EGU2011-11901
John Pyle, Andrew Robinson and the Dirac Team
 Brominated VLS and tetrachloroethene in the tropical boundary layer of the maritime continent in 2008/2009
- XY118 EGU2011-9493
Karsten Kotte, Stefan G. Huber, Torsten Krause, and Heinz Friedrich Schöler
 Climatic effects on the emission of Volatile Organohalogens from saline soils - Study sites in Southern Africa and Central Asia -
- XY119 EGU2011-5652
Dean Venables, Enowmbi Ashu-Ayem, Darby Steven, and Paul Smith
 Reaction of iodine with ozone and nitrogen oxides studied in an atmosphere simulation chamber
- XY120 EGU2011-6417
Enowmbi Ashu-Ayem, Ciaran Monahan, Udo Nitschke, Louise Murphy, Steven Darby, Paul Smith, Dagmar Stengel, Colin O'Dowd, and Dean Venables
 Iodine emission and particle formation from Laminaria Digitata
- XY121 EGU2011-12088
Natalja Balzer, Johannes Ofner, Sergej Bleicher, Joelle Buxmann, Ulrich Platt, and Cornelius Zetzsch
 Influence of secondary organic aerosols (SOA) on bromine explosion in smog-chamber experiments
- XY122 EGU2011-12035
Johannes Ofner, Natalja Balzer, Hinrich Grothe, Heinz-Ulrich Krüger, Philippe Schmitt-Kopplin, and Cornelius Zetzsch
 Aerosol-halogen interaction: Formation of halogenated compounds in the particle phase and change of aerosol optical properties
- XY123 EGU2011-5895
Óscar Galvez and Luis F. Pacios
 Quantum chemical investigation on iodine oxides and their role in the formation of atmospheric aerosols
- XY124 EGU2011-8396
Martina Roeselova, Alena Habartova, Babak Minofar, Hasan Pašalić, and Hans Lischka
 Alkyl halides at the liquid water-vapor and ice-vapor interfaces

- XY125 EGU2011-7280
Peter Bräuer, Andreas Tilgner, Ralf Wolke, and Hartmut Herrmann
Modelling of the tropospheric halogen multiphase chemistry with CAPRAM
- XY126 EGU2011-5943
Roberto Sommariva and **Roland von Glasow**
Halogen chemistry at the Cape Verde islands - A model study
- XY127 EGU2011-6051
Karin Kreher, Paul Johnston, Alan Thomas, Timothy Hay, Mónica Martínez-Avilés, and Julian Kinzel
Halogen oxide observations in the marine boundary layer: From the Tropics to the Antarctic
- XY128 EGU2011-11845
Johannes Lampel, Sabrina Niebling, Jens Tschritter, Udo Frieß, and Ulrich Platt
MAX-DOAS Measurements on RV Polarstern
- XY129 EGU2011-8054
Katja Großmann, Jens Tschritter, Robert Holla, Denis Pöhler, Udo Frieß, and Ulrich Platt
MAX-DOAS measurements of BrO and IO over the Eastern Tropical North Atlantic
- XY130 EGU2011-12176
Katja Großmann, Udo Frieß, Jens Tschritter, Enno Peters, Folkard Wittrock, Birgit Quack, Kirstin Krüger, Roland von Glasow, Roberto Sommariva, Klaus Pfeilsticker, and Ulrich Platt
Shipborne MAX-DOAS Measurements of Reactive Halogen Species over the Western Pacific and the Eastern North Atlantic
- XY131 EGU2011-9302
Leif Vogel, Nicole Bobrowski, Victoria Cáceres Espinoza, Christoph Kern, Holger Sihler, and Ulrich Platt
BrO formation in the plume of Pacaya volcano, high resolution plume chemistry at early plume ages
- XY132 EGU2011-13022
Zak Buys, Anna Jones, Roland von Glasow, Neil Brough, Greg Huey, and Dave Tanner
Exploring high resolution measurements of ozone depletion chemistry in coastal Antarctica through use of a 1D marine boundary layer chemistry model (MISTRA)
- XY133 EGU2011-11189
Jose D Fuentes, Xiao-Ming Hu, Ralf M. Staebler, Jan W. Bottenheim, and Paul B. Shepson
Ozone depletion events during OASIS 2009 in Barrow, Alaska
- XY134 EGU2011-13518
Kenjiro Toyota, **John C. McConnell** and the GEM-AQ Arctic Bromine Study Team
Synoptic-scale meteorological control on reactive bromine production and ozone depletion in the Arctic boundary layer: 3-D simulation with the GEM-AQ model

AS3.14 – Satellite observations of tropospheric composition and pollution, analyses with models and applications –

Orals

Convener: Andreas Richter | Co-Conveners: Pieternel Levelt, Cathy Clerbaux

Room: 8

Chairperson: Andreas Richter

- 08:30–08:45 EGU2011-2469
Folkert Boersma and the OMI NO₂ Team
An improved retrieval of tropospheric NO₂ columns from the Ozone Monitoring Instrument
- 08:45–09:00 EGU2011-2798
Qiang Zhang, Siwen Wang, Kebin He, David Streets, Sicong Kang, Dan Chen, Randall Martin, and Lok Lamsal
NO_x emissions from power plants in China: bottom-up estimates and satellite constraints
- 09:00–09:15 EGU2011-3084
Bas Mijling and Ronald van der A
NO_x emissions in China constrained by satellite observations: a new inversion approach
- 09:15–09:30 EGU2011-5734
Yipin Zhou, Dominik Brunner, Johannes Staehelin, Christoph Hüglin, and Stephan Henne
Changes in OMI tropospheric NO₂ columns over Europe (2004-2009) and the influence of meteorological variability
- 09:30–09:45 EGU2011-7190
Steffen Beirle, Folkert Boersma, Ulrich Platt, Mark Lawrence, and Thomas Wagner
Megacity NO_x emissions and lifetimes probed from space
- 09:45–10:00 EGU2011-9276
Achim Strunk and Hendrik Elbern
Impact of NO₂ tropospheric column observations on near-surface analyses of nitrogen oxides using an inverse model system

COFFEE BREAK

Chairperson: Cathy Clerbaux

- 10:30–10:45 EGU2011-7425
Lieven Clarisse, Pierre Coheur, Yasmine Ngadi, Daniel Hurtmans, and Cathy Clerbaux
 Uplift and long range transport of anthropogenic SO₂
- 10:45–11:00 EGU2011-7798
Antje Inness, Johannes Flemming, and Martin Suttie
 SO₂ forecasts and data assimilation experiments with the MACC system
- 11:00–11:15 EGU2011-1766
Trissevgeni Stavrakou, Jean-Francois Muller, Jozef Peeters, Ariane Razavi, Lieven Clarisse, Daniel Hurtmans, Pierre-Francois Coheur, and Cathy Clerbaux
 New constraints on the global budget of formic acid from IASI column data
- 11:15–11:30 EGU2011-10773
Rob Pinder, John Walker, Jesse Bash, Karen Cady-Pereira, Daven Henze, Ming Luo, Greg Osterman, and Mark Shephard
 Space-based observations of NH₃: spatial patterns, seasonal trends and in situ evaluation
- 11:30–11:45 EGU2011-10953
Maya George, Cathy Clerbaux, Juliette Hadji-Lazaro, Matthieu Pommier, Daniel Hurtmans, Pierre-Francois Coheur, David P. Edwards, Merritt Deeter, and Helen Worden
 Monitoring of atmospheric composition with IASI and MOPITT: CO distributions and trends
- 11:45–12:00 EGU2011-8970
Thibaud Thonat, Cyril Crevoisier, Noëlle A. Scott, Alain Chédin, Raymond Armante, and Laurent Crépeau
 Contribution to the study of tropical biomass burnings: Observation of carbon monoxide emitted by fires in Africa with IASI

LUNCH BREAK

Chairperson: Pieternel Levelt

- 13:30–13:45 EGU2011-1818
Colette Heald, Kateryna Lapina, and David Ridley
 Using satellite observations to investigate natural aerosol loading
- 13:45–14:00 EGU2011-9099
Richard Dupont, John Worden, Paul Hamer, Adetutu Aghedo, Meemong Lee, Jessica Neu, Daven Henze, and Kevin Bowman
 Understanding ozone (O₃) in the Arctic: Comparison between model and satellite observations using Geos-CHEM and TES O₃ and carbon monoxide (CO) products
- 14:00–14:15 EGU2011-7042
Philippe Ricaud, Jean-Luc Attié, Laaziz El Amraoui, Vincent-Henri Peuch, Thomas August, and Juying Warner
 Measured and modelled variabilities of long-lived species over the Mediterranean Basin
- 14:15–14:30 EGU2011-11415
Nigel Richards, Stephen Arnold, Martyn Chipperfield, and Sarah Monks
 The Mediterranean summertime ozone maximum: A satellite and model perspective
- 14:30–14:45 EGU2011-8221
Gaëlle Dufour, Maxim Eremenko, Gilles Forêt, Adriana Coman, Benjamin Gaubert, Andrea Pozzer, Matthias Beekmann, and Jean-Marie Flaud
 Monitoring tropospheric ozone from IASI at the continental scale: which information for the models?
- 14:45–15:00 EGU2011-11421
Remco Scheepmaker, Christian Frankenberg, Ilse Aben, Annemieke Gloudemans, Hans Schrijver, Sophie Fally, and Thomas Roeckmann
 Improved global atmospheric HDO/H₂O retrievals with SCIAMACHY

AS3.14 – Satellite observations of tropospheric composition and pollution, analyses with models and applications – Posters

Convener: Andreas Richter | Co-Conveners: Pieternel Levelt, Cathy Clerbaux

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Andreas Richter

- XY135 EGU2011-144
Will Hewson, Hartmut Bösch, and Mike Barkley
Improving GOME-2 Tropical Formaldehyde Retrievals
- XY136 EGU2011-1567
Trissevgeni Stavrakou, Alex Guenther, Ariane Razavi, Lieven Clarisse, Cathy Clerbaux, Pierre-Francois Coheur, Daniel Hurtmans, and Jean-Francois Muller
First space-based derivation of the global atmospheric methanol emission fluxes
- XY137 EGU2011-4210
Penelope Maher, **Guergana Guerova**, Symeon Koumoutsaris, and George Takacs
Study of the biogenic soil NO_x emissions from the Australian desert.
- XY138 EGU2011-7733
Wesley Sluis, Marc Allaart, Ankie Piters, Tim Vlemmix, Lou Gast, and Stijn Berkhout
Use of high-resolution NO₂ sonde profiles for the validation of tropospheric NO₂ from satellites
- XY139 EGU2011-7869
Kazuyuki Miyazaki and Henk Eskes
Global NO_x emission estimates using OMI NO₂ data and ensemble-based data assimilation
- XY140 EGU2011-8161
Andreas Richter, Andreas Hilboll, Achim Zien, and John P. Burrows
Cloud effects in satellite observed tropospheric NO₂
- XY141 EGU2011-6527
Christoph Popp, Ping Wang, Dominik Brunner, Piet Stammes, Yipin Zhou, and Michael Grzegorski
MERIS albedo climatology and its application to FRESCO+ cloud and NO₂ trace gas retrieval from SCIAMACHY
- XY142 EGU2011-6423
Patricia Castellanos, Hugo van der Gon, Mark Kroon, Pepijn Veefkind, Piet Stammes, Pieter Levelt, and Folkert Boersma
Trends in NO₂ and the Effects of the Economic Crisis Observed by OMI over Europe
- XY143 EGU2011-8699
Erika von Schneidmesser, Andreas Hillbol, Paul Monks, Andreas Richter, and John Burrows
Megacity Trends in NO₂ from Space and Surface Measurements in the Greater London Area
- XY144 EGU2011-10910
Nan Hao, Pieter Valks, Isabelle De Smedt, Meike Rix, Diego Loyola, Michel Van Roozendael, Bin Zhou, and Walter Zimmer
Satellite observations of changes in air quality at mega-events in China
- XY145 EGU2011-1905
Astrid Baquero-Bernal and Freddy Grajales
Ground-level nitrogen dioxide concentrations over Colombia, South America, inferred from the satellite-borne Ozone Monitoring Instrument
- XY146 EGU2011-3210
Maarten Sneep, Mark Kroon, Pepijn Veefkind, and Pieter Levelt
Validation and quality control of satellite retrievals by intercomparison of many data-fields
- XY147 EGU2011-5925
Joonsuk Lee, Chang-Keun Song, Won-Jun Choi, Sukjo Lee, Youdeog Hong, Deok-Rae Kim, Sung-Chul Hong, Jin-Young Choi, and Jaebum Lee
Comparison of NO₂ and SO₂ from OMI with ground-based measurements and CMAQ
- XY148 EGU2011-11300
Pieter Valks, Nan Hao, Isabelle De Smedt, Steffen Beirle, Gaia Pinardi, Jean Christophe Lambert, Diego Loyola, Kornelia Mie, Meike Rix, and Niilo Kalakoski
Operational O₃M-SAF trace gas column products: GOME-2 NO₂, BrO, SO₂, CH₂O, and H₂O
- XY149 EGU2011-8007
Sebastian Eiser, Rolf von Kuhlmann, Fabrizio Niro, and Thorsten Fehr
Demonstration of a Multi-Mission Large Scale Inter-Comparison of Ozone Products using the GECA Validation Tool
- XY150 EGU2011-940
Felix Ebojie, Christian von Savigny, Annette Ladstätter-Weißenmayer, Stefan Bötzel, Heinrich Bovensmann, and John Burrows
Investigation of the spatial and temporal variation of tropospheric ozone using SCIAMACHY limb-nadir matching observations
- XY151 EGU2011-10757
Stefan Bötzel, Annette Ladstätter-Weißenmayer, Felix Ebojie, Christian von Savigny, and John P. Burrows
Tropospheric Ozone Columns During Biomass Burning Events as Seen from SCIAMACHY Using Limb-Nadir-Matching
- XY152 EGU2011-10805
Olaf Tuinder, Lucia Kins, and Andy Delcloo
Tropospheric Ozone from GOME-2 Vertical O₃ Profiles

- XY153 EGU2011-8364
Gaëlle Dufour, Maxim Eremenko, Alexandra Griesfeller, Brice Barret, Eric Le Flochmoen, Juliette Hadji-Lazaro, Cathy Clerbaux, Daniel Hurtmans, Pierre-François Coheur, and Jean-Marie Flaud
 Tropospheric ozone from IASI: validation of three scientific products using ozone sondes measurements.
- XY154 EGU2011-10826
Catharinus Dijkstra, Annemieke Gloudemans, Jos de Laat, Hans Schrijver, Guido van der Werf, Maarten Krol, Ilse Aben, and Remco Scheepmaker
 Interannual variability of CO and its relation to long-range transport and biomass burning as seen by SCIAMACHY
- XY155 EGU2011-3444
Cheng Liu, Tim Butler, Peter Hoor, Patrick Jöckel, Andrea Pozzer, Mark G. Lawrence, Jos Lelieveld, and Thomas Wagner
 CO profile information from SCIAMACHY observations using 'cloud-slicing'
- XY156 EGU2011-6032
Christoforos Tsamalis, Sophie Peyridieu, and Alain Chédin
 Dust altitude climatology based on CALIPSO observations
- XY157 EGU2011-9994
Annelise du Piesanie and Ankie PETERS
 Comparison of SCIAMACHY water vapour column observations with radiosonde measurements over Europe
- XY158 EGU2011-668
Karol Szymankiewicz, Jacek W. Kaminski, Joanna Struzewska, and Pawel Regulski
 Application of satellite observations for verification of air quality forecast - issues, challenge and applications of EcoForecast.EU
- XY159 EGU2011-11715
 Samuele Masieri, **Andrea Petritoli**, Ivan Kostadinov, Giorgio Giovanelli, Margherita Premuda, Fabrizio Ravegnani, and Daniele Bortoli
 GROUND-BASED & SATELLITE DOAS MEASUREMENTS INTEGRATION FOR AIR QUALITY EVALUATION/FORECAST MANAGEMENT IN THE FRAME OF QUILSAT PROJECT
- XY160 EGU2011-8882
Robert Pommrich, Jean-Luc Attié, Béatrice Josse, Laaziz El Amraoui, Marine Claeysman, Philippe Ricaud, and Vincent-Henri Peuch
 To what extent does the choice of an emissions inventory matter when doing chemical data assimilation in a global CTM?
- XY161 EGU2011-7185
Sebastian Dikty, Andreas Richter, Mark Weber, Stefan Noël, Folkard Wittrock, Heinrich Bovensmann, Rosemary Munro, Rüdiger Lang, and John P. Burrows
 GOME-2 optical degradation as seen in level 2 data time series (2007 - 2010; BrO, NO₂, HCHO, H₂O, and O₃)
- XY162 EGU2011-12888
Sebastián Gimeno García, Sander Slijkhuis, Schreier Franz, Lichtenberg Günter, and Thomas Trautmann
 On the spectral calibration of SCIAMACHY channel 8
- XY163 EGU2011-10768
Pasquale Sellitto, Pierre Dauphin, Gaëlle Dufour, Maxim Eremenko, Jean-Marie Flaud, and Vincent-Henri Peuch
 Performance analyses of future space-borne infrared instruments to monitor air quality
- XY164 EGU2011-11292
Nicole Jacquinet-Husson, Laurent Crépeau, Raymond Armante, Chérif Boutamine, Alain Chédin, Noëlle Scott, Cyril Crevoisier, and Virginie Capelle
 The GEISA Database 2009 Edition: A Tool for Hyperspectral Earth Tropospheric Satellite Observations Studies
- XY165 EGU2011-11294
Michael Grzegorski, Bastian Jäcker, and Thomas Wagner
 Comparison of clear-sky radiance and surface albedo from different satellite instruments
- XY166 EGU2011-6178
Dong Han and Liangfu Chen
 The Influence of Trace Gases Absorption on Differential Ring Cross Sections
- XY167 EGU2011-12683
 Anna Serdyuchenko, **Victor Gorshelev**, Mark Weber, Wissam Chehade, and John Burrows
 Harmonisation of GOME, SCIAMACHY and GOME-2 ozone cross-sections
- XY168 EGU2011-11026
Gonzalo Gonzalez Abad and Peter F. Bernath
 Organics in the troposphere from ACE

Room: 10

Chairperson: Hans-Dieter Betz and Yoav Yair

- 08:30–08:45 EGU2011-1939
Jochen Grandell, Marcel Dobber, and Rolf Stuhlmann
Lightning monitoring from a geostationary orbit: MTG Lightning Imager concept and processing challenges
- 08:45–09:00 EGU2011-8954
Chonglin Liu and Stan Heckman
Using Total Lightning Data in Severe Storm Prediction: Global Case Study Analysis from North America, Brazil and Australia
- 09:00–09:15 EGU2011-9170
Colin Price, Keren Mezuman, and Eli Galanti
How many thunderstorms are active at any moment?
- 09:15–09:30 EGU2011-1734
Themis Chronis, Liliana Velea, Gerasimos Armenis, Georgios Pothriadis, and Antonios Fiamegos
First observations from the Greek HNMS lightning monitoring network
- 09:30–09:45 EGU2011-12953
Georg Mayr and Ingo Bertram
Lightning in the eastern Alps: Diurnal, seasonal and weather type dependence
- 09:45–10:00 EGU2011-9175
Barry Lynn, Yoav Yair, **Colin Price**, and Guy Kelman
A Dynamic Approach to Lightning Prediction for Convection Resolving Mesoscale Models

COFFEE BREAK

Chairperson: Colin Price and Yukihiro Takahashi

- 10:30–10:45 EGU2011-1443
Torsten Neubert, **Olivier Chanrion** and the EuroSprite Team
The Electric Potential of a Giant Jet Determined From a Simultaneous Sprite
- 10:45–11:00 EGU2011-6407
Serge Soula, Oscar van der Velde, Joan Montanya, Patrice Huet, and Christelle Barthe
Gigantic Jets produced by an isolated tropical thunderstorm near Réunion Island
- 11:00–11:15 EGU2011-4381
Yasuhide Hobara, Masahiko Iwamoto, Kenji Ohta, Takuya Ohtsuyama, and Masashi Hayakawa
TLE producing ionospheric disturbances: Observation and numerical modeling
- 11:15–11:30 EGU2011-6191
Nikolai Ostgaard, Ragnhild Hansen, Thomas Gjesteland, Brant Carlson, and Andrew Collier
Occurrence frequency and fluence of TGFs
- 11:30–11:45 EGU2011-3609
Fabio Fuschino, Martino Marisaldi, Claudio Labanti, Marco Tavani, Andrea Argan, Alessio Trois, Guido Barbiellini, Francesco Longo, and Ettore Del Monte
Correlation of AGILE TGFs and global lightning activity across the equatorial belt
- 11:45–12:00 EGU2011-12203
Brant Carlson, Morris Cohen, Ryan Said, Michael Briggs, Valerie Connaughton, Gerald Fishman, Thomas Gjesteland, and Nikolai Østgaard
TGF electron beam modeling and constraints on TGF production

NH1.4/AS4.4 – Lightning: physics, detection and atmospheric effects (co-organized) – Posters

Convener: Yoav Yair | Co-Conveners: Serge Soula, Colin Price, Hans D. Betz, Yukihiro Takahashi

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Serge Soula and Yoav Yair

- XY463 EGU2011-201
Savka Petrova, Rumjana Mitzeva, and Boryana Markova
Relationship between flash density and rainfall over Bulgaria and Black sea
- XY464 EGU2011-13793
Pavlo Kochkin, Vung Nguyen, and Alexander van Deursen
X-ray bursts observation along and perpendicularly to the streamer path

- XY465 EGU2011-13549
Yukihiro Takahashi, Mitsuteru Sato, Tetsuya Fukuhara, Makoto Watanabe, Yoav Yair, Karen Aplin, and Georg Fischer
Lightning and thundercloud observation in Jupiter using spacecraft and ground-based telescope
- XY466 EGU2011-712
Aglika Savtchenko, Serge Soula, Oscar van der Velde, Rumjana Mitzeva, and Elisaveta Peneva
Lightning Activity of a Sprite Producing Storm over South East France
- XY467 EGU2011-2131
Maja Telišman Prtenjak, Karmen Babi?, Petra Mikuš, and Nataša Strelec Mahovi?
The summer convective activity above Croatia
- XY468 EGU2011-11857
Sigalit Shalev, Hadas Saaroni, Yoav Yair, **Baruch Ziv**, Zippy Erlich, Reuven Aviv, Alexander Agrachov, and Colin Price
Lightning Characteristics in Israel and the Eastern Mediterranean
- XY469 EGU2011-3455
Siri Merete Vaktdal, Nikolai Østgaard, Thomas Gjesteland, Ragnhild Schrøder Hansen, Andrew Collier, and Brant Carlson
TGF dependence on magnetic latitude and solar zenith angle
- XY470 EGU2011-5260
Shu Chun Chang, Sung-Ming Huang, Cheng-Ling Kuo, Jung-Kuang Chou, Li-Jou Lee, Yeng-Jung Wu, Alfred B. Chen, Han-Tzong Su, Rue-Ron Hsu, Lou-Chuang Lee and the NCKU-ISUAL Team
A possible lightning-gigantic jet interaction and mass of elves associated with negative cloud-to-ground lightning occurred over a very active thunderstorm
- XY471 EGU2011-9902
Thomas Farges, Elisabeth Blanc, and Bjørn Gitle Hauge
Infrasound and wideband electric field measurements during Hessdalen Science camp 2010
- XY472 EGU2011-5261
Jung Kuang Chou, Cheng-Ling Kuo, Shu-Chun Chang, Li-Jou Lee, Sung-Ming Huang, Yen-Jung Wu, Alfred B. Chen, Han-Tzong Su, Rue-Ron Hsu, Lou-Chuang Lee and the NCKU ISUAL Team
Radiative emissions of the blue starters, blue jets, and gigantic jets
- XY473 EGU2011-9017
Ullrich Finke
Simulating the optical characteristics of lightning as observed from above the cloud
- XY474 EGU2011-6556
Veronika Barta, József Bór, and Gabriella Sátor
Classification of sprites observed in Central Europe between 2007 and 2009
- XY475 EGU2011-5328
Daiki Tsurushima, Kiyotaka Sakaida, Yukihiro Takahashi, and Noriyasu Honma
Cloud to Ground Lightning distribution over Tokyo metropolitan area observed by Lightning Location System (LLS)
- XY476 EGU2011-6214
David Pisa, Ondrej Santolik, and Michel Parrot
Connection of lightning-related HF signatures measured by the DEMETER satellite with localized field-aligned currents
- XY477 EGU2011-8443
Andrew Collier, **Thomas Gjesteland**, and Nikolai Østgaard
Terrestrial Gamma-Ray Flash Intensity Distribution
- XY478 EGU2011-2829
Yoav Yair, Moshe Ben-Yona, Na'ama Reicher, Keren Mezman, Avy Lousky, and Colin Price
The spatial and temporal relations between sprites and meteors during the 2009 Geminid shower
- XY479 EGU2011-3838
Thomas Marshall, Maribeth Stolzenburg, Sumedhe Karunarathne, and Hans-Dieter Betz
Initial leader extension of lightning flashes
- XY480 EGU2011-3848
Maribeth Stolzenburg, Thomas Marshall, Lauren Vickers, Sumedhe Karunarathne, Tom Warner, Richard Orville, Hans Betz, and Robert Gebauer
Time Correlated High-Speed Video and Multi-frequency Electromagnetic Observations of Cloud-to-Ground Lightning
- XY481 EGU2011-13262
Bjørn Gitle Hauge
Optical spectroscopy and radar analysis of transient luminous phenomena in the low atmosphere over Hessdalen valley NORWAY
- XY482 EGU2011-6236
Ondrej Santolik, David Pisa, and Michel Parrot
Field aligned currents triggered in the mid-latitude ionosphere by very intense lightning discharges

- XY483 EGU2011-11778
Enrico Arnone, Anne K. Smith, Antti Kero, and Bianca M. Dinelli
 Climate-chemistry model sensitivity to sprite-induced chemical perturbations
- XY484 EGU2011-9137
Erling Strand
 The Hessdalen Phenomena
- XY485 EGU2011-3641
Martino Marisaldi, Fabio Fuschino, Claudio Labanti, Marco Tavani, Andrea Argan, Alessio Trois, Guido Barbiellini, Francesco Longo, and Ettore Del Monte
 AGILE Observations of Terrestrial Gamma-Ray Flashes above 20 MeV
- XY486 EGU2011-6744
Thomas Gjesteland, Nikolai Østgaard, and Andrew Collier
 Constraints on the Emission Cone of Terrestrial Gamma-ray Flashes by Spectral Analysis of Geolocated Events.
- XY487 EGU2011-8740
Baoyou Zhu, Fanchao Lv, and Helin Zhou
 Current characteristics of NBE as inferred from narrow bipolar pulse

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

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

Room: 33

Chairperson: Tim Cohn

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

LUNCH BREAK

Chairperson: Manfred Mudelsee

- 13:30–13:45 EGU2011-537
Claudia Teutschbein and Jan Seibert
 Evaluation of Bias-Correction Procedures for Adjusting RCM Simulations for Hydrological Impact Studies at the Catchment Scale
- 13:45–14:00 EGU2011-9214
Rasmussen Roy and the NCAR Team
 High-resolution simulation of seasonal snowfall over the Colorado Headwaters region and some impacts of climate change
- 14:00–14:15 EGU2011-9434
Taotao Qian, Aiguo Dai, Kevin E. Trenberth, and Jialin Lin
 Hydroclimatic Trends in the Mississippi River Basin from 1948 to 2004
- 14:15–14:30 EGU2011-5379
Jung-Eun Kim and Song-You Hong
 Changes in the precipitation mechanism under global warming - global hotspots

- 14:30–14:45 EGU2011-6160
Reinhard Schiemann, Rebekka Erdin, Marco Willi, Christoph Frei, Marc Berenguer, and Daniel Sempere-Torres
 Geostatistical radar-raingauge combination with nonparametric correlograms: methodological considerations and application in Switzerland
- 14:45–15:00 EGU2011-10492
Heike Huebener
 Tripwires between climatological and hydrological research

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

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

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Harry Lins

- A399 EGU2011-1336
Marco Antonellini, Eric Masson, Pauline Nella Mollema, and Abdel Khattabi
 Water Budget Changes under the A1b Climate Change Scenario for the Tahadart Watershed, Tangiers, Morocco.
- A400 EGU2011-1561
Maddalen Mendizabal, Roberto Moncho, and Peter Torp
 Assessing the impact of Climate Change on flood events in the north of Iberian Peninsula (Basque Country Region)
- A401 EGU2011-2176
adeline bichet, martin wild, doris folini, and christoph schär
 Global precipitation response to changing climate forcings since 1870
- A402 EGU2011-4800
YuWen Chen, ChihChao Ho, and LiangCheng Chang
 Applying Conditional Weather Generation Downscaling Model on Long-Term Rainfall Synthesis on a Basin Scale
- A403 EGU2011-5560
Pao-Shan Yu, Jau-Ming Chen, Tao-Chang Yang, Cheng-Chin Liu, and Yu-Chen Lin
 Estimating Probable Maximum Precipitation by Considering Co-movement of Typhoon and Southwesterly Flow
- A404 EGU2011-7510
Dunia Gonzalez Zeas, Luis Garrote, and Ana Iglesias
 Comparison of methods for downscaling runoff from regional climate models in Spanish basins
- A405 EGU2011-11940
Rita Nogherotto, Vanda Grubišić and the NCAR Team
 Drying Ratio of the Colorado Mountains under Climate Change Conditions
- A406 EGU2011-12954
Pierre-Antoine Versini, Marc Berenguer, Romeo Ballinas-González, and Daniel Sempere-Torres
 Hydrological validation of historical precipitation reconstruction
- A407 EGU2011-1444
Simon-Michael Papalexiou, Haris Adraktas-Rentis, Athina Drosou, Eva Kallitsi, Ioannis Kyprianou, Vasilis Mathios, Eva Steirou, Maria-Anna Vasilaki, Menelaos Xirouchakis, and Demetris Koutsoyiannis
 Long-term properties of annual maximum daily rainfall worldwide
- A408 EGU2011-13700
Yannis Markonis and Demetris Koutsoyiannis
 Hurst-Kolmogorov dynamics in long climatic proxy records
- A409 EGU2011-1439
Dimitris Bouziotas, Georgios Deskos, Nikos Mastrantonas, Dimosthenis Tsaknias, Grigoris Vangelidis, Simon-Michael Papalexiou, and Demetris Koutsoyiannis
 Long-term properties of annual maximum daily river discharge worldwide
- A410 EGU2011-1235
Richard Phillips, Salima Baraka-Lokmane, Martin Smith, David Pope, Jon Caplin, Niall Burnside, Gary Bilota, and David Nash
 The Impact of Climate Change on Aquifer Recharge and Groundwater Quality in the Patcham Catchment, England
- A411 EGU2011-8600
Chih-Chao Ho, Yu-Wen Chen, and Liang-Cheng Chang
 Statistical Downscaling Based on Conditional Weather Generation for Storm Hyetograph
- A412 EGU2011-1902
Renji Remesan, Tim Bellerby, and Lynne Frostick
 Effects of GCM uncertainty on climate change impacts on regional hydrology of the river Derwent catchment

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

NH7.2/AS4.14/BG2.17 – Fire in the Earth System: Impacts and Feedbacks (co-organized) – Orals

Convener: Kirsten Thonicke | Co-Conveners: Allan Spessa

Room: 2

Chairperson: Kirsten Thonicke

- 10:30–10:45 EGU2011-383
Fernando Castro, Francesca Barnaba, Federico Angelini, and Gian Paolo Gobbi
The relative role of Amazonian and non-Amazonian fires in building up the aerosol optical depth in South America
- 10:45–11:00 **Placeholder**
- 11:00–11:15 EGU2011-1097
ronan Paugam, martin Wooster, george Papadakis, and martin Schultz
Estimation of the Injection Height of Biomass Burning Emission
- 11:15–11:30 EGU2011-2668
João Silva, João Carreiras, Isabel Rosa, and José Pereira
Greenhouse gas emissions from shifting cultivation in the tropics, including uncertainty and sensitivity analysis
- 11:30–11:45 EGU2011-7074
Elisa Garcia-Hurtado, Esther Borrás, Pilar Sanchez, **Teresa Vera**, M.Jaime Baeza, and V.Ramon Vallejo
Determination of emissions from Mediterranean shrubland fires.
- 11:45–12:00 EGU2011-13297
Brian Magi, Elena Shevliakova, Sergey Malyshev, and Stephen Pacala
Modeling Anthropogenic Drivers of Fires

NH7.2/AS4.14/BG2.17 – Fire in the Earth System: Impacts and Feedbacks (co-organized) – Posters

Convener: Kirsten Thonicke | Co-Conveners: Allan Spessa

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Kirsten Thonicke

- XY574 EGU2011-621
Faith Taylor, Ronan Paugam, and Martin Wooster
Exploring and Improving Methods of Validating a 1D Plume Rise Model for Wildfire Emissions: The Use of BIRD and MODIS Earth Observation Products
- XY575 EGU2011-2921
Matthias Forkel, Kirsten Thonicke, Sibyll Schaphoff, Ursula Heyder, and Christiane Schmillius
Hotspots, vulnerable ecosystems and global change of fire-influenced permafrost degradation
- XY576 EGU2011-3542
Mirco Migliavacca, Alessandro Dosio, Alessandro Cescatti, Andrea Camia, Jesus San Miguel-Ayanz, and Tracy Durrant Houston
Modeling forest fires dynamics in Europe using the Community Land Model
- XY577 EGU2011-7184
Elisa Garcia-Hurtado, Jorge Pey, Esther Borrás, Andrés Alastuey, Xavier Querol, and V.Ramon Vallejo
Determination of particle tracers released in forest fire events in the Mediterranean basin. Ayora burning experiment.
- XY578 EGU2011-9614
Jane Liu, David Tarasick, Mark Parrington, Paul Palmer, Huixia He, Kevin Strawbridge, and Tom Duck
Observation of High Ozone From Canadian Boreal Forest Fires in 2010
- XY579 EGU2011-10524
Anatoly Prokushkin, Oleg Pokrovsky, and Jerome Viers
Wildfire effects on stream hydrochemistry within the zone of continuous permafrost distribution in Central Siberia
- XY580 EGU2011-11273
Beatriz Monge-Sanz, Steve Arnold, and Sarah Monks
Estimation of boreal fire emissions under future climate scenarios and their impacts on Arctic atmospheric composition
- XY581 EGU2011-11696
Margarita Evtugina, Ana Patricia Fernandes, **Ana Calvo**, Teresa Nunes, Célia Alves, Luis Tarelho, and Ana Vicente
Characterisation of emissions from wildfires in Portugal in summer 2010
- XY582 EGU2011-12635
Iryna Khlystova, Silvia Kloster, Alex Loew, and Christian Reick
Integration of satellite burned area products into the land biosphere model JSBACH
- XY583 EGU2011-10782
Thomas Smith, Katherine Allen, Robert Marrs, Michael Harris, John Dold, and Martin Wooster
Emissions of greenhouse gases and selected volatile organic compounds from UK moorland burning estimated using open-path FTIR spectrometry and burnt area measures.

IG3/AS4.15 – Stable Isotopes in Atmospheric Research (co-organized) – Orals

Convener: Ralf Koppmann | Co-Conveners: Astrid Kiendler-Scharr, Thomas Röckmann

Room: 41

Chairperson: Astrid Kiendler-Scharr

- 08:30–08:45 EGU2011-14097
Ingeborg Levin, Cordelia Veidt, Christian Poß, Renate Heinz, Bruce H. Vaughn, James W.C. White, Gordon Brailsford, Tony Bromley, Dave Lowe, Rebecca Fisher, and David Lowry
Long-term observations of stable isotopes in atmospheric methane - how robust are the reported trends?
- 08:45–09:00 EGU2011-13781
Celia Sapart, Patricia Martinerie, Thomas Röckmann and the NEEM firn air collaborators Team
Understanding the CH₄ and N₂O budget over the last 50 years with stable isotope measurement of firn air
- 09:00–09:15 EGU2011-6917
Ashley Jones, Kaley A. Walker, Makoto Suzuki, Yasko Kasai, Masato Shiotani, Chris Boone, Peter Bernath, Gloria Manney, and Xing Shuo Zhai
An intercomparison study of isotopic ozone profiles from the ACE-FTS and JEM-SMILES instruments.
- 09:15–09:30 EGU2011-9679
Joachim Mohn, Béla Tuzson, Pascal Wunderlin, Jan Reent Köster, Albert Manninen, and Lukas Emmenegger
Laser spectroscopic analysis of ambient N₂O isotopomers for source identification

- 09:30–09:45 EGU2011-14098
Jörg Steinwagner, Thomas Röckmann, and Gabriele P. Stiller
 Using HDO-HHO correlations to examine stratospheric chemistry and transport processes
- 09:45–10:00 EGU2011-679
Rahul Peethambaran and Prosenjit Ghosh
 Pattern in isotopic ratio of Indian Summer Monsoon Rainfall (ISMR) 2010 capturing the origin of moisture source; a case study from Southern India

IG3/AS4.15 – Stable Isotopes in Atmospheric Research (co-organized) – Posters

Convener: Ralf Koppmann | Co-Conveners: Astrid Kiendler-Scharr, Thomas Röckmann

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ralf Koppmann

- A482 EGU2011-6916
Stefan G. Huber, Markus Greule, and Frank Keppler
 Stable hydrogen-isotope analysis of methyl chloride emitted from leaves using continuous flow gas chromatography-isotope ratio mass spectrometry
- A483 EGU2011-5121
Jan Kaiser, Johannes Laube, Martin Martin, and James Lockhart
 Chlorine isotope fractionation during photolysis of difluorodichloromethane (CFC-12)
- A484 EGU2011-7750
Alina Jasek, Miroslaw Zimnoch, Zbigniew Gorczyca, and Kazimierz Rozanski
 Seasonal variability of soil CO₂ flux and its stable isotope composition in an urban area: case study from Krakow, southern Poland
- A485 EGU2011-8841
Elisa Sosa Trujillo, Juan Carlos Guerra García, and María Teresa Arencibia Pérez
 Isotopic Composition of Rainwater in Subtropical Region, Tenerife, Canary Islands
- A486 EGU2011-8715
Frank Jäger, Olaf Gluschke, and Rainer Doll
 FTIR- and NDIR-Spectroscopy measurements on environmental air. How accurate are ¹³CO₂ isotope ratio and trace gas measurements with an outdoor instrument ?
- A487 EGU2011-8504
Sergey Gromov, Patrick Jöckel, Rolf Sander, and Carl Brenninkmeijer
 Global stable isotope composition of CO: comprehensive modelling with the ECHAM/MESy Atmospheric Chemistry (EMAC) GCM
- A488 EGU2011-13856
Anneke Batenburg, Elena Popa, Alex Vermeulen, Pim van den Bulk, Piet Jongejan, and Thomas Röckmann
 Measurements of atmospheric molecular hydrogen and its isotopic composition at the Cabauw tall tower in the Netherlands
- A489 EGU2011-13857
Sylvia Walter, Stephan Laukenmann, Alfons Stams, and Thomas Röckmann
 The isotopic signature of biologically produced Hydrogen and its impact to the atmosphere
- A490 EGU2011-13938
Supun Pathirana and Thomas Röckmann
 A Novel Analytical System for Studying the Stable Isotopes of Carbon Monoxide using CF-IRMS
- A491 EGU2011-9976
Marc Krebsbach, Ralf Koppmann, Peter Knieling, Christian Linke, Marcel vom Scheidt, and Holger Spahn
 First Measurements of Stable Carbon Isotope Ratios of VOC in the UT/LMS aboard HALO
- A492 EGU2011-11256
Holger Spahn, Marc Krebsbach, Christian Linke, Robert Wegener, and Ralf Koppmann
 Stable Carbon Isotope Ratios of Methanol in the Atmosphere
- A493 EGU2011-4189
Axel Horst, Henry Holmstrand, Per Andersson, August Andersson, Daniel Carrizo, Brett Thornton, Asher Wishkerman, Frank Keppler, and Örjan Gustafsson
 Compound specific bromine isotope analysis of methyl bromide: method development and initial applications toward plant emissions and the Arctic troposphere
- A494 EGU2011-10453
Andrius Garbaras, Ruta Bariseviciute, Jonas Matijosius, Saugirdas Pukalskas, Andrius Suchanka, and Vidmantas Remeikis
¹³C values of size-segregated aerosol particles emitted by the internal combustion engine
- A495 EGU2011-10802
Nicholas Deutscher, Stephen Parkes, Camille Risi, David Griffith, Christian Frankenberg, Justus Notholt, and Nicholas Jones
 Intercomparing Isotopic Water Vapour Measurements to determine spatial and temporal representativity

A496 EGU2011-13331

Matt Sweeney, Chris Rella, Eric Crosson, Gregor Hsiao, Joe Galewski, and David Noone
Real-time Stable Isotope Analysis of Atmospheric Water Vapor

G5.2/AS4.18 – Atmospheric Water Vapour Retrieval by Space Geodetic Techniques (co-organized) – Orals

Convener: Rosa Pacione | Co-Conveners: Henrik Vedel

Room: 17

Chairperson: Rosa Pacione

13:30–13:45 EGU2011-4222

Siebren de Haan

Impact of GPS ZTD on Rainfall Estimates in an Hourly Update Cycle of a Numerical Weather Prediction Model

13:45–14:00 EGU2011-10409

Stefan Heise, Georg Beyerle, Grzegorz Michalak, Torsten Schmidt, Jens Wickert, and Florian Zus
GPS radio occultation at GFZ: Status and recent results from TerraSAR-X and TanDEM-X

14:00–14:15 EGU2011-1824

Thomas Hobiger, Youhei Kinoshita, Masato Furuya, Ryuichi Ichikawa, Yasuhiro Koyama, and Tetsuro Kondo

InSAR troposphere delay corrections from numerical weather models - status quo and future directions

14:15–14:30 EGU2011-13515

Antonio Martellucci, **Paolo Tortora**, Ermanno Fionda, Susanne Crewell, Gunnar Elgered, Alberto Graziani, Vinia Mattioli, and Per Jarlemark

Water vapour assessment for the characterisation of radiowave propagation in Satellite Communication systems and Radio Science Experiments

14:30–14:45 EGU2011-1312

Dennis Kilian

Real-time Water-Vapor and TEC calculation using GNSS reference station infrastructure

14:45–15:00 EGU2011-6159

Michael Bender, Xingxing Li, Galina Dick, Florian Zus, Markus Ramatschi, Jan Dousa, Junping Chen, Maorong Ge, and Jens Wickert

GPS-derived Atmospheric Water Vapour at GFZ: from Near Real-Time to Real-Time Processing

15:00–15:15 EGU2011-8121

Vahab Nafisi, Matthias Madzak, Andrea Pany, Johannes Böhm, Harald Schuh, and Alireza Azmoude Ardalan

Ray-traced tropospheric slant delays from numerical weather models in VLBI analysis

G5.2/AS4.18 – Atmospheric Water Vapour Retrieval by Space Geodetic Techniques (co-organized) – Posters

Convener: Rosa Pacione | Co-Conveners: Henrik Vedel

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Henrik Vedel

XL228 EGU2011-6705

Gemma Bennitt and Thomas Levick

The impact of assimilating zenith total delay measurements from Ground-based GNSS receivers in the Met Office numerical weather prediction UK model

XL229 EGU2011-2742

Guergana Guerova, June Morland, and Tzvetan Simeonov

Water vapor anomaly during the 2003 and 2007 heat waves in Switzerland and Bulgaria

XL230 EGU2011-7969

Hugues Brenot, Jean Neméghaire, Laurent Delobbe, and Nicolas Clerbaux

Development of deep convection and identification of preliminary signs in water vapour structures by GNSS

XL231 EGU2011-2139

Karolina Szafranek, Krzysztof Kroszczynski, Mariusz Figurski, Janusz Bogusz, and Pawel Kaminski

Investigation of temporal and spatial distribution of slant delay for low elevation angles on the basis of mesoscale weather model data

XL232 EGU2011-5686

Henrik Vedel, Siebren de Haan, Jonathan Jones, Gemma Bennitt, and Dave Offiler

E-GVAP, the EIG EUMETNET GNSS Water Vapour Programm

XL233 EGU2011-5623

Henrik Vedel, **Rosa Pacione**, Brigida Pace, Siebren de Haan, Roberto Lanotte, and Francesco Vespe

On the fly quality evaluation of GNSS ZTD estimates

- XL234 EGU2011-4871
Jan Dousa
Global Near Real-time GNSS Troposphere Product
- XL235 EGU2011-9061
Eric Pottiaux and Carine Bruyninx
GNSS Near Real-Time Zenith Path Delay Estimations at ROB: Validation by Inter-technique Comparisons
- XL236 EGU2011-7840
Tong Ning, Rüdiger Haas, and Gunnar Elgered
Assessment of the zenith wet delay and horizontal delay gradients derived from collocate techniques
- XL237 EGU2011-1034
Ming Shangguan, Michael Bender, Jens Wickert, Ulrich Löhnert, and Susanne Crewel
Comparison of atmospheric water vapor from GPS and WVR
- XL238 EGU2011-12348
Michal Kruczyk, Tomasz Liwosz, and Jerzy Rogowski
IPW from various sources: GPS tropospheric solution, sunphotometer, radiosounding and numerical weather prediction model - conformity analysis
- XL239 EGU2011-12266
Ian Thomas, Matt King, Nigel Penna, and Peter Clarke
An up to date GPS derived precipitable water vapor (PW) dataset for Antarctica, and the effect of the GPS analysis strategy on PW retrievals
- XL240 EGU2011-5212
Jihye Won, Kwan-Dong Park, Du-Sik Kim, and **Hye-In Kim**
A preliminary study for creating precipitable water vapor maps using GPS
- XL241 EGU2011-11758
Francesco Vespe, **Roberto Tolve**, Catia Benedetto, and Patrizia Sacco
Validation of atmospheric profiles retrieved with GPS Radio Occultation observations applying numerical inversion techniques
- XL242 EGU2011-399
Namaoui Houaria
Estimation of tropospheric parameter with GPS data
- XL243 EGU2011-2592
Steffen Schön, Xing Fang, and Ulrich Weinbach
Can line-of-sight information be recovered from GPS double-differences ? - Alber's approach revisited
- XL244 EGU2011-1442
Michael Bender, Galina Dick, Ming Shangguan, Jens Wickert, and Armin Raabe
GPS Tomography: Validation of the Reconstructed Humidity Fields
- XL245 EGU2011-10240
Jan Kap?on, Witold Rohm, Jaros?aw Bosy, and Jan Sierny
NRT GNSS data processing service for regional GNSS tomography
- XL246 EGU2011-12349
Witold Rohm, Jan Sierny, **Jan Kap?on**, and Jaros?aw Bosy
In-situ meteorological data interpolation and homogenization procedure for NRT GNSS tomography

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

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

Room: 18

Chairperson: M. Meghraoui and P. Briole

- 08:30–08:45 EGU2011-12696
Andrew Hooper, David Bekaert, and Mahmut Arikan
Radar interferometry for measuring regional-scale processes
- 08:45–09:00 EGU2011-12096
Ziyadin Cakir, Mustapha Meghraoui, Esra Cetin, Ahmet Akoglu, and Samir Belabbes
Postseismic Hanging-wall Subsidence of the 2003 Zemmouri (Mw=6.9, Algeria) Thrust Earthquake From InSAR Time Series
- 09:00–09:15 EGU2011-11725
Jean-Mathieu Nocquet, Andrea Walpersdorf, François Jouanne, Frédéric Masson, Jean Chéry, and Philippe Vernant
Slow deformation in the Western Alps from a decade of Continuous GPS measurements
- 09:15–09:30 EGU2011-13090
Pierre Briole
Ground deformation monitoring in the Corinth rift laboratory, Greece

- 09:30–09:45 EGU2011-4840
Athanassios Ganas, Kostas Chousianitis, George Drakatos, Marios Papanikolaou, Panagiotis Argyrakis, Maria Kolligri, Panagiota Petrou, Evagelia Batsi, and Christina Tsimi
 NOANET: High-rate GPS Network for Seismology and Geodynamics In Greece
- 09:45–10:00 EGU2011-2324
Ugur Dogan, Semih Ergintav, Baki Karaboce, Gokhan Arslan, Ayse Selendi (1), Deniz Oz, Cuneyt Ayd?n (1), Azer Ilgar, Rahsan Cakmak (2), Alpay Belgen, Enver Sad?koglu, Eyup Bilgic, and Ahmet Direnc
 Long-term Crustal Deformations Based on Gravity and GPS Measurements (2006 - 2010) in Marmara Region, Turkey

COFFEE BREAK

Chairperson: R. Reilinger and A. Hooper

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

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

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

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

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

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

- XL190 EGU2011-11370
Graham Appleby, Georg Kirchner, Jan McGarry, Carey Noll, Erricos Pavlis, and Michael Pearlman
High Quality Products from Satellite Laser Ranging
- XL191 EGU2011-11708
Luisa Bastos, Machiel Bos, and Rui M.S Fernandes
An investigation of monument stability of GPS stations in Iberia
- XL192 EGU2011-13026
Machiel Bos, Odair Tavares, **Luisa Bastos**, and Rui Fernandes
An online GPS time-series analysis provider at GEODAC
- XL193 EGU2011-227
Haluk Ozener, Asli Dogru, and Bulent Turgut
Contemporary Results of GPS Observations in Ismetpasa Creeping Region of North Anatolian Fault Zone (NAFZ), Turkey
- XL194 EGU2011-365
Radia Mir, Salem Kahlouche, and Said Touam
Crustal deformations using GPS data and the Kalman filter: preliminary results
- XL195 EGU2011-1378
Susanna Zerbini, Claudio Prati, Giovanni Cappello, Maddalena Errico, Fabrizio Novali, and Silvia Scirpoli
Combination of INSAR and GPS to measure ground motions and atmospheric signals
- XL196 EGU2011-2707
M. Ersen Aksoy, Mustapha Meghraoui, Matthieu Ferry, Ziyadin Çakır, and Gülsen Uçarku?
Short-term and long-term slip rate estimations along the Ganos Fault using stream offsets and paleo-climatic changes (North Anatolian Fault, Turkey)
- XL197 EGU2011-3962
Stathis C. Stiros, Fanis Moschas, Lujia Feng, and Andrew V. Newman
Constraints to the 2008 Patras (Greece) seismic fault: Evidence from historical triangulation and morphotectonic data.
- XL198 EGU2011-4785
Stefano Tinti, Alberto Armigliato, and Gianluca Pagnoni
The role of GPS observations in a Tsunami Early Warning System suitable for near-shore tsunami detection and forecast.
- XL199 EGU2011-5439
Kamil Eren, Turgut Uzel, Engin Gulal, Ibrahim Tiryakioglu, Ahmet Anil Dindar, and Haluk Yilmaz
Tectonic Studies in Turkey Using CORS-TR Observations
- XL200 EGU2011-5777
Marc-Andre Gutscher
Tectonics of the Gibraltar subduction and its relation to recent kinematics
- XL201 EGU2011-6742
Matthias Becker, **Mohamed Saleh**, Mohamed Rashwan, Sayed Mohamed Abd el-Monem, Salah Mahmoud, Hassan Khalil, Awad Omran, and Mostafa Yousef
Regional and local deformation analysis results from the Nile River Valley and its relation to seismicity
- XL202 EGU2011-7357
Mohamed Chlieh, Hernando Tavera, Jean-Mathieu Nocquet, Juan-Carlos Villegas, Hugo Perfettini, and Jean-Philippe Avouac
Interseismic Coupling maps in South America subduction zone as indicator of future large Megathrust Earthquakes
- XL203 EGU2011-8062
Joaquim Sousa, Luisa Bastos, Antonio Ruiz, Ramon Hanssen, and Andy Hooper
Terrain Deformation Monitoring in Granada Basin Area Using Persistent Scatterers Interferometry (PSI)
- XL204 EGU2011-9179
Yasser Mahmoud, Frederic Masson, Mustapha Meghraoui, Ziyadin Cakir, Abd elmotaleb Alchalbi, Hakan Yavasoglu, Onder Yönlü, Mohamed Daoud, Semih Ergintav, and Sedat Inan
GPS velocity field in SE Turkey and NW Syria derived from 2009 and 2010 measurements
- XL205 EGU2011-9721
Yüksel Altiner
Another view on the study of Earth's crust deformations applied in Adriatic plate
- XL206 EGU2011-12464
Aggeliki Marinou, Xanthos Papanikolaou, Dimitris Paradissis, Dimitris Anastasiou, Vangelis Zacharis, Panayiotis Tzavaras, Kalliopi Papazissi, and Christiana Mitsakaki
Estimating of tectonic velocities in the Ionian region.
- XL207 EGU2011-11998
Rui Fernandes, José Quembo, Jorge Miranda, and Damien Delvaux
Present-Day Kinematics of Mozambique derived from Episodic GPS data

- XL208 EGU2011-12149
Robert King, Simon McClusky, Philippe Vernant, Semih Ergintav, Galaktion Hahubia, Fakhraddin Kadirov, Samir Mammadov, Ruben Stepanyan, Tamara Guseva, and Vadim Milyukov
 New GPS velocity field for the Arabian-Eurasian collision zone
- XL209 EGU2011-12720
Demitris Anastasiou, Aggeliki Marinou, Xanthos Papanikolaou, Vangelis Zacharis, Demitris Paradissis, Kalliopi Papazissi, and Christiana Mitsakaki
 Deformation studies using GPS data for South Peloponnisos
- XL210 EGU2011-12775
Juan Carlos Villegas Lanza, Jean-Mathieu Nocquet, Hernando Tavera, Mohamed Chlieh, and Francis Bondoux
 A new GPS velocity field from Central Peru to northern Ecuador
- XL211 EGU2011-8122
Oliver Boyd, Yuehua Zeng, and Leonardo Ramirez-Guzman
 Modeling surface deformation in the New Madrid seismic zone
- XL212 EGU2011-9330
Tilo Schöne, Julia Illigner, Cornelia Zech, Cecep Subarya, Pak Khafid, Wahyu Pandoe, Imam Mudita, and Roman Galas
 GNSS in Support of Sea Level Monitoring: Early Warning to Long-Term Corrections
- XL213 EGU2011-13129
David Mencin, Selwyn Sacks, Alan Linde, and Michael Gladwin
 Borehole Strainmeters and Natural Hazards

AS4.23 – The Russian Heat Wave and Fires of 2010 – Orals

Convener: Michael Fromm | Co-Conveners: Johann Georg Goldammer, Brian Stocks, Meinrat Andreae, Marloes Penning de Vries, Nikolai Elansky

Room: 19

Chairperson: Michael Fromm, Marloes Penning de Vries

- 13:30–13:45 EGU2011-1610
Anna Ivanova, Natalia Shakina, Elena Skriptunova, and Natalia Bogaevskaia
 Extreme dynamic conditions for 2010 blocking in European Russia as compared with earlier episodes
- 13:45–14:00 EGU2011-5909
Igor B. Kononov, Matthias Beekmann, Irina N. Kuznetsova, Anatoliy M. Zvyagintsev, and Alla Yurova
 Impacts of 2010 Russian wildfires on atmospheric composition: integrating satellite and ground based observations with regional model simulations
- 14:00–14:15 EGU2011-5063
Brian Stocks, Mike Fromm, Johann Goldammer, Richard Carr, and Anatoly Sukhinin
 Extreme Forest Fire Activity in Western Russia in 2010: Fire Danger Conditions, Fire Behavior and Smoke Transport
- 14:15–14:30 EGU2011-5883
Igor Zveryaev, Sergey Gulev, and Peter Koltermann
 Russian heat wave of 2010 in the context of hot summer events over the last century
- 14:30–14:45 EGU2011-3169
Vincent Huijnen, Johannes Flemming, Johannes W. Kaiser, Antje Inness, Martin G. Schultz, and Angelika Heil
 Assimilation and hindcast experiments of reactive trace gases during the 2010 Russian fires
- 14:45–15:00 EGU2011-5894
Nikolai Elansky, Igor Belikov, Elena Berezina, Alexander Elovkhov, Viktor Ivanov, Natalya Pankratova, Oleg Postylyakov, Alexander Safronov, Andrey Skorokhod, and Roman Shumsky
 Gaseous composition of surface air in Moscow during the extreme heat and fires in summer 2010

AS4.23 – The Russian Heat Wave and Fires of 2010 – Posters

Convener: Michael Fromm | Co-Conveners: Johann Georg Goldammer, Brian Stocks, Meinrat Andreae, Marloes Penning de Vries, Nikolai Elansky

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michael Fromm, Nikolai Elansky

- XY169 EGU2011-12264
Brigitte Mueller, Sonia I. Seneviratne, and Richard de Jeu
 Soil moisture anomalies during the Russian heat wave of 2010

- XY170 EGU2011-2756
Daniel Lindsey, Michael Fromm, and Zdenek Charvat
Using CALIOP Aboard CALIPSO to Quantify the Impacts of the 2010 Russian Fires on Stratospheric Aerosols
- XY171 EGU2011-6943
Tero Mielonen, Harri Portin, Ari Leskinen, Mika Komppula, Antti Arola, and Kari Lehtinen
Biomass burning aerosols measured with in-situ and remote sensing instruments in Kuopio, Finland during the Russian forest fires in 2010
- XY172 EGU2011-7232
Mio Matsueda
Predictability of blocking events over the Euro-Russian region in summer 2010
- XY173 EGU2011-9663
Pao Wang
Cloud model simulation of dynamical processes atop pyrocumulonimbus
- XY174 EGU2011-11945
Judith Perlwitz, Randall Dole, Martin Hoerling, and Jon Eischeid
Physical processes associated with heat waves over Russia in a changing climate
- XY175 EGU2011-13631
Yoshihiro Tachibana, Tetsu Nakamura, and Yuriko Otomi
Abrupt evolution of the summer Arctic Oscillation and its association with blocking and anomalous hot summer
- XY176 EGU2011-12178
Deborah Claire Stein-Zweers, Pepijn Veefkind, and Pieternel Levelt
Biomass burning plumes in the vicinity of Moscow as seen by OMI during summer 2010
- XY177 EGU2011-7207
Michael Fromm, Zdenek Charvat, and Pat Kablick
Extreme Fire Behavior in Russia in 2010: Pyroconvection Across the Continent
- XY178 EGU2011-617
Vadim Rakitin, Anatoly Dzhola, Evgeny Grechko, Ekaterina Fokeeva, Roman Shumsky, and Leonid Yurganov
CO pollution anomaly over Moscow and rural area in summer 2010, July - August.
- XY179 EGU2011-1770
Jacque Witte, Anne Douglass, Bryan Duncan, Arlindo da Silva, Omar Torres, and Pepijn Veefkind
Observation highlights of the 2010 Russian wildfires: A satellite perspective
- XY180 EGU2011-753
Mikhail A. Lokoshchenko
Disastrous hot in Moscow city in summer of 2010 by results of meteorological measurements

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Orals

Convener: Thorvaldur Thordarson | Co-Conveners: Susan Loughlin, Sigrun Hreinsdottir, Halldór Björnsson, Séverine Moune

Room: 4

Chairperson: n.n.

- 08:30–08:45 EGU2011-8790
Helen Dacre and Alan Grant
The prediction and observation of volcanic ash clouds during the Eyjafjallajökull eruption
- 08:45–09:00 EGU2011-1319
Cordelia Maerker, **Lars Klüser**, Thilo Erbertseder, Julian Meyer-Arneke, Dmytro Martynenko, and Thomas Holzer-Popp
Infrared observation of volcanic ash and estimation of ash emission profiles of the 2010 Eyjafjöll eruption
- 09:00–09:15 EGU2011-13253
Andreas Vogel, Konradin Weber, Christian Fischer, Günther van Haren, Tobias Pohl, Bernhard Grobety, and Mario Meier
Airborne in-situ measurements of the Eyjafjallajökull ash plume with a small aircraft and optical particle spectrometers over north-western Germany - comparison between the aircraft measurements and the VAAC-model calculations
- 09:15–09:30 EGU2011-2420
Nicolas Bukowiecki and the The Swiss Eyja In-Situ Observation Team
Ground-based and airborne in-situ measurements of the Eyjafjallajökull volcanic aerosol plume in Switzerland in April and May 2010
- 09:30–09:45 EGU2011-6252
Matthias Tesche, Albert Ansmann, Patric Seifert, Ina Mattis, Silke Groß, Volker Freudenthaler, Arnoud Apituley, Keith Wilson, Ilya Serikov, and Holger Linné
Separation of volcanic ash and sulfate aerosol based on lidar-photometer observations in central Europe after the eruption of the Eyjafjallajökull volcano

- 09:45–10:00 EGU2011-4957
Patric Seifert, Silke Groß, Albert Ansmann, Volker Freudenthaler, Anja Hiebsch, Jörg Schmidt, Franziska Schnell, Matthias Tesche, Bernd Heinold, and Matthias Wiegner
 Ice formation in ash-influenced clouds after the Eyjafjallajökull eruption in April 2010
- 10:00–10:15 EGU2011-11538
Julien Vergoz, Robin S. Matoza, Alexis Le Pichon, Pierre Gaillard, Lars Ceranna, David N. Green, Láslo G. Evers, Emanuele Marchetti, Maurizio Ripepe, and Paola Campus
 Telesonic infrasound from Eyjafjallajökull, Iceland: a unique opportunity to understand infrasonic network detection capability of volcanic eruptions

NH2.3/AS4.29/GMPV47 – The 2010 flank and summit eruptions at Eyjafjallajökull volcano (Iceland): History of an eruption from source to the atmosphere (co-organized) – Posters

Convener: Thorvaldur Thordarson | Co-Conveners: susan loughlin, Sigrun Hreinsdottir, Halldór Björnsson, Séverine Moune

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY516 EGU2011-10353
Sigrún Hreinsdóttir, Thóra Árnadóttir, Freysteinn Sigmundsson, Andrew Hooper, Matthew Roberts, Halldór Geirsson, and Benedikt Ófeigsson
 Surface Deformation Prior to and During the 2010 Eyjafjallajökull Eruptions from Spatial and Temporal Variations in GPS Time Series
- XY517 EGU2011-13017
Joana Martins, Andrew Hooper, Karsten Spaans, Freysteinn Sigmundsson, and Kurt Feigl
 InSAR Time Series analysis of the Eyjafjallajökull eruptions using TerraSAR-X data
- XY518 EGU2011-8413
 Jon Tarasewicz, Bryndis Brandsdottir, **Robert White**, Martin Hensch, and Bergthora Thorbjarnardottir
 Tracking the seismicity preceding and during the March 2010 Fimmvörðuháls fissure eruption and April 2010 summit eruption of Eyjafjallajökull, Iceland
- XY519 EGU2011-13109
Freysteinn Sigmundsson, Kristin Vogfjord, Sigurlaug Hjaltadottir, Bryndis Brandsdottir, Jon Tarasewicz, Bob White, Martin Hensch, Jakob K. Keiding, Olgeir Sigmarsson, and Andy Hooper
 Volcano anatomy: Comparing geodetic, seismic, and geochemical constraints on inner structure and magma transport at Eyjafjallajökull volcano
- XY520 EGU2011-3686
Haraldur Páll Gunnlaugsson, Sigurdur Steinthorsson, Niels Oskarsson, Morten Bo Madsen, Per Nørnberg, and Jon Merrison
 Mössbauer Spectroscopy of Samples from the 2010 Eyjafjallajökull Summit Eruption
- XY521 EGU2011-12046
Thorvaldur Thordarson, Chris Hayward, Margaret Hartley, Olgeir Sigmarsson, Ármann Höskuldsson Höskuldsson, and Guðrún Larsen
 The 14 April - 22 May 2010 summit eruption at Eyjafjallajökull volcano, Iceland: Volatile contents and magma degassing
- XY522 EGU2011-12040
Patrick Allard, Mike Burton, Niels Oskarsson, Agnès Michel, and Margherita Polacci
 Magmatic gas composition and fluxes during the 2010 Eyjafjallajökull explosive eruption: implications for degassing magma volumes and volatile sources
- XY523 EGU2011-7978
Póður Arason, Halldór Björnsson, and Guðrún Nína Petersen
 Plume-top altitudes during the Eyjafjallajökull 2010 eruption
- XY524 EGU2011-13167
 Ingibjörg Jónsdóttir, Guðrún Larsen, **Thor Thordarson**, Ármann Höskuldsson, Friðrik Höskuldsson, and Ashley Gerard Davies
 Tephra dispersal monitoring by satellite images
- XY525 EGU2011-9091
John Stevenson, Jennie Gilbert, Ármann Höskuldsson, Antoni Milodowski, Susan Loughlin, and Thorvaldur Thordarson
 Morphology of proximal and distal ash grains from the 2010 Eyjafjallajökull summit eruption.
- XY526 EGU2011-13213
Chr. Bender Koch, Thomas Bjerring Kristensen, and Merete Bilde
 SEM analysis of tephra collected in rain in Copenhagen during the 2010 eruption of Eyjafjallajökull
- XY527 EGU2011-5886
Ulrich Schumann, Robert Baumann, Andreas Minikin, Oliver Reitebuch, Thomas Sailer, Hans Schlager, Christian Voigt, and Bernadett Weinzierl
 The volcanic ash plume near the Eyjafjallajökull in April/May 2010

- XY528 EGU2011-3522
Bergun Oladottir, Gudrun Larsen, and Olgeir Sigmarsson
The neighbours of the Eyjafjallajökull volcano: Katla, Grímsvötn and Bárðarbunga
- XY529 EGU2011-6221
Gudrun Sverrisdottir and the Lahar Team
May 19th rain triggered lahar originating in the Eyjafjallajökull 2010 volcanic ash. Observation, mapping and granulometric study.
- XY530 EGU2011-8563
Stuart Dunning, Andy Large, Andy Russell, Anne-Sophie Meriaux, Robert Duller, and Matthew Roberts
The use of repeat Terrestrial Laser Scanning to quantify jökulhlaup induced change caused by the 2010 Eyjafjallajökull eruption, Iceland
- XY531 EGU2011-13142
Andy Russell, Andy Large, Anne-Sophie Mériaux, Stuart Dunning, Matthew Roberts, Rob Duller, Qihua Liang, Jonathan Carrivick, Fiona Tweed, and Málfríður Ómarsdóttir
Impacts and dynamics of volcanically-generated jökulhlaups, Eyjafjallajökull, Iceland
- XY532 EGU2011-4161
Robert Duller, Nicholas Warner, Chris McGonigle, and Andrew Russell
Landscape response and development following the catastrophic 1918 jökulhlaup, southern Iceland
- XY533 EGU2011-10941
Martin Kirkbride and Andrew Dugmore
Impacts of the Ey2010 tephra fall on Icelandic ice caps: interactions between substrate and glacier surface topography.
- XY534 EGU2011-11546
Throstur Thorsteinsson, Thorsteinn Johannsson, and Gudrun Petursdottir
High levels of particulate matter due to ash plume and ash re-suspension following the Eyjafjallajökull eruption

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

Convener: Reinhard Budich | Co-Conveners: Dan Lunt

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

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

- XL168 EGU2011-6341
Thomas Jung, Sergey Danilov, Kerstin Fieg, Wolfgang Hiller, Jens Schroeter, Dmitry Sidorenko, and Qiang Wang
Towards a coupled climate model with a finite-element sea ice-ocean representation
- XL169 EGU2011-7726
Jon Hill and the Applied Modelling and Computation Group Team
Fluidity - an open-source, next-generation, fluid dynamics framework

ML1 – Alfred Wegener Medal Lecture by Gerold Wefer (co-listed) – Orals

Convener: Tuija Pulkkinen

Room: D

Chairperson: Tuija Pulkkinen

- 12:15–13:15 EGU2011-3107
Gerold Wefer, Stefan Mulitza, and Michael Schulz
Understanding the drivers of environmental changes in West Africa from sedimentary deep-sea records
(Alfred Wegener Medal Lecture)

ML4 – Vilhelm Bjerknes Medal Lecture by Karin Labitzke (co-listed) – Orals

Convener: Charlotte Bay Hasager

Room: 14

Chairperson: Charlotte Bay Hasager

- 19:00–20:00 EGU2011-14175
Karin Labitzke
On the QBO-Solar-Relationship throughout the year (Vilhelm Bjerknes Medal Lecture)

Wednesday, 06 April

AS1.3 – Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (General Session) – Orals

Convener: Silas Michaelides | Co-Conveners: Vincenzo Levizzani, Arthur Hou, Kenji Nakamura

Room: 14

Chairperson: V.Levizzani, P.Kucera

- 08:30–08:45 EGU2011-11316
George Huffman, Christian Klepp, Paul Kucera, and Bozena Lapeta
 Status and Update of the International Precipitation Working Group
- 08:45–09:00 EGU2011-1972
Mircea Grecu and William S. Olson
 Efficient Monte Carlo Algorithm to Retrieve Precipitation from Satellite Combined Radar and Radiometer Observations
- 09:00–09:15 EGU2011-3228
Rafal Iwanski, Bozena Lapeta, and Danuta Serafin
 Remote sensing information on precipitation in Poland - radar and ATS datasets as a validation sources for H-SAF satellite precipitation products - case study analysis.
- 09:15–09:30 EGU2011-3974
Takuji Kubota, Naofumi Yoshida, Riko Oki, Shuji Shimizu, Misako Kachi, Masahiro Kojima, Toshio Iguchi, Shinta Seto, and Kenji Nakamura
 Current Status of Japan's Activity for GPM/DPR algorithm development
- 09:30–09:45 EGU2011-4327
Guosheng Liu, Yu Wang, Eun-Kyoung Seo, and Holly Nowell
 Determining Snow Cloud Characteristics by Both Active and Passive Microwave Satellite Observations
- 09:45–10:00 EGU2011-4988
Efi Foufoula-Georgiou and Mohammad Ebtehaj
 Adaptive Fusion of Multi-sensor Precipitation Observations using Gaussian Scale Mixtures in the Wavelet Domain

COFFEE BREAK

Chairperson: A.Hou, Z.Haddad

- 10:30–10:45 EGU2011-5295
Chris Kidd and Arthur Hou
 Advancing the next generation of global precipitation measurements
- 10:45–11:00 EGU2011-11482
Thomas Fiolleau and Rémy Roca
 Mesoscale Convective Systems life cycle characteristics from METEOSAT and precipitating estimates derived from TRMM over the monsoon regions
- 11:00–11:15 EGU2011-12616
ziad haddad and kyungwon park
 Vertical profiling of rain using passive microwaves over the Atlantic ITCZ, and its implications about flights AF447 on 1 June 09 and AF445 on 1 Dec 09
- 11:15–11:30 EGU2011-13228
Dmitri Moisseev, Tristan L'Ecuyer, and Walt Petersen
 First results of the Light Precipitation Validation Experiment
- 11:30–11:45 EGU2011-13846
V. Chandrasekar and C. Balaji
 Space borne precipitation Radar, radiometers and precipitation: What is common between them?
- 11:45–12:00 EGU2011-14125
Ardeshir Art Azarbarzin
 The Global Precipitation Measurement (GPM) project

LUNCH BREAK

Chairperson: T.Kubota, E. Foufoula-Georgiou

- 13:30–13:45 EGU2011-7911
Pablo Saavedra, Alessandro Battaglia, and Clemens Simmer
Light precipitation observations at high latitudes by the radiometer ADMIRARI during the Finnish LPVEx campaign.
- 13:45–14:00 EGU2011-8439
Ralf Bennartz, **Mark Kulie**, and Mike Hiley
The sensitivity of combined passive microwave and multi-frequency radar signatures to microphysical assumptions
- 14:00–14:15 EGU2011-8966
Benjamin Johnson and Gail Skofronick-Jackson
Satellite-Based Passive Microwave Retrieval of Ice-Phase Precipitation
- 14:15–14:30 EGU2011-9364
George Huffman, David Bolvin, Eric Nelkin, and Robert Adler
Upgrades to the TRMM Multi-satellite Precipitation Analysis (TMPA)
- 14:30–14:45 EGU2011-3670
Sahra Kacimi, Nicolas Viltard, and Pierre-Emmanuel Kirstetter
Optimization of a rain retrieval algorithm using microwave data from satellite
- 14:45–15:00 EGU2011-4741
Themis Chronis and the Dr. Themis Chronis Team
Synergistic Severe Weather Monitoring over the Greek Seas
- Chairperson: G.Petty, F.Teschl
- 15:30–15:45 EGU2011-5737
Erwin Wolters, Bart van den Hurk, and Rob Roebeling
Evaluation Of Rainfall Retrievals from SEVIRI Reflectances over West Africa using TRMM-PR and CMORPH
- 15:45–16:00 EGU2011-6048
Luca Facheris, Fabrizio Cuccoli, Luca Baldini, and Stefano Gori
Estimating rainfall through a network of radiobase stations and tomographic processing in urban area: impact of link density
- 16:00–16:15 EGU2011-11099
Frédéric Tridon, Joël Van Baelen, and Yves Pointin
Identification of convective and stratiform areas towards improved precipitation estimation with a local area X-band radar
- 16:15–16:30 EGU2011-11309
Franz Teschl, Walter L. Randeu, and Reinhard Teschl
Microwave single scattering of preferential oriented ice crystals
- 16:30–16:45 EGU2011-36
Erich Stocker and Yimin Ji
GPM near-realtime data production at PPS
- 16:45–17:00 EGU2011-9768
Miguel Nogueira, Ana Barros, and Pedro Miranda
Multiscaling properties of embedded convective structures in orographic precipitation: toward subgrid-scale predictability

AS1.3 – Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (General Session) – Posters

Convener: Silas Michaelides | Co-Conveners: Vincenzo Levizzani, Arthur Hou, Kenji Nakamura

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: O.Pratt, F.Porcu, H.Takahashi

- XY1 EGU2011-7817
Christian Chwala, Harald Kunstmann, Susanne Hipp, Uwe Siart, Wei Qui, and Jörg Seltmann
Line integrated precipitation and humidity observation with a coherent microwave transmission experiment at 22.235 GHz and 34.8 GHz
- XY2 EGU2011-8015
Ferat Çağlar, Elcin Tan, and Yurdanur Sezginer Unal
A High Resolution Flash Flood Event Simulation in Istanbul Using the WRF Model
- XY3 EGU2011-8474
David Wolff
Comparison of TRMM V6 and V7 (ITE225) Rain Rate Retrievals
- XY4 EGU2011-8746
Marc Schneebeli and **Alexis Berne**
Processing polarimetric X-band weather radar data with an Extended Kalman Filter framework

- XY5 EGU2011-8792
Luca Baldini, Nicoletta Roberto, Eugenio Gorgucci, Jason Fritz, and Ve Chandrasekar
Analysis of precipitation in polarimetric images collected by the COSMO SkyMed constellation
- XY6 EGU2011-8842
Margarida Belo-Pereira, Emanuel Dutra, and Pedro Viterbo
Precipitation over the Iberian Peninsula: ECMWF re-analyses versus observational gridded datasets
- XY7 EGU2011-8938
Stephen Munchak, Gail Skofronick-Jackson, and Benjamin Johnson
Thresholds of Passive Microwave Snowfall Detection Determined Using CloudSat and AMSU-B
- XY8 EGU2011-9207
Humberto A. Barbosa, Michel d. S. Mesquita, and Flavio B. Justino
A close look at a severe mesoscale convective system surrounding the Air France 447 crash
- XY9 EGU2011-9567
Olivier Prat and Brian Nelson
Yearly, seasonal, and diurnal precipitation trends in the Southeastern United States derived from long-term remotely sensed data and quantification of hydro-climatic extremes
- XY10 EGU2011-9621
Hiroshi G. Takahashi
Precipitation climatology over Southeast Asia during the winter monsoon: Comparison between different rainfall datasets
- XY11 EGU2011-9888
Paul Kucera, Barbara Brown, Courtney Weeks, and Randy Bullock
Application of MET for the Verification of the NWP Cloud and Precipitation Products using A-Train Satellite Observations
- XY12 EGU2011-9985
Canberk Karadavut, Ferat Ça?lar, Yurdanur Ünal, and Elçin Tan
WRF simulation of snow event on the Eastern Anatolia Region, Turkey: assessment using different microphysics and ground observations
- XY13 EGU2011-10179
Stijn de Jong and Rolf Hut
Comparison of different Calibration methods of a low cost disdrometer
- XY14 EGU2011-10587
Heiko Steiner, Ulf Riediger, and Annegret Gratzki
Development of gridded reference datasets covering Germany and bordering river basins
- XY15 EGU2011-10739
Joanna Linkowska and **Katarzyna Starosta**
Regime dependant and conditional verification of accumulated precipitation in the COSMO_PL
- XY16 EGU2011-10793
Alexander Walther, Jee-Hoon Jeong, Grigory Nikulin, Deliang Chen, and Colin Jones
Potential future changes of the diurnal precipitation properties over Sweden
- XY17 EGU2011-11023
Gina Tiron and Steluta Gosav
Improving Rainfall Estimation by the Optimization of Input Data using PC-ANN Systems
- XY18 EGU2011-11122
Frédéric Tridon, Joël Van Baelen, and Yves Pointin
Automatic detection of spectral aliasing to avoid errors in Micro Rain Radar retrievals due to strong vertical wind
- XY19 EGU2011-11154
Sante Laviola, Elsa Cattani, and Vincenzo Levizzani
Rainfall estimations and characterization of snow-covered terrains: Validation of the new version of the 183-WSL retrieval method
- XY20 EGU2011-11285
Santos Mónica and Fragozo Santos
Trends in extreme daily precipitation indices in Northern of Portugal
- XY21 EGU2011-11446
Fátima E. Santo, **Isabel de Lima**, and Alexandre M. Ramos
Trends in daily precipitation extremes in Mainland Portugal, 1941-2007
- XY22 EGU2011-11450
Kwo-Sen Kuo, Ziad Haddad, Simone Tanelli, Bill Olson, and Gail Skofronick-Jackson
Identifying effective parameters for characterizing the scattering of ice and snow aggregate particle ensembles
- XY23 EGU2011-11455
Jessica Erlingis, Ana Barros, and Prabhakar Shrestha
An investigation of the role of daytime land-atmosphere interactions on nocturnal convective activity using a coupled land-cloud resolving model

- XY24 EGU2011-12367
Gérémy Panthou, Vischel Théo, Lebel Thierry, Quantin Guillaume, and Ali Abdou
Impact of climate variability on extreme rainfall statistics in West Africa
- XY25 EGU2011-12438
Gail Skofronick-Jackson, Benjamin Johnson, James Wang, and S. Joseph Munchak
Falling snow retrievals from space
- XY26 EGU2011-12638
Luca G. Lanza and **Matteo Colli**
Dynamic performance of a weighing rain gauge under laboratory simulated time-varying reference rainfall rates
- XY27 EGU2011-12672
Zoran Pasaric and Josip Juras
Multicategorical contingency tables in the precipitation forecast verification
- XY28 EGU2011-12732
Clelia Caracciolo, **Federico Porcu**, and Franco Prodi
Drop Size Distribution over the Tibetan Plateau.
- XY29 EGU2011-12829
Karl Bumke, Alexander Strehz, Marc Schröder, and Karsten Fennig
Detection of precipitation over the sea in satellite climatologies
- XY30 EGU2011-13025
Flavio Couto, Rui Salgado, Hari Prasad, and M. Joao Costa
A study of intense rainfall events in Madeira Island using numerical Models
- XY31 EGU2011-13592
Ana Maria Gomes, Gerhard Held, Marcelo Moreira Medeiros, and Jonas Teixeira Nery
The use of a radar network to determine the characteristics of mesoscale convective systems in the State of São Paulo
- XY32 EGU2011-13747
Diofantos Hadjimitsis, Nektarios Chrysoulakis, Adrianos Retalis, and **Silas Michaelides**
Estimation of spatio-temporal distribution of precipitable water over Cyprus using MODIS and AVHRR
- XY33 EGU2011-13748
Ana Maria Gomes, Gerhard Held, and Jaqueline Murakami Kokitsu
Radar networking in the South-southeast Brazil - The SINAL-SOS Project
- XY34 EGU2011-5972
Luis Gimeno, Anita Drumond, **Raquel Nieto**, Ricardo Trigo, and Andreas Stohl
On the origin of continental precipitation

AS1.4 – Clouds, Aerosols and Radiation (General Session) – Orals

Convener: Andrea I. Flossmann | Co-Conveners: Andreas Macke, Johannes Quaas, Arturo Sanchez-Lorenzo, Patrick Laux, Harrie-Jan Hendricks Franssen, Stefanie Vogl, Simone Lolli

Room: 12

Chairperson: n.n.

- 08:30–08:45 EGU2011-2701
Kentaroh Suzuki, Graeme Stephens, Takashi Nakajima, Teruyuki Nakajima, Masaki Satoh, and Susan van den Heever
Warm cloud microphysics and its interaction with aerosols: cloud-resolving modeling and satellite observation
- 08:45–09:00 EGU2011-2089
Ana Sesartic, Ulrike Lohmann, Trude Storelvmo, and Tanja Dallafior
Modelling global emissions of bacteria and fungal spores acting as ice nuclei
- 09:00–09:15 EGU2011-6963
Thorsten Mauritsen, Joseph Sedlar, Michael Tjernström, Caroline Leck, Maria Martin, Matthew Shupe, Staffan Sjogren, Berko Sierau, Ola Persson, Ian N. Brooks and the T. Mauritsen Team
An Arctic CCN-limited cloud-aerosol regime
- 09:15–09:30 EGU2011-12024
Stavros Solomos, George Kallos, and Jonilda Kushta
Effects of airborne particles on cloud processes and precipitation
- 09:30–09:45 EGU2011-463
Tom Goren and Daniel Rosenfeld
Can aerosols close open cells in the Marine Boundary Layer?
- 09:45–10:00 EGU2011-1668
Vaughan Phillips and Jun-Ichi Yano
Ice-Ice Collisions: An Ice Multiplication Process in Atmospheric Clouds

COFFEE BREAK

Chairperson: V. Schemann, J. Crosier

- 10:30–10:45 EGU2011-704
Greg McFarquhar, David Plummer, Robert Rauber, and Brian Jewett
 In-situ microphysical measurements of banded structures in cold-season extra-tropical cyclones
- 10:45–11:00 EGU2011-3117
Jan Cermak
 Determinants of Cloud Properties - A Statistical Study
- 11:00–11:15 EGU2011-1665
Kay Suselj and Joao Teixeira
 Unified boundary layer and convection parameterization: simulation of the transition from stratocumulus to shallow cumulus boundary layers
- 11:15–11:30 EGU2011-2315
 Joanna Slawinska, **Wojciech Grabowski**, Hanna Pawlowska, and Hugh Morrison
 Large-eddy simulation of a shallow cumulus field with a double-moment warm-rain microphysics
- 11:30–11:45 EGU2011-3934
Juilin Li, Richard Forbes, Duane Waliser, and Tristan L'Ecuyer
 Radiative impacts of precipitating hydrometeors on atmosphere circulation features in weather and climate models
- 11:45–12:00 EGU2011-4424
Philip Stier, Benjamin Grandey, Rosalind West, Zak Kipling, and Edward Gryspeerdt
 Observational constraints on model-based assessments of indirect aerosol radiative effects - and model constraints on observations

LUNCH BREAK

Chairperson: K. Suzuki, E. Ludewig

- 13:30–13:45 EGU2011-5096
Yousuke Sato, Teruyuki Nakajima, and Kentaroh Suzuki
 A study of microphysical mechanism for correlation patterns between droplet radius and optical thickness of warm clouds simulated idealized and downscaling simulation by a three-dimensional spectral bin microphysics model.
- 13:45–14:00 EGU2011-9701
Juha Tonttila, Ewan O'Connor, Sami Niemelä, Petri Räisänen, and Heikki Järvinen
 Cloud base vertical velocity statistics - A comparison between AROME and CloudNet observations
- 14:00–14:15 EGU2011-4287
Claudia Stubenrauch, Stefan Kinne and the GEWEX Cloud Assessment Team
 GEWEX Cloud Assessment: cloud properties and their variation
- 14:15–14:30 EGU2011-2069
Ping Wang, Piet Stammes, and Richard Mueller
 Evaluation of the broadband surface solar irradiance derived from SCIAMACHY effective cloud fraction
- 14:30–14:45 EGU2011-6039
Jennifer Müller, Hartwig Deneke, Victor Venema, and Clemens Simmer
 Radiative fluxes from active satellite observations and their sensitivity to scale
- 14:45–15:00 EGU2011-7923
Kuan-Man Xu, Anning Cheng, and Seiji Kato
 Comparison of an Upgraded Multiscale Modeling Framework Simulation with Merged CERES, CloudSat, CALIPSO and MODIS (C3M) Data

Chairperson: M. Penning de Vries, C. Stubenrauch

- 15:30–15:45 EGU2011-8543
Ralf Bennartz
 A sharper view of fuzzy objects: Synergistic use of A-Train measurements to study warm clouds
- 15:45–16:00 EGU2011-10491
Seethala Chellappan, Jan Fokke Meirink, Ákos Horváth, Ralf Bennartz, and Rob Roebeling
 Investigating the diurnal variation of South Atlantic boundary layer clouds from SEVIRI and TMI
- 16:00–16:15 EGU2011-10627
Jui-Yuan Christine Chiu, Alexander Marshak, Yuri Knyazikhin, and Warren Wiscombe
 Spectral-invariant behavior of zenith radiance near cloud edges: Simulations and implications

- 16:15–16:30 EGU2011-11213
Verena Grützun, Maximilian Voigt, Felix Ament, and Johannes Quaas
 Evaluating cloud schemes in global circulation models - what can we gain from ground based remote sensing and high resolution modeling?
- 16:30–16:45 EGU2011-11909
Hartwig Deneke, Simone Placidi, and Dave Donovan
 Correcting for 3D Radiative Effects in the Estimation of Cloud Properties from Reflected Solar Radiation
- 16:45–17:00 EGU2011-3373
Gaby Radel, Igor V. Ptashnik, Keith P. Shine, and Julie Chenery
 Radiative impact of the water vapour continuum in near-infrared windows and possible consequences for cloud remote sensing

AS1.4 – Clouds, Aerosols and Radiation (General Session) – Posters

Convener: Andrea I. Flossmann | Co-Conveners: Andreas Macke, Johannes Quaas, Arturo Sanchez-Lorenzo, Patrick Laux, Harrie-Jan Hendricks Franssen, Stefanie Vogl, Simone Lolli

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY35 EGU2011-1468
Dong Yeong Chang, Holger Tost, Benedikt Steil, Kirsty Pringle, and Jos Lelieveld
 Global performance of the prognostic cloud droplet nucleation scheme and the effective aerosol hygroscopicity parameter in the EMAC model
- XY36 EGU2011-1009
Joanna Stepien, Alfred Wiedensohler, Wolfram Birmili, and Erik Sogaard
 Study of physically measured and chemistry-based modeled hygroscopic growth of atmospheric aerosol particles over Central Europe
- XY37 EGU2011-822
Virginia Ciardini, Tatiana Di Iorio, Marco Cacciani, Giampietro Casasanta, Luca Di Liberto, Alcide di Sarra, Cecilia Tirelli, Daniele Fuà, and Giorgio Fiocco
 Measurements of tropospheric aerosol over Rome throughout the period 2006-2009
- XY38 EGU2011-12766
Vasilis Pappas, Christos Matsoukas, Ilias Vardavas, and Nikolaos Hatzianastassiou
 Vertical distributions of aerosols and clouds over the greater Mediterranean basin using CALIOP observations
- XY39 EGU2011-2574
Philipp Reutter and Ulrike Lohmann
 Influence of different prescribed scavenging ratios on global aerosol and cloud properties in ECHAM5-HAM
- XY40 EGU2011-3045
Iuis antonio ladino moreno, Olaf Stetzer, Felix Lüönd, Andre Welti, and Ulrike Lohmann
 Ice nuclei ability of kaolinite particles in the contact freezing mode
- XY41 EGU2011-7663
Jinfang Yin, Donghai Wang, and Guoqing Zhai
 Long-term Measurement of Ice Nuclei Characteristics in North China
- XY42 EGU2011-8012
Rosalind E. L. West, Philip Stier, Andy Jones, Colin E. Johnson, Graham W. Mann, Zak Kipling, and Roy G. Grainger
 Estimation of the indirect radiative effects of aerosol on climate using the HadGEM-UKCA aerosol-chemistry climate model
- XY43 EGU2011-8271
Moa Sporre, Erik Swietlicki, Paul Glantz, and Markku Kulmala
 A Long-Term Study of the Aerosol Effects on Convective Clouds over Southern Sweden and Finland
- XY44 EGU2011-8354
Despina Giannadaki, Holger Tost, Benedikt Steil, and Jos Lelieveld
 Direct aerosol radiative fluxes and heating rates. A sensitivity study using the EMAC chemistry-climate model
- XY45 EGU2011-11464
Adam G. Wollny, Bernadett Weinzierl, Martin Gysel, Martin Schnaiter, Ottmar Möhler, Meinrat O. Andreae, and Ulrich Pöschl
 Single-Particle-Soot-Photometer (SP2) investigations of soot aerosol and cloud interactions
- XY46 EGU2011-11610
 Martin B Enghoff, **Jens Olaf Pepke Pedersen**, Ulrik I Uggerhøj, Sean M Paling, and Henrik Svensmark
 Aerosol nucleation induced by a high energy particle beam
- XY47 EGU2011-5210
Aaron Pratt
 Is Saharan Dust a positive or negative for hurricanes? Observations and NU-WRF Simulations from the NAMMA and GRIP field campaigns

- XY48 EGU2011-7596
Monica Adriana Lozano Juarez, Lelieveld Jos, and Holger Tost
Climate effects of Biomass Burning using EMAC model
- XY49 EGU2011-9594
Carlos J. Valle-Diaz, Olga L. Mayol-Bracero, Felix Zurcher, Adriana Gioda, Taehyoung Lee, Jeff Collett, and Kim A. Prather
Size-resolved Chemical Composition of Cloud and Rain Water Collected during the Puerto Rico African Dust and Clouds Study (PRADACS) Campaign
- XY50 EGU2011-13317
Magali Andraud, Marie Monier, Nicholas Good, Andrea Flossmann, and the BIOCLOUD team
Impacts of ice active bacteria on the precipitation production of a convective storm.
- XY51 EGU2011-12793
Vasileios Pappas, Nikolaos Hatzianastassiou, Christos Papadimas, and Stefan Kinne
Evaluation of global AEROCOM aerosol optical properties against satellite MODIS aerosol products
- XY52 EGU2011-11267
Eric Girard, Guillaume Dueymes, Ping Du, and Allan K. Bertram
Assessment of the Effects of Acid-Coated Ice Nuclei on the Arctic Cloud Microstructure, Atmospheric Dehydration, Radiation and Temperature during Winter.
- XY53 EGU2011-11089
Céline Planche, Wolfram Wobrock, and Andrea Flossmann
Development of a detailed ice melting scheme within bin microphysics in a 3D cloud model
- XY54 EGU2011-6713
Alexei Kiselev
Paul traps: from a single levitated droplet to cloud microphysics
- XY55 EGU2011-10920
Martin Bødker Enghoff, Jacob Svensmark, and Henrik Svensmark
The effect of coronal mass ejections on cloud microphysics
- XY56 EGU2011-11017
Nicolai Bork, Martin B. Enghoff, Jens Olaf P. Pedersen, Kurt V. Mikkelsen, Theo Kurtén, and Henrik Svensmark
Ab initio modeling O₂-(H₂O)_n and O₃-(H₂O)_n clusters, n = 1-12
- XY57 EGU2011-2080
Vaclav Kvicera, Martin Grabner, and Jiri Vasicek
Space dependence of fog visibility and its influence on availability of free space optical links
- XY58 EGU2011-1493
Jean Louis Ricard
New insights into the rainbow
- XY59 EGU2011-8559
Harald Rieder, Philipp Weihs, Jochen E. Wagner, Stana Simic, Martin Dameris, and Eugene Rozanov
Prediction of future erythemal UV-radiation for Austria
- XY60 EGU2011-67
Ganna Pirnach and **Taras Belyi**
Interaction between frontal cloud system and dangerous events in Crimea
- XY61 EGU2011-501
Chiara Bertolin and Dario Camuffo
The long Precipitation series in Padova, Italy (1725-today)
- XY62 EGU2011-3710
Vera Schemann, Verena Grützun, Dagmar Popke, and Johannes Quaas
Evaluation of a statistical cloud parametrization for global climate models
- XY63 EGU2011-10876
Jonathan Crosier, Thomas Choulaton, Keith Bower, Paul Connolly, Ian Crawford, Martin Gallagher, James Dorsey, and Christopher Westbrook
Microphysical properties of mid-latitude frontal clouds
- XY64 EGU2011-5735
Vivek Sant, Rebekka Posselt, and Ulrike Lohmann
Drizzling Marine Stratiform Clouds in the ECHAM5-HAM
- XY65 EGU2011-6369
Edgar Schmucki, Julian Groebner, Stefan Wacker, and Niklaus Kaempfer
Cloud Climatology and Surface Radiative Forcing over Switzerland
- XY66 EGU2011-11776
Marcin Kurowski, Bogdan Rosa, and Michal Ziemianski
High-resolution anelastic modeling of Alpine flows: a case study for a summer convection
- XY67 EGU2011-802
Praveen Pandey, Koen De Ridder, Didier Gillotay, and Nicole Van Lipzig
Modelling the impact of satellite retrieved scaled cloud optical thickness on surface UV irradiance and photolysis frequencies for NO₂, using Tropospheric Ultraviolet and Visible radiation model

- XY68 EGU2011-3490
Bozena Lapeta, Danuta Serafin, Rafal Iwanski, and Adam Twardowski
H-SAF Products Validation in Poland
- XY69 EGU2011-3718
Corey Calvert and Michael Pavolonis
Introduction of A Day/Night, Object-Based, Quantitative Fog/Low Cloud Detection Algorithm for GOES-R.
- XY70 EGU2011-3792
Stefan Kinne
BC direct radiative forcing constrained by AERONET
- XY71 EGU2011-4841
Elke Ludewig and Ákos Horváth
Multi-sensor analysis of cloud-top heights in Sc - Cu transition regions
- XY72 EGU2011-9360
Zhipeng Qu, Philippe Blanc, Mireille Lefèvre, Lucien Wald, and Armel Oumbe
Is the MLB parameterization accurate enough to describe change in solar radiation with solar zenith angle?
- XY73 EGU2011-2754
Michael Pavolonis
The Temporal Evolution of Satellite-Derived Deep Convective Cloud Properties
- XY74 EGU2011-3733
Bastiaan van Dierenhoven, Brian Cairns, Ann Fridlind, and Andrew Ackerman
Global constraints on radiative properties of ice clouds using MODIS and POLDER measurements
- XY75 EGU2011-7388
Kajsa Parding, Laura Hinkelman, Thomas Ackerman, and Sally McFarlane
Shortwave absorptance in a tropical cloudy atmosphere: Reconciling calculations and observations
- XY76 EGU2011-10000
Timo Hanschmann, Hartwig Deneke, and Andreas Macke
Effect of undetected broken clouds on the MSG-SEVIRI clear sky radiances and the cloud radiative effect
- XY77 EGU2011-10141
Cintia Carbajal Henken, Rasmus Lindstrot, Rene Preusker, and Jürgen Fischer
Synergistic MERIS-AATSR cloud property retrievals using optimal estimation technique
- XY78 EGU2011-12581
Antonis Gkikas, Nikos Hatzianastassiou, and Nikos Mihalopoulos
Direct effect of extreme aerosol episodes on atmospheric solar radiation in the broader Mediterranean basin and potential links with atmospheric dynamics
- XY79 EGU2011-10488
Petri Räisänen
Clouds, regional surface albedo and the downwelling solar irradiance: spectral dependence
- XY80 EGU2011-11975
Ulrike Spörl and **Hartwig Deneke**
Toward a combined high-temporal resolution aerosol product from MODIS and METEOSAT SEVIRI
- XY81 EGU2011-11083
Jordi Badosa, **Josep Calbó**, Richard L. McKenzie, and Josep-Abel González
Cloud effects on erythemal UV from a 9-years, 1-minute resolution, dataset from Lauder, New Zealand
- XY82 EGU2011-906
Jyotsna Singh, Manoj Kumar, and Bimal Kumar Bhattacharya
Estimation of Diffuse Insolation for Nagpur, India
- XY83 EGU2011-8876
Arturo Sanchez-Lorenzo, Patrick Laux, Harrie-Jan Hendricks-Franssen, Josep Calbó, and Stefanie Vogl
Large-scale weekly cycles of meteorological variables: a review
- XY84 EGU2011-2977
Arturo Sanchez-Lorenzo, Patrick Laux, Martin Wild, and Josep Calbó
Rethinking large-scale weekly cycles in Central Europe
- XY85 EGU2011-4521
Josep Calbó, Arturo Sanchez-Lorenzo, and Javier Martin-Vide
Weekly cycles in Spain and their possible connections with changes in atmospheric circulation
- XY86 EGU2011-13985
Patrick Laux, Harald Kunstmann, Arturo Sanchez-Lorenzo, Harrie-Jan Hendricks-Franssen, and Stefanie Vogl
Regional patterns of weekly weather cycles across Europe
- XY87 EGU2011-12759
Christoph Beck and Andreas Philipp
Are there weekly cycles in occurrence frequencies of large-scale atmospheric circulation types?
- XY88 EGU2011-10931
Steffen Beirle and Thomas Wagner
Weekly cycle of NO₂ observed from space: Insights on NO_x emissions and chemistry

- XY89 EGU2011-172
Sergei Sitnov
Weekly variations in atmospheric tracers and meteorological parameters over Central Russia
- XY90 EGU2011-736
Kwang Kim and Hanna Na
Identifying Natural and Anthropogenic Weekend Effects
- XY91 EGU2011-459
Wenshan Wang and Daoyi Gong
Weekly Cycle of PM₁₀ in Eastern China: the seasonal patterns and possible effect on radiation
- XY92 EGU2011-678
Yong-Sang Choi and Bo-Ram Kim
Detailed Characteristics of Weekend Effects in Chinese Cities } Yong-Sang Choi, and Bo-Ram Kim
Department of Environmental Science and Engineering, Ewha Womans University, Seoul 120-750 Korea
- XY93 EGU2011-179
Simone Lolli, Jani Poutiainen, Herman Böök, and Laurent Sauvage
Validation of WLS70 Doppler Wind Lidar in the frame of Helsinki Testbed
- XY94 EGU2011-2657
Marloes Penning de Vries, Ferdi van de Wetering, Michael Fromm, and Thomas Wagner
Optical properties of smoke aerosols over clouds: combining the strengths of satellite imagers and spectrometers
- XY95 EGU2011-2941
Philippe Royer, Patrick Chazette, Alain Dabas, Mélody Lardier, and Laurent Gomes
Retrieval of mass concentrations in the volcanic ash plume from the Eyjafjöll eruption using airborne, ground-based lidars and in-situ measurements.
- XY96 EGU2011-6383
Sarath Guttikunda, **Benjamin Guinot**, Giuseppe Calori, Prashant Gargava, Fanny Velay-Lasry, Richard Ngo, Sophie Loaec, Simone Lolli, Laurent Sauvage, and Armand Albergel
Clean Air for Delhi 2010 and Beyond - An Operational Program to Forecast Daily Air Quality and Pollution Alerts
- XY97 EGU2011-11420
Camelia Talianu, Doina Nicolae, Luminita Marmureanu, and Emil Carstea
Combining PBL and Free Troposphere Lidars to improve the retrieval of aerosol optical properties
- XY98 EGU2011-3248
Anne Hoffmann, Robert Stone, Astrid Lampert, Christoph Ritter, Marion Maturilli, Andreas Herber, and Roland Neuber
A PAM-ARCMIP 2009 Arctic Haze case study: ground based and airborne observations with lidar and sun photometry
- XY99 EGU2011-9675
Tamer Refaat and **Syed Ismail**
A feasibility study of Atmospheric Methane DIAL measurements at 1.65 micron spectral region
- XY100 EGU2011-10082
Adam Povey, Roy Grainger, Daniel Peters, Judith Agnew, and Charles Wrench
Impact of clouds on aerosol scattering as observed by lidar
- XY101 EGU2011-10765
Gionata Biavati and **Dietrich Feist**
Boundary Layer height evaluation over Lindenberg
- XY102 EGU2011-9271
Nicolas Yan, Yves Balkanski, and Michael Schulz
Impact of aerosol mitigation on clouds properties in a 2xCO₂ climate simulation

AS1.14 – Joint Session of the MLT and the CAWSES programme – Orals

Convener: Martin Kaufmann | Co-Conveners: Franz-Josef Lübken, Peter Preusse

Room: 8

Chairperson: Martin Kaufmann

- 13:30–14:00 EGU2011-8009
Maya Garcia-Comas
Water vapor in the mesosphere as seen by MIPAS
- 14:00–14:15 EGU2011-2155
Manfred Ern, Peter Preusse, and Silvio Kalisch
Global distributions of gravity wave momentum flux measured by satellites: Some implications for the dynamics of the strato- and mesosphere

- 14:15–14:30 EGU2011-8001
Kathrin Haeusler, Hermann Luehr, and Jens Oberheide
 Nonmigrating tides in the thermospheric zonal wind as observed by CHAMP: inter-annual, latitudinal, and solar flux variability
- 14:30–14:45 EGU2011-3828
Richard Goldberg, Artem Feofilov, Dean Pesnell, and Alexander Kutepov
 Tracing the Inter-hemispheric Coupling during Polar Summer Periods of 2002-2010 Using TIMED/SABER Measurements
- 14:45–15:00 EGU2011-4132
Franz-Josef Lübken and Uwe Berger
 Interhemispheric comparison of stratospheric effects on mesospheric ice layers

AS1.14 – Joint Session of the MLT and the CAWSES programme – Posters

Convener: Martin Kaufmann | Co-Conveners: Franz-Josef Lübken, Peter Preusse

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Franz-Josef Lübken

- XY103 EGU2011-2058
Fabian Senf and Ulrich Achatz
 On the impact of middle-atmosphere thermal tides on the propagation and dissipation of gravity waves
- XY104 EGU2011-3193
Gareth Chisham and Mervyn P. Freeman
 The Character and Importance of Aperiodic Velocity Fluctuations in the Mesosphere
- XY105 EGU2011-3201
Mykhaylo Grygalashvyly, Gerd Sonnemann, and Uwe Berger
 Influence of the 11-years solar cycle on the chemistry of MLT-region
- XY106 EGU2011-3462
Nadine Wieters, Holger Winkler, Miriam Sinnhuber, Justus Notholt, Jan Maik Wissing, Uwe Berger, Gabriele Stiller, Thomas von Clarmann, and Bernd Funke
 Three dimensional model simulations of the impact of solar particle precipitation on the upper polar atmosphere
- XY107 EGU2011-3509
 Peter Preusse, Catrin Lehmann, Lars Hoffmann, Sebastian Hoefer, **Manfred Ern**, and Martin Riese
 Perspectives of gravity wave measurements by future ESA satellite mission PREMIER
- XY108 EGU2011-7706
Marius Zecha, Peter Hoffmann, Markus Rapp, and Jenn-Shyong Chen
 Range imaging results from VHF radar measurements in the mesosphere
- XY109 EGU2011-7835
Jens Fiedler, Gerd Baumgarten, Uwe Berger, Peter Hoffmann, Natalie Kaifler, and Franz-Josef Lübken
 Noctilucent clouds and the background atmosphere above ALOMAR
- XY110 EGU2011-7998
Corinne Straub, Klemens Hocke, Brigitte Tschanz, Niklaus Kämpfer, Peter Hoffmann, Werner Singer, Kristofer Hallgren, Paul Hartogh, and Thomas Ulich
 The Sudden Stratospheric Warming 2010 over the European Arctic region observed by ground based measurements of the Mesosphere/Mesopause region
- XY111 EGU2011-8481
 Andreas Miller and **Hauke Schmidt**
 Middle atmosphere coupling during stratospheric warming events simulated with the HAMMONIA GCM
- XY112 EGU2011-8576
Johannes Kiliani, Franz-Josef Lübken, Uwe Berger, Gerd Baumgarten, and Peter Hoffmann
 Modelling of NLC particle history with LIMA/ICE
- XY113 EGU2011-10754
Toralf Renkwitz, Werner Singer, and Ralph Latteck
 Multi beam observations of the polar mesosphere using a VHF radar with a Butler matrix for beam forming
- XY114 EGU2011-10797
Stefan Kowalewski, Mathias Palm, and Justus Notholt
 The Mesospheric OH layer above Spitsbergen: Observation of the OH rotational emission with high resolution Fourier Transform Spectroscopy
- XY115 EGU2011-10905
Manja Placke, Peter Hoffmann, Michael Gerding, Markus Rapp, and Erich Becker
 Mesospheric gravity waves from simultaneous measurements of winds and temperatures in connection with model data

- XY116 EGU2011-10998
Kristofer Hallgren, Paul Hartogh, and Christopher Jarchow
 A climatology of water vapor above ALOMAR from ground-based microwave observations.
- XY117 EGU2011-11393
Teferi Demissie, Patrick Espy, and Keisuke Hosokawa
 Relationship of Polar Mesospheric Summer Echoes and Ozone in middle and upper atmosphere
- XY118 EGU2011-11498
Martin Kaufmann, Catrin Lehmann, and Martin Riese
 A comparison between atomic hydrogen abundance as measured by the SCIAMACHY/ENVISAT and SABER/TIMED instruments

AS2.2 – Air-Sea Interactions - BoundaryLayers (General Session) – Orals

Convener: Vladimir K. Makin | Co-Conveners: Neil C. Wells, Francisco J. Ocampo-Torres

Room: 8

Chairperson: Makin, Wells, Petrosyan

- 15:30–15:45 EGU2011-891
Hector Garcia-Nava and Francisco J. Ocampo-Torres
 Reduction of wind stress due to swell at high wind conditions
- 15:45–16:00 EGU2011-2144
Werner Alpers
 Investigation of Bora and Foehn winds over the Black Sea using Envisat synthetic aperture radar images
- 16:00–16:15 EGU2011-3281
Niels Zweers, Vladimir Makin, Hans de Vries, and Gerrit Burgers
 Using proper drag coefficients for extreme wind speeds leads to improved hurricane simulations
- 16:15–16:30 EGU2011-11054
Vanda Grubišić, Stefano Serafin, and Lukas Strauss
 Wave-Induced Boundary-Layer Separation and Turbulence
- 16:30–16:45 EGU2011-12536
Wei Zhang and Fernando Porte-Agel
 Turbulent boundary layer flow over a steep 2-D hill: atmospheric stability effects
- 16:45–17:00 EGU2011-10258
 Heiko Schmidt, **Falko Schulz**, and Alan R. Kerstein
 Toward modeling of multi-phase flow patterns using a combination of level sets and one-dimensional turbulence

AS2.2 – Air-Sea Interactions - BoundaryLayers (General Session) – Posters

Convener: Vladimir K. Makin | Co-Conveners: Neil C. Wells, Francisco J. Ocampo-Torres

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Wells, Ocampo-Torres,

- XY119 EGU2011-586
Daniel Kiefhaber, Roland Rocholz, Günther Balschbach, and Bernd Jähne
 Mean Square Slope Measurements in the Field with the Reflective Stereo Slope Gauge
- XY120 EGU2011-865
Damyan Barantiev, Mikhael Novitsky, and Ekaterina Batchvarova
 Vertical structure of the sea breeze at a Bulgarian Black Sea side
- XY122 EGU2011-1666
Kay Suselj, Brian Kahn, Joao Teixeira, Johannes Karlsson, and Mathias Schreier
 The transition of stratocumulus to shallow cumulus from satellite observations and numerical model simulations
- XY123 EGU2011-2844
Zhe Han, Shuanglin Li, and Mu Mu
 The Role of Warm North Atlantic SST in the Formation of Positive Height Anomalies over the Ural Mountains during January 2008
- XY124 EGU2011-3802
Irina Repina, Alexander Chukharev, Alexey Kuzmin, Mikhail Pospelov, and Ilia Sadovsky
 Air-sea interaction and turbulence characteristics within the atmospheric and ocean boundary layers in the coastal zone from experimental data
- XY125 EGU2011-637
Vladislav Polnikov
 Integrated model for a wave boundary layer

- XY126 EGU2011-4531
Yoshihiko Toyama, Yusei Miyagi, and Takemitsu Arakaki
 UV-VIS absorbance, fluorescence and concentration of dissolved organic carbon (DOC) of sea-surface microlayer samples collected at Okinawa, Japan
- XY127 EGU2011-4713
 Yann Largeron, Jean-Pierre Chollet, and **Chantal Staquet**
 Boundary layer dynamics in the Grenoble valley during strongly stable and polluted episodes
- XY128 EGU2011-5185
 Kohei Takatama, **Shoshiro Minobe**, Masaru Inatsu, and Richard Small
 Mechanisms of Near Surface Wind Convergence/Divergence over the Gulf Stream Analyzed by a New Diagnostics Method
- XY129 EGU2011-7560
Haroldo Fraga de Campos Velho, Andre B. Nunes, Prakki Satyamurty, Umberto Rizza, and Antonio G. O. Goulart
 A model for convective planetary boundary layer growth
- XY130 EGU2011-7881
Harald Sodemann, Andreas Winschall, Stephan Pfahl, and Heini Wernli
 Towards parameterising evaporation fluxes of artificial water vapour tracers in a mesoscale model with a Lagrangian stochastic model
- XY131 EGU2011-7905
Monique Albert, Magdalena Anguelova, Gerrit de Leeuw, Colin O'Dowd, and Martijn Schaap
 Estimating global sea-spray emissions using satellite data
- XY132 EGU2011-8337
Aline van den Kroonenberg, Sabrina Martin, and Jens Bange
 In situ measurements of the temperature structure parameter over a heterogeneous land surface
- XY133 EGU2011-8698
Sabrina Martin and Jens Bange
 The influence of aircraft speed variations on sensible heat flux measured by different airborne systems
- XY134 EGU2011-9107
Judit Carrillo, Juan Carlos Guerra, and Emilio Cuevas
 Study of vertical distribution of temperature anomalies in the subtropical troposphere over Canary Islands
- XY135 EGU2011-10384
Nadia Mkhinini, Thomas Dubos, and Philippe Drobinski
 Transition to turbulence in stratified Ekman flow
- XY136 EGU2011-10892
Gilles Garric, Nathalie Verbrugge, and Clément Bricaud
 Large scale ERAinterim radiative and precipitation surface fluxes assessment, correction and application on 1/4° global ocean 1989-2009 hindcasts.
- XY137 EGU2011-13438
 Jens Tambke, Kay Suselj, Yves-Marie Saint-Drenan, John A.T. Bye, and **Jörg-Olaf Wolff**
 Evaluation of Wind Speed Profile Models over the North Sea
- XY138 EGU2011-13559
Corey Markfort, Wei Zhang, Fernando Porte-Agel, and Heinz Stefan
 Effect of porosity on ABL evolution over a canopy patch in a stable atmosphere: a wind tunnel study
- XY139 EGU2011-14077
 Kirill Karelsky, **Arakel Petrosyan**, and Igor Smirnov
 Modeling of particulate plumes transportation in boundary layers with obstacles
- XY140 EGU2011-3896
Paul Hwang, Héctor García-Nava, and Francisco (Paco) Ocampo-Torres
 Wavelength Scaling of Ocean Surface Friction Coefficient in Wind Sea and Mixed Sea
- XY141 EGU2011-4773
Elie Bou-Zeid and Dan Li
 When and why does turbulence transport momentum, heat, and moisture differently?

AS3.1 – Gas Phase Composition and Reactivity (including HO_x, NO_x) – Orals

Convener: Hartwig Harder | Co-Conveners: Terry Dillon, Luc Vereecken

Room: 8

Chairperson: Hartwig Harder

- 08:30–08:45 EGU2011-148
David Asaf, Daniel Pedresen, Mordechai Peleg, Christoph Kern, Ulrich Platt, and Menachem Luria
 Long term measurements of NO₃ radical at a semi-arid urban site: Extreme concentration events and their oxidation capacity

- 08:45–09:00 EGU2011-6014
Sascha Nehr, Birger Bohn, Hendrik Fuchs, and Andreas Hofzumahaus
 Secondary HO₂ formation from the OH-initiated photo-oxidation of aromatic hydrocarbons under atmospheric conditions in the absence of NO
- 09:00–09:15 EGU2011-6906
Matthias Sörgel and the DOMINO and the Bayreuth Team
 Quantification of the net HONO daytime source and its relation to NO₂
- 09:15–09:30 EGU2011-7328
Daniel Stone, Mathew Evans, Peter Edwards, Roisin Commane, Trevor Ingham, Dwayne Heard and the OP3 Team
 Measurements and modelling of OH and HO₂ radicals over a South-East Asian tropical rainforest during the OP3 field campaign
- 09:30–09:45 EGU2011-12947
Vladimir L. Orkin, Victor G. Khamaganov, Larissa E. Martynova, and Michael J. Kurylo
 Accurate FP-RF determination of OH reaction rate constants over atmospheric temperatures.
- 09:45–10:00 EGU2011-13573
Yasin Elshorbany, Jörg Kleffmann, Ralf Kurtenbach, Peter Wiesen, Andreas Hofzumahaus, Hans-Peter Dorn, Eric Schlosser, Yugo Kanaya, Ayako Yoshino, Satoshi Nishida, and Yoshizumi Kajii
 HO_x Budgets during HO_x Comp: a Case Study of HO_x Chemistry under NO_x limited Conditions

COFFEE BREAK

Chairperson: Terry Dillon

- 10:30–10:45 EGU2011-3385
Jim Thieser and the DOMINO Team
 NO₃ and N₂O₅ measurements via Cavity Ring Down Spectroscopy (CRDS) and Differential Optical Absorption Spectroscopy (DOAS) during DOMINO 2008
- 10:45–11:00 EGU2011-3549
 Andrew Huisman, **Frank Keutsch** and the BEARPEX, CABINEX and BEACHON-ROCS Team
 Glyoxal: A BVOC oxidation tracer with high sensitivity to OH
- 11:00–11:15 EGU2011-8082
Christoph B. M. Groß, Terry J. Dillon, and John N. Crowley
 HO_x recycling via HO₂ + isoprene-derived RO₂: Direct experimental evidence
- 11:15–11:30 EGU2011-11483
Denis Pöhler, Wolfgang Müssel, Joelle Buxmann, and Ulrich Platt
 Concentrations and vertical profiles of NO₂, NO₃, O₃, SO₂, HCHO and HONO observed with LP-DOAS over a pine forest during DOMINO 2008
- 11:30–11:45 EGU2011-5732
Piero Di Carlo, Cesare Dari Salisburgo, Eleonora Aruffo, Fabio Biancofiore, Marcella Busilacchio, Franco Giammaria, Claire Reeves, Sarah Moller, and James Lee
 Airborne Laser Induced Fluorescence system for simultaneous measurements of nitrogen dioxide and speciated {NO_y}
- 11:45–12:00 EGU2011-10671
 Ying Xie, Fabien Paulot, **Robert Pinder**, Christopher Nolte, Deborah Luecken, William Hutzell, Ronald Cohen, and Paul Wennberg
 HO_x and NO_x reformation during isoprene oxidation - implications for atmospheric chemistry using a regional-scale chemical transport model

AS3.1 – Gas Phase Composition and Reactivity (including HO_x, NO_x) – Posters

Convener: Hartwig Harder | Co-Conveners: Terry Dillon, Luc Vereecken

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: N.N.

- XY142 EGU2011-1725
Cécile Coeur-Tourneur, Andy Cassez, and John C. Wenger
 Rate coefficients for the gas-phase reaction of hydroxyl radicals with 2-methoxyphenol (Guaiacol) and related compounds
- XY143 EGU2011-2208
Georges Le Bras, Nadia Butkovskaya, and Alexandre Kukui
 Formation of small alkyl nitrates in RO₂ + NO reaction and its significance in gas phase tropospheric chemistry

- XY144 EGU2011-2231
Raoul Axinte, Horst Fischer, Jonathan Williams, Zeinab Hosaynali Beygi, Heiko Bozem, Rainer Koenigstedt, Uwe Parchatka, and Jos Lelieveld
 Hydroperoxide and formaldehyde measurements over a boreal coniferous forest in Hyytiälä, Southern Finland during the HUMPPA summer campaign 2010
- XY145 EGU2011-3544
Hannah Bunyan, Trevor Ingham, Daniel Stone, Stewart Vaughan, Mathew Evans, and Dwayne Heard
 Night-time aircraft measurements of OH and HO₂ using the FAGE technique
- XY146 EGU2011-5633
Jose Adame, Florentina Villanueva, Notario Alberto, and Jose Albadalejo
 Clustering classification of air pollutants to investigate their daily behaviour in an heavy industrialised area in the centre of Iberian Peninsula
- XY147 EGU2011-5544
 Jose Adame, **Jovana Diesch**, Miguel Hernández-Ceballos, Frank Drewnick, and Mónica Martínez
 Surface meteorology overview for the DOMINO campaign
- XY148 EGU2011-4232
Oriol Jorba, Donald Dabdub, Jose Maria Baldasano, Michele Spada, and Alba Badia
 Assessing the impact of NO₂ photo-excitation at global scale
- XY149 EGU2011-14204
 Juan P. Colomer, **María B. Blanco**, Alicia B. Peñeñory, Ian Barnes, Peter Wiesen, and Mariano A. Teruel
 Kinetic investigation of the unsaturated nitriles degradation initiated by OH reaction in atmospheric conditions
- XY150 EGU2011-14202
María B. Blanco, Iustinian Bejan, Ian Barnes, Peter Wiesen, and Mariano Teruel
 Atmospheric chemical mechanisms of the photooxidation of vinyl and allyl acetate initiated by Cl reactions
- XY151 EGU2011-12160
Anna Chrobry, Maria Dolores Andrés Hernández, Deniz Kartal, and John P. Burrows
 A modified PeRCA instrument for the selective determination of atmospheric concentrations of HO₂ and RO₂ radicals
- XY152 EGU2011-11691
Christian Plass-Dülmer, Thomas Elste, Pauli Paasonen, and Tuukka Petäjä
 Sulphuric Acid Measurements by CIMS - Uncertainties and Consistency between Various Data Sets
- XY153 EGU2011-11124
Ole Amund Søvdø, Michael Prather, Terje K. Berntsen, Gunnar Myhre, and Ivar S. A. Isaksen
 Oslo CTM3; a global chemical transport model
- XY154 EGU2011-10698
John N. Crowley, Jim Thieser, Mingjin Tang, Gerhard Schuster and the DOMINO Team
 Nighttime chemistry in DOMINO: Variable lifetimes and loss mechanisms for NO₃ and N₂O₅
- XY155 EGU2011-9142
Emma Yates, Max Lowenstein, Laura Iraci, Kuze Akihiko, Jovan Tadic, Stephanie Vay, and Stephan Kawa
 Atmospheric measurements of carbon dioxide and methane at Railroad Valley playa, Nevada, USA
- XY156 EGU2011-9096
Matti Rissanen, Marvin Ihlenborg, Damien Amedro, and Raimo Timonen
 Kinetics of some oxygenated carbon centered free radical reactions with nitric oxide in the temperature range 241 - 473 K
- XY157 EGU2011-7942
Terry J. Dillon, Christoph B.M. Groß, Katrin Dulitz, Abraham Horowitz, and John N. Crowley
 Laboratory studies of the atmospheric oxidation of isoprene in clean-air
- XY158 EGU2011-7687
Milagros Ródenas, Amalia Muñoz, Mónica Vázquez, Eva Clemente, Pavel Mikuška, Zbyněk Veřeřa, Dean Venables, Jun Chen, Mark Daniels, and Stephen Ball
 NO₂ intercomparison at the EUPHORE simulation chambers during the FIONA campaign
- XY159 EGU2011-7586
 Jozef Peeters, Thanh Lam Nguyen, Trissevgeni Stavrou, and **Jean-François Müller**
 HO_x radical regeneration in isoprene oxidation via peroxy radical isomerisations: secondary OH formation following hydroperoxy-methyl-butene photolysis
- XY160 EGU2011-7515
Sarah Schmitz, Roland Ruhnke, Heike Vogel, Bernhard Vogel, Christoph Knöbe, and Dominik Brunner
 Simulation of the chemical composition of the upper troposphere with a regional chemistry-transport-model
- XY161 EGU2011-2052
Xin Huang and Yu Song
 Inventory of ammonia emissions in China
- XY162 EGU2011-983
Igor Larin, Alexandr Spasskiy, and Elen Trofimova
 ON REACTION RATE CONSTANTS Cl + CH₃I, C₃F₇I, CF₃I

- XY163 EGU2011-190
Shubha Pandey, Johannes Staehelin, Stephan Henne, Uwe Weers, Martin Steinbacher, and Christoph Zellweger
Peroxy acetyl nitrate (PAN) at Jungfraujoch from different source regions
- XY164 EGU2011-8736
Milagros Ródenas, Amalia Munoz, Francisco Alacreu and the FIONA Team
The FIONA campaign (EUPHORE): Formal Intercomparison of Observations of Nitrous Acid
- XY165 EGU2011-13634
Gerhard Held, José Marcio Bassan, and Ricardo Sérgio Frascarelli Junior
Continuous Monitoring of the Lower Boundary Layer in the central State of São Paulo, Brazil, with a SODAR
- XY166 EGU2011-2557
Shouming Zhou, Alex Lee, Robert McWhinney, and Jonathan Abbatt
Effect of Organic Coatings on the Reactivity of Gas-Phase Ozone with Particle-Borne PAHs
- XY167 EGU2011-11611
Denis Pöhler, Andreas Hartl, and Ulrich Platt
Determination of continuous trace gas distribution maps for e.g. NO₂, O₃ and SO₂ in a city using tomographic LP-DOAS measurements
- XY168 EGU2011-9345
Joshua A. McGrath, Max G. Adam, Roy L. Mauldin III, Birgar Bohn, Franz Rohrer, and Harald Berresheim
First Results from Long Term Measurements of OH, H₂SO₄ and MSA on the West Coast of Ireland
- XY169 EGU2011-8508
Aki Virkkula, Ulla Makkonen, Jenni Mäntykenttä, and Hannele Hakola
Diurnal cycles of ammonia, nitrous acid and nitric acid at a forest site in Finland in summer 2010
- XY170 EGU2011-6144
Robert Oswald, Christian Breitenberger, Franziska Köllner, Magdalena Bertelmann, Huug Ouwersloot, Rainer Königstedt, Zeinab Hosaynali Beygi, and Ivonne Trebs
Measurements of nitrous acid in a boreal forest ecosystem (Hyytiälä, Finland)
- XY171 EGU2011-13654
Alberto Notario, Iván Bravo, José Antonio Adame, Yolanda Díaz-de-Mera, Alfonso Aranda, Ana Rodríguez, and Diana Rodríguez
Analysis of NO, NO₂, O₃, NO_x and level of oxidant (OX) measured at Seville (Spain) in two monitoring stations during one year
- XY172 EGU2011-7849
Paulo Alarcon, Cornelius Zetzsch, Birger Bohn, Marie-Thérèse Rayez, and Jean-Claude Rayez
Experimental and theoretical study of the reaction of OH with the aromatic molecule p-cymene, proceeding via two adducts.

AS3.3 – Atmospheric Ice Particles – Orals

Convener: Hinrich Grothe | Co-Conveners: Peter Spichtinger, Claudia Stubenrauch, Christiane Voigt

Room: 10

Chairperson: Voigt&Stubenrauch

- 08:30–09:00 EGU2011-574
Greg McFarquhar and Junshik Um
Quantifying and reducing uncertainty in observed shapes and concentrations of small ice crystals: implications for derived scattering properties
- 09:00–09:15 EGU2011-3785
Bastiaan van Diedenhoven, Ann Fridlind, Andrew Ackerman, and Brian Cairns
An investigation of ice crystal sizes and shapes in deep convective clouds using radiance and polarization measurements in conjunction with model simulations
- 09:15–09:30 EGU2011-6068
Stephan Borrmann, Wiebke Frey and the SCOUT-AMMA science Team
In-situ measurements of tropical cloud properties in the West African Monsoon: Upper tropospheric ice clouds, Mesoscale Convective System outflow, and subvisual cirrus
- 09:30–09:45 EGU2011-11403
Tom W. Choularton, Ian Crawford, Christopher Dearden, Keith Bower, Jonathan Crosier, Alan M Blyth, Christopher Westbrook, and Martin W Gallagher
A study of ice formation by primary nucleation and ice multiplication in shallow precipitating convective clouds
- 09:45–10:00 EGU2011-10404
Tamsin Malkin, Benjamin J. Murray, Andrey V. Brukhno, Jamshed Anwar, and Christoph G. Salzmann
Ice from Supercooled Water: Neither Hexagonal nor Cubic

COFFEE BREAK

Chairperson: Grothe&Spichtinger

- 10:30–11:00 EGU2011-1049
Anthony Baran
 From ice crystal single-scattering to climate prediction: the way forward?
- 11:00–11:15 EGU2011-11190
Jessica Meyer, Darrel Baumgardner, Martin Schnaiter, Ottmar Möhler, Stefan Benz, Achmed Abdelmonem, Roy Newton, Armin Afchine, and Martina Krämer
 Size spectra of ice & drops in mixed phase clouds: measurements at the AIDA Cloud Chamber
- 11:15–11:30 EGU2011-8453
Sonja Eikenberg, Kristina Fröhlich, Axel Seifert, Susanne Crewell, and Mario Mech
 Evaluation of ice and snow content in the global NWP model GME with CloudSat
- 11:30–11:45 EGU2011-12967
Dennis Niedermeier, Raymond A. Shaw, Heike Wex, Susan Hartmann, Tina Clauss, Jens Voigtländer, and Frank Stratmann
 Heterogeneous ice nucleation: Bridging stochastic and singular freezing behavior
- 11:45–12:00 EGU2011-9149
James Sloan, Thomas Kuhn, Michael Earle, and Alexei Khalizov
 Temperature and size dependence of volume and surface nucleation rates for homogeneous freezing of supercooled water droplets

AS3.3 – Atmospheric Ice Particles – Posters

Convener: Hinrich Grothe | Co-Conveners: Peter Spichtinger, Claudia Stubenrauch, Christiane Voigt

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Grothe&Voigt&Stubenrauch&Spichtinger

- XY173 EGU2011-4261
Michel J. Rossi, Riccardo Iannarelli, and Lukas Gutzwiller
 The temperature- and pressure-dependent mass accommodation coefficient ? of H₂O vapor on atmospheric ices in the range 160 to 200 K
- XY174 EGU2011-5805
Thomas Ulrich, Samuel Leutwyler, Markus Ammann, and Thorsten Bartels-Rausch
 The adsorption of HO₂NO₂ on ice
- XY175 EGU2011-873
Xiangrui Kong, Patrik Andersson, Nikola Markovic, Erik Thomson, and Jan Pettersson
 Formation of water and methanol ice on graphite at 180 - 213 K
- XY176 EGU2011-7449
Erik Thomson, Xiangrui Kong, Patrik U Andersson, Nikola Markovic, and Jan B C Pettersson
 Butanol, water, and graphite interactions at atmospheric temperatures
- XY177 EGU2011-6041
Bernhard Pummer, Hinrich Grothe, Heidi Bauer, Johannes Bernardi, Segej Bleicher, and Karin Whitmore
 The Ice Nucleation Activity Of Pollens And Fungal Spores
- XY178 EGU2011-7549
Valeria Pinti, Claudia Marcolli, Bernhard Zobrist, Christopher Hoyle, and Thomas Peter
 Ice nucleation efficiency of clay minerals in the immersion mode
- XY179 EGU2011-13527
Christian Sippel, Thomas C. Hansen, Michael M. Koza, and Werner F. Kuhs
 The structure of ice crystals at atmospheric conditions
- XY180 EGU2011-12058
 Sébastien Facq, Cristian Focsa, Michael Ziskind, and **Bertrand Chazallon**
 Influence of the presence of organics on the freezing of ice particles investigated by micro-Raman scattering
- XY181 EGU2011-11637
 Christopher Hoyle, **Valeria Pinti**, André Welti, Claudia Marcolli, Bernhard Zobrist, Björn Hannes Mattsson, Throstur Thorsteinsson, Guðrún Larsen, and Thomas Peter
 Ice nucleation properties of volcanic ash from Eyjafjallajökull
- XY182 EGU2011-11408
Mikhail Kulikov, Alexander Feigin, Stanislav Ignatov, Petr Sennikov, Thaddaeus Bluszcz, and Otto Schrems
 Laboratory studies of VUV photochemistry of thin water ice films: H₂O₂ production and its implication for Noctilucent Clouds
- XY183 EGU2011-10732
 Hinrich Grothe, **Philipp Baloh**, and Fabian Weiss
 The effect of different carboxylic acids on ice nucleation

- XY184 EGU2011-933
Lei Han, Sergej Bleicher, Heinz-Ulrich Krüger, and Cornelius Zetzsch
Heterogeneous atmospheric degradation of organochlorine pesticides on ice particles
- XY185 EGU2011-4271
Julian Skrotzki, Paul Connolly, Monika Niemand, Harald Saathoff, Ottmar Möhler, Volker Ebert, and Thomas Leisner
The Accommodation Coefficient of Water Molecules on Ice and its Role for Cirrus Clouds
- XY186 EGU2011-13448
Tina Clauss, Susan Hartmann, Dennis Niedermeier, Alexei Kiselev, Heike Wex, and Frank Stratmann
A time dependence study of droplet freezing with immersed mineral dust particles
- XY187 EGU2011-770
Manvendra Dubey, Bradley Flowers, Allison Aiken, and Claudio Mazzoleni
Closure field observations and controlled laboratory studies demonstrate chemical aging affects optical and microphysical properties of carbonaceous aerosols significantly
- XY188 EGU2011-11053
Björn Nillius, Heinz Bingemer, Holger Klein, Joachim Curtius, and Ulrich Bundke
Ambient measurements of ice nuclei with a new version of the Fast Ice Nuclei CHamber FINCH-HALO
- XY189 EGU2011-6600
Jean-Jacques Berthelie, Fernando Simoes, Jean-Pierre Pommereau, and Johannes Nielsen
Observation of thin charged clouds in the lower tropical stratosphere, origin and possible consequences on water transport in the UTLS
- XY190 EGU2011-5034
Yann Blanchard, Alain Royer, and Norm O'Neill
Retrieving cloud optical depth and ice particle size using thermal infrared radiometry: Application to the monitoring of thin ice clouds in an arctic environment
- XY191 EGU2011-4839
Cédric Chou, Olaf Stetzer, Torsten Trischter, Ernest Weingartner, André Prévot, and Ulrike Lohmann
Ice nucleation ability of biomass burning particles from wood combustion
- XY192 EGU2011-11164
Heinz Bingemer, **Holger Klein**, Karin Ardon-Dryer, Werner Haunold, Zev Levin, Martin Ebert, Thomas Herrmann, Stephan Weinbruch, Lothar Schütz, and Joachim Curtius
Factors affecting ice nucleus concentration over Europe and the Eastern Mediterranean
- XY193 EGU2011-2695
Jean - François Gayet, Guillaume Mioche, Andreas Minikin, Andreas Dörnbrack, Martin Wirth, Bernhard Mayer, and Christophe Gourbeyre
On the observation of unusual high concentration of small ice particles near the top of a deep convective system during the CIRCLE-2 experiment
- XY194 EGU2011-3098
Christiane Voigt, Schumann Ulrich, Jeßberger Philipp, Jurkat Tina, Petzold Andreas, Gayet Jean-Francois, Krämer Martina, Thornberry Troy, and Fahey David
Extinction, optical depth and radiative forcing from linear contrails - new results from in-situ measurements from the CONCERT campaign
- XY195 EGU2011-12022
Otto Schrems and Franz Immler
15 years of ground-based tropospheric ice cloud measurements with travelling Aerosol Raman Lidars
- XY196 EGU2011-11695
Miriam Kübbeler and the CONCERT Team
Thin and subvisible cirrus and contrails in a subsaturated environment
- XY197 EGU2011-6346
Anthony Guignard, Claudia Stubenrauch, Sylvain Cros, Nicolas Lamquin, and Anthony Baran
Microphysical properties of semi-transparent cirrus from AIRS
- XY198 EGU2011-768
Erika Kienast-Sjögren, Peter Spichtinger, and Klaus Gierens
Aggregation of Ice Crystals in a Cirrus Cloud Model
- XY199 EGU2011-7277
Carmen Koehler and Axel Seifert
Towards a Two-Moment Two-Mode Cloud Ice Scheme for High-Resolution Global Models
- XY200 EGU2011-7086
Peter Spichtinger
The impact of heterogeneous ice nuclei on cirrus cloud convection
- XY201 EGU2011-3393
Gaby Radel, Jolene Cook, and Keith P. Shine
Impact of varying optical depths and locations of persistent contrails on their radiative forcing

- XY202 EGU2011-2015
Evgeny A. Podolskiy, Bjorn E.K. Nygaard, and Kouichi Nishimura
 In-cloud atmospheric icing episodes at Mt. Zao, Northern Honshu, modeled with the WRF mesoscale numerical weather prediction system (April 2009)
- XY203 EGU2011-12276
Di Chang, Hang Su, Philip Reutter, Jörg Trentmann, Meinrat Andreae, and Ulrich Pöschl
 The effects of biomass burning aerosols on the formation of convective mixed-phase clouds and precipitation
- XY204 EGU2011-10740
Valentina Aquila and the co-author Team
 Resolving the mixing state of ice nuclei with EMAC/MADE-IN
- XY205 EGU2011-11911
 Ana Cirisan, **Peter Spichtinger**, Debra Weisenstein, Heini Wernli, and Thomas Peter
 Influence of changed stratospheric aerosol loadings on cirrus cloud formation

NP6.3/AS4.11 – Turbulence in the Atmosphere (co-organized) – Orals

Convener: Carlos Yagüe | Co-Conveners: Francesco Tampieri, Joan Cuxart

Room: 13

Chairperson: Carlos Yagüe

- 15:30–15:45 EGU2011-1083
Carmen J. Nappo
 The Influence of Wave-Like Disturbances on Turbulence in the Very Stable Planetary Boundary Layer
- 15:45–16:00 EGU2011-8391
Felipe Costa and Otávio Acevedo
 Implications of using stability functions in modeling the nocturnal stable boundary layer
- 16:00–16:15 EGU2011-5026
Francesco Tampieri, Samuel Viana, and Carlos Yagüe
 Studying the height of atmospheric stable boundary layer from turbulence moments at different heights
- 16:15–16:30 EGU2011-7485
Ann-Sofi Smedman and Erik Nilsson
 Structure of turbulence in 'the eddy surface layer'
- 16:30–16:45 EGU2011-10694
Christophe Brun, Sébastien Blein, and Jean-Pierre Chollet
 Role of Görtler vortices on the turbulent mixing in a katabatic flow along a curved slope for stably stratified atmospheric boundary layer. Application to real mountain slopes in the Alps.
- 16:45–17:00 EGU2011-8764
Silvana Di Sabatino, Laura S. Leo, Harindra J. S. Fernando, Marco Cacciani, Giampietro Casasanta, Paolo Martano, Ann Dallmann, Giovanni Grandoni, and Maria Cristina Mammarella
 Atmospheric Boundary Layer in a Narrow-Coastal Valley: Modelling Implications

ESS11/AS4.17/CL4.8 – International Collaboration and Integration Strategies for Climate and other Geosciences Informatics (co-organized) – Orals

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

Room: 2

Chairperson: n.n.

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

16:45–17:00 EGU2011-3096
Andrew Riddick and Holger Kessler
 The Open Environmental Modelling Platform concept - an approach to information fusion in geoscience and environmental modelling

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

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

Room: 13

Chairperson: n.n.

13:30–14:00 EGU2011-5364
Efi Foufoula, Ilya Zaliapin, Stefano Zanardo, Michael Ghil, Mary Power, and Bill Dietrich
 Dynamic River Networks (DRNs): a new conceptual framework for modeling spatially explicit and temporally dynamic fluxes connecting channels and landscapes

14:00–14:15 EGU2011-13541
A. Surjalal Sharma, Julia Cline, Aram Vartanyan, and Samuel Wascher
 The magnetosphere as a multiscale complex network

14:15–14:30 EGU2011-2459
Norbert Marwan, Jonathan F. Donges, Friedrich-Wilhelm Gerstengarbe, Peter C. Werner, and Jürgen Kurths
 Graph-theoretical analysis of regional climate variability

14:30–14:45 EGU2011-12674
Cristina Masoller, Marcelo Barreiro, and Arturo Marti
 Inferring long memory processes in the climate network via nonlinear time series analysis

14:45–15:00 EGU2011-9579
Milan Palus, David Hartman, Martin Vejmelka, and Dagmar Novotna
 (Tele)Connectivity in climate variability at different spatial/temporal scales in relation to solar and geomagnetic activity

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY435 EGU2011-12579
Tobias Heckmann and Wolfgang Schwanghart
 Graph theory as a tool for the analysis of cascading systems in geomorphology

XY436 EGU2011-11986
Wolfgang Schwanghart
 Assessing the potential of time-slicing in numerical models of landscape evolution

XY437 EGU2011-13884
Jobst Heitzig, Jonathan F. Donges, and Jürgen Kurths
 Agglomerative clustering of climate networks by representation optimization

XY438 EGU2011-11598
Jakob Runge, Jonathan Donges, and Jürgen Kurths
 Climate Networks with Conditioned Links

XY439 EGU2011-2105
Jonathan Donges, Hanna C.H. Schultz, Norbert Marwan, Yong Zou, and Jürgen Kurths
 Coupled climate networks for analysing the terrestrial atmosphere's vertical dynamical structure

XY440 EGU2011-4528
Kira Rehfeld, Norbert Marwan, Jonathan F. Donges, and Jürgen Kurths
 Linear and nonlinear similarity measures for networks from irregularly sampled data

XY441 EGU2011-12883
Reik Donner, Jonathan F. Donges, Martin H. Trauth, Norbert Marwan, and Jürgen Kurths
 Large-scale transitions in Plio-Pleistocene African dust flux dynamics identified by recurrence network analysis

XY442 EGU2011-11852
Reik Donner, Jobst Heitzig, Jonathan F. Donges, Yong Zou, Norbert Marwan, and Jürgen Kurths
 The Geometry of Chaotic Dynamics - A Complex Network Perspective

XY443 EGU2011-1749
Naoya Fujiwara and Jürgen Kurths
 Parameter estimation of nonlinear dynamical systems using synchronization

- XY444 EGU2011-9725
ham ghaffari, Farzine Nasser, and Robert Paul Young
 Topological Spatio-Temporal Complexity Analysis of an Evolvable Rough Fracture
- XY445 EGU2011-4661
Florin Caldararu
 How Does Earth Maintain the Stability of its Rotation Motion?: An Irreversible Thermodynamics Approach
- XY446 EGU2011-5501
Ye Pu
 Parallel Applications Infrastructure for the ESM

SM5.5/AS4.21 – Research and Development in Nuclear Explosion Monitoring (co-organized) – Orals

Convener: Andreas Becker | Co-Conveners: Martin Kalinowski, Lars Ceranna, David Brown, Yan Jia

Room: 27

Chairperson: David Brown

- 13:30–13:45 EGU2011-1736
Martin Kalinowski
 Characterisation of Prompt and Delayed Atmospheric Radioactivity Releases from Underground Nuclear Tests at Nevada as a Function of Release Time
- 13:45–14:00 EGU2011-8913
Tormod Kvaerna, David B. Harris, and Steven J. Gibbons
 Matched Field Detection of Variable Seismic Sources
- 14:00–14:15 EGU2011-11660
Nicolai Gestermann, Christian Bönemann, and Lars Ceranna
 The National Data Centres Preparedness Exercises (NPE) - Independent performance assessment by simulated CTBT violation scenarios
- 14:15–14:30 EGU2011-12363
John Coyne, Jeffrey Given, Patrick Grenard, Georgios Haralabus, Julien Marty, Pierrick Mialle, and Lassina Zerbo
 Infrasound Calibration in the Eastern Mediterranean
- 14:30–14:45 EGU2011-1748
Yefim Gitterman and Rami Hofstetter
 GT0 Explosion Sources for IMS Infrasound Calibration, Winter 2011
- 14:45–15:00 EGU2011-5786
Heoncheol Chi, Geunyoung Kim, Il-Young Che, and Jungho Park
 Regional Source Scaling of North Korea Underground Explosions: Yield and Burial-Depth Relationship

SM5.5/AS4.21 – Research and Development in Nuclear Explosion Monitoring (co-organized) – Posters

Convener: Andreas Becker | Co-Conveners: Martin Kalinowski, Lars Ceranna, David Brown, Yan Jia

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Martin Kalinowski

- XY715 EGU2011-12486
Andreas Becker, Ole Ross, and Lars Ceranna
 On the potential of public available gridded precipitation re-analysis and monitoring products to access the wet-deposition impact on PTS radionuclide monitoring capability
- XY716 EGU2011-6226
Frederik Postelt and Mika Nikkinen
 The Potential of Radionuclide Ratios for Spectrum Categorization Algorithms
- XY717 EGU2011-3156
Gerhard Wotawa and Ulrike Mitterbauer
 Exercise Scenario and combined Radionuclide/Seismic/Infrasound data analysis in Austria during the Preparedness Exercise 2010 of the National Data Centres
- XY718 EGU2011-4076
Yuri Starovoit and Pavel Martysevich
 Dynamical calibration of MB2000/5 microbarometer widely used in the IMS infrasound Network
- XY719 EGU2011-5547
Pierrick Mialle, Bittner Paulina, Brachet Nicolas, Brown David, and Given Jeffrey
 One Year of Infrasound Event Analysis into the IDC Operations
- XY720 EGU2011-5669
Michael Schoeppner, Martin Kalinowski, Wolfgang Plastino, and Gerhard Wotawa
 Radioxenon analysis methods and atmospheric transport modeling to distinguish anthropogenic from nuclear explosion signals

- XY721 EGU2011-5710
Carsten Riggelsen and Matthias Ohrnberger
Improving Automatic Detections at IMS Seismic Stations via Machine Learning: Current Status and Future Directions
- XY722 EGU2011-8814
Tormod Kvaerna, Frode Ringdal, and Jeffrey Given
Application of Detection Probabilities in the IDC Global Phase Association Process
- XY723 EGU2011-9780
Ivan Kitov, Dmitry Bobrov, and John Coyne
Recurrence curves from the IDC catalog
- XY724 EGU2011-11463
Ole Ross, Gernot Hartmann, Nicolai Gestermann, Thomas Plenefisch, Lars Ceranna, and Christian Bönemann
National Data Center Preparedness Exercise 2010: Localization capability of Atmospheric Transport Modelling and analysis of wave-form signals
- XY725 EGU2011-5322
Tae-Kyung Hong and Seunggu Rhee
Seismic investigation of a South Korean warship sinking and two North Korean nuclear explosions

AS4.25 – Integrated physical and chemical weather modelling with two-way interactions – Orals

Convener: Alexander Baklanov | Co-Conveners: Georg Grell, Johannes Flemming

Room: 19

Chairperson: Alexander Baklanov

- 08:30–09:00 EGU2011-2288
Mark Jacobson
Coupling cloud and aerosol microphysical processes in a nested climate-weather-air pollution model and its implications for the cloud and climate effects of black carbon
- 09:00–09:15 EGU2011-473
Yang Zhang, Yaosheng Chen, Shiang-Yuh Wu, Shuai Zhu, Karine Sartelet, Pierret Tran, and Christian Seigneur
Application of WRF/Chem-MADRID in Europe: Model Evaluation and Aerosol-Meteorology Interactions
- 09:15–09:30 EGU2011-8546
Johannes Flemming, Vincent Huijnen, Antje Inness, Joaquim Arteta, Olaf Stein, Martin G. Schultz, Angela Benedetti, Jean-Jacques Morcrette, Adrian Simmons, and Luke Jones
Towards the integration of atmospheric chemistry in the ECMWF integrated forecast system
- 09:30–09:45 EGU2011-8536
Georg Grell, Stuart McKeen, Tom Henderson, Paul Madden, Susan Sahm, and Stan Benjamin
Impact of chemistry on forecasting weather using WRF-Chem and FIM-Chem
- 09:45–10:00 EGU2011-7518
Richard Ménard, Yves Rochon, Yan Yang, Jean de Grandpré, Alain Robichaud, and Simon Chabrilat
Coupled stratospheric ozone-dynamics modeling and assimilation in an operational NWP system
- 10:00–10:15 EGU2011-9212
Jonathan Pleim, Rohit Mathur, David Wong, Shaocai Yu, and Frank Binkowski
Development and Evaluation of the 2-Way Coupled WRF-CMAQ Model

AS4.25 – Integrated physical and chemical weather modelling with two-way interactions – Posters

Convener: Alexander Baklanov | Co-Conveners: Georg Grell, Johannes Flemming

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Johannes Flemming

- XY206 EGU2011-13432
Alexander Baklanov and EuMetChem COST Action team
European framework for online integrated air quality and meteorology modelling: Methodology and plans of COST Action ES1004
- XY207 EGU2011-1864
Bernhard Vogel, Max Bangert, Heike Vogel, Rayk Rinke, and Kristina Lundgren
The Fully Online Integrated Model System COSMO-ART to Simulate Interactions of Aerosols, Clouds, and Radiation on the Regional to the Continental Scale

- XY208 EGU2011-4223
Oriol Jorba, Carlos Pérez, Karsten Haustein, Zavis Janjic, Jose Maria Baldasano, Donald Dabdub, Alba Badia, and Michele Spada
 The NMMB/BSC-CHEM online chemical weather prediction system: current status of development and feedback interactions
- XY209 EGU2011-792
Benjamin Aouizerats, Pierre Tulet, and Laurent Gomes
 Radiative impacts of aerosols on dynamics: Application to the CAPITOUL field experiment
- XY210 EGU2011-14069
Felicita Russo, Alberto Maurizi, and Francesco Tampieri
 Studying the feedback processes in the model BOLCHEM
- XY211 EGU2011-13492
Alexander Baklanov, Ulrik Korsholm, Alexander Mahura, Ashraf Zakey, Roman Nuterman, Bent Sass, Kristian Nielsen, Brian Soerensen, and Iratxe Gonzalez-Aparicio
 Enviro-HIRLAM online integrated ACT-NWP modeling system with two-way interactions: History and current status
- XY212 EGU2011-8816
Jacek W. Kaminski and Joanna Struzewska
 Development and performance of a semi-operational chemical weather forecasting system EcoForecast.EU
- XY213 EGU2011-474
 Shuai Zhu and **Yang Zhang**
 Sensitivity of Simulated Chemical Concentrations and Aerosol-Meteorology Interactions to Aerosol Treatments in WRF/Chem
- XY214 EGU2011-12190
Renate Forkel, Johannes Werhahn, Rainer Schmitz, Tim Butler, Uli Uhrner, and Peter Suppan
 Application of the online coupled meteorology-chemistry model WRF/chem and the Lagrangian model GRAL to the Santiago de Chile region
- XY215 EGU2011-1960
Matthew Woodhouse, Graham Mann, Ken Carslaw, Jean-Jacques Morcrette, and Olivier Boucher
 Implementation and evaluation of a microphysical aerosol module in the ECMWF Integrated Forecasting System
- XY216 EGU2011-2467
Ardi Loot, Riinu Ots, and Marko Kaasik
 High-resolution application of SILAM air quality modelling system in Estonia
- XY217 EGU2011-4811
 Tov Elperin, **Andrew Fominykh**, Boris Krasovtsov, and Alexander Vikhansky
 Effect of Rain Scavenging on Altitudinal Distribution of Soluble Gaseous Pollutants in the Atmosphere
- XY218 EGU2011-6390
Idir Bouarar, Claire Granier, Kathy Law, Ariela Dangiola, Aude Mieville, Andreas Richter, Henk Eskes, and Randall Martin
 Evaluation of chemistry transport model simulations in the MACC project: comparison with satellite and in-situ data
- XY219 EGU2011-8000
Michael Kleeman, Steven Denero, Mengsteab Weldegeber, Shuhua Chen, and Hsiang-He Lee
 Initial Testing of a Source-Oriented WRF-CHEM Model
- XY220 EGU2011-8136
 Quentin Errera and **Richard Ménard**
 Implementation of spatial correlations in the background error covariance matrix in the BASCOE system.
- XY221 EGU2011-9166
Joris Van Bever, Simon Chabrilat, Yves Christophe, Hugo De Backer, Andy Delcloo, Richard Ménard, Michael Moran, and Paul Makar
 BACCHUS project: Evaluation of GEM-MACH15 and adaptation to Europe
- XY222 EGU2011-9383
Rohit Mathur, Jonathan Pleim, David Wong, Shaocai Yu, St Rao, Shawn Roselle, and Francis Binkowski
 Applications and Sensitivity Analysis with the 2-Way Coupled WRF-CMAQ Model
- XY223 EGU2011-10633
Eszter Komjáthy, Róbert Mészáros, and Istán Lagzi
 Expected changes of near surface ozone fluxes in Europe due to the effects of global warming
- XY224 EGU2011-12033
Johannes Werhahn, Renate Forkel, Ayoe Buus Hansen, Georg Grell, Stuart McKeen, Steven Peckham, and Peter Suppan
 Effect of aerosol-radiation feedback on regional air quality - A sensitivity study with WRF/chem.

XY225 EGU2011-9519

Yafang Cheng, Stephan Nordmann, Wolfram Birmili, Sarika Kulkarni, Chao Wei, Denier van der Gon, David Streets, Hang Su, Gregory Carmichael, Alfred Wiedensohler and the Gregory Carmichael Team
WRF-Chem simulation of black carbon episodes over Europe: transportation, regional radiative forcing, and influence on snow melting in Alpine region

GI-14 – GMES Sentinel Satellites: New Possibilities for Science (co-listed) – Orals

Convener: Michael Berger | Co-Conveners: Josef Aschbacher

Room: 24

Chairperson: n.n.

15:30–15:45 EGU2011-9767

Josef Aschbacher, Maria Pilar Milagro-Pérez, Antonio Ciccolella, Thomas Beer, Giancarlo Filippazzo, and Eleni Paliouras
“GMES Space Component - Programme Overview

15:45–16:00 EGU2011-4216

Jose Moreno

GMES/Sentinels in Land-Surface Earth System Science: temporal series and data synergy

16:00–16:15 EGU2011-6213

Hervé Yesou, Francesco Sarti, Nadine Tholey, Antonios Mouratidis, and Stephen Cladillon

Synergy of Sentinel 1 and 2 for emergency flood mapping and the monitoring of large inland water bodies based on a 10-year experience with active and passive remote sensing from space

16:15–16:30 EGU2011-3425

Wolfgang Wagner, Marcela Doubkova, Daniel Sabel, Annett Bartsch, Michael Hornacek, Jean-Pierre Klein, and Stefan Schlaffer

Global Land Surface Hydrology Monitoring using Sentinel-1: Opportunities and Challenges

16:30–16:45 EGU2011-3593

Pieterneel Levelt, Pepijn Veefkind, and Michiel Weele

Contribution of sentinel 4, 5 and s5p for further understanding of air quality - climate and ozone layer - climate interactions

16:45–17:00 EGU2011-12208

Maria Fabrizia Buongiorno, Pierre Briole, Fabiano Costantini, Francesco Guglielmino, Mattia Marconcini, Antonios Mouratidis, Giuseppe Puglisi, Francesco Sarti, Claudia Spinetti, and Salvatore Stramondo

Long-term experience gathered on Etna for volcano monitoring using optical and radar remote sensing, in preparation for Sentinel Missions

17:00–17:15 EGU2011-642

Claus Zehner

Sentinel User Requirements from the Application Volcanic Ash Monitoring

GI-14 – GMES Sentinel Satellites: New Possibilities for Science (co-listed) – Posters

Convener: Michael Berger | Co-Conveners: Josef Aschbacher

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

A105 EGU2011-13779

Paul Snoeij, Ramon Torres, Malcolm Davidson, Betlem Rosich, and Guido Levrini
SENTINEL-1 Implementation Status

A106 EGU2011-3754

Bianca Hoersch, François Spoto, Philippe Martimort, Omar Sy, Claudia Isola, **Pier Bargellini**, Olivier Colin, Ferran Gascon, Umberto del Bello, Aimé Meygret and the Sentinel-2 Team
The GMES Sentinel-2 Mission

A107 EGU2011-14008

Ulf Klein, Bruno Berruti, Craig Donlon, Johannes Frerick, Constantin Mavrocordatos, Jens Nieke, Bernd Seitz, Juergen Stroede, Helge Rebhan, and Nicolas Picot
Sentinel-3 Mission Status

A108 EGU2011-11629

J. Pepijn Veefkind, Ilse Aben, Johan de Vries, Gerard Otter, Paul Ingmann, and Pieterneel Levelt
TROPOMI on the ESA Sentinel-5 Precursor: Global Observations of the Atmospheric Composition for Climate and Air Quality Applications

A109 EGU2011-1011

Jochem Verrelst, Luis Alonso, Jesus Delegido, Juan Pablo Rivera, and Jose Moreno
Gaussian Processes regression for biophysical parameter retrieval from Sentinel-2 and Sentinel-3 data

A110 EGU2011-8446

Jean-Damien Desjonqueres

A new tracking mode for altimeters using an on-board digital elevation model

A111 EGU2011-8982

Nicolas Picot and **Francois Boy**

SAR Data over Ocean, CNES Proposed Processing Strategy and Continuity with LRM Data.

Thursday, 07 April

AS1.4 – Clouds, Aerosols and Radiation (General Session) – Orals

Convener: Andrea I. Flossmann | Co-Conveners: Andreas Macke, Johannes Quaas, Arturo Sanchez-Lorenzo, Patrick Laux, Harrie-Jan Hendricks Franssen, Stefanie Vogl, Simone Lolli

Room: 12

Chairperson: n.n.

- 08:30–08:45 EGU2011-684
Aristeidis Georgoulis and Konstantinos Kourtidis
 Weekly cycle patterns of total cloud cover over Europe and their connection to aerosol weekly variability and synoptic transport
- 08:45–09:00 EGU2011-9806
Graham Weedon, Olivier Boucher, and Johannes Quaas
 Detecting weekly cycles in model-derived and observation time series with Fourier-based techniques.
- 09:00–09:15 EGU2011-12049
Robert Portmann, John Daniel, Susan Solomon, and Daniel Murphy
 Evaluating the significance of weekly cycles in temperature
- 09:15–09:30 EGU2011-8931
Fabio Madonna, Aldo Amodeo, Giuseppe D'Amico, Aldo Giunta, Lucia Mona, and Gelsomina Pappalardo
 Raman and elastic lidar techniques for aerosol observation at CIAO
- 09:30–09:45 EGU2011-9370
Syed Ismail, Richard Ferrare, and Jonathan Hair
 LASE measurements during NAMMA and GRIP field experiments
- 09:45–10:00 EGU2011-11600
Alain Hauchecorne and the MMEDTAC Team
 Turbulent layers detection from ground based lidar observations

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

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

Room: 7

Chairperson: Riwal Plougonven

- 13:30–13:45 EGU2011-8258
Lars Hoffmann and M. Joan Alexander
 Occurrence Frequency of Convective Gravity Waves during the North American Thunderstorm Season
- 13:45–14:00 EGU2011-11235
Pascale Bourruet-Aubertot, Yannis Cuypers, Bruno Ferron, Denis Dausse, Olivier Ménage, and Agus Atmadipoera
 Turbulent mixing and its relationship with internal tides in the Indonesian Throughflow as inferred from the INDOMIX cruise
- 14:00–14:15 EGU2011-5383
Robert Scott, John Goff, Alberto Garabato, and George Nurser
 Characteristics of lee wave generation in the World Ocean
- 14:15–14:30 EGU2011-2524
Daniel Ruprecht and Rupert Klein
 A Reduced Model for Nonlinear Interactions of Gravity Waves with Deep Convective Clouds
- 14:30–14:45 EGU2011-1938
Roger Grimshaw, Karl Helfrich, and Ted Johnson
 The effect of rotation on internal solitary waves
- 14:45–15:00 EGU2011-11816
Mark Fruman, Ulrich Achatz, and Stefan Hicckel
 Simulation of breaking inertia-gravity waves using direct numerical simulation and implicit large-eddy simulation

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Riwal Plougonven

- XY672 EGU2011-5294
Hye-Yeong Chun and Young-Ha Kim
 Effects of the Convective Gravity-Wave Drag Parameterization in the Global Forecast System of the Met Office Unified Model in Korea
- XY673 EGU2011-12997
Corwin Wright and John Gille
 HIRDLS observations of gravity wave momentum fluxes over monsoon regions
- XY674 EGU2011-10778
Rafael Posada, José Luis Sánchez, Eduardo García-Ortega, José Luis Marcos, and Laura López
 Characterization of favourable conditions for gravity wave generation during snow precipitation events using remote sensing and modelling
- XY675 EGU2011-740
Mohammad Mirzaei, Ali R. Mohebalhojeh, Christoph Zülicke, and Farhang Ahmadi Givi
 Inertia-gravity waves generated in a moist baroclinic wave simulation
- XY676 EGU2011-4228
Kelvin Richards, Andrei Natarov, Yuji Kashino, and Wataru Sasaki
 The impact of near-inertial waves on mixing in the equatorial oceanic thermocline
- XY677 EGU2011-4589
Mathieu Leclair, Nicolas Grisouard, Louis Gostiaux, Francis Auclair, and Chantal Staquet
 Reflexion of a plane wave from a slope and wave-induced mean flow
- XY678 EGU2011-6250
Jose Carlos Sanchez-Garrido, Gianmaria Sannino, Luca Liberti, Jesus Garcia Lafuente, and Larry Pratt
 Three-dimensional generation of nonlinear internal tides in the Strait of Gibraltar
- XY679 EGU2011-1550
Chuncheng Guo, Xueen Chen, Vasiliy Vlasenko, and Nataliya Stashchuk
 Numerical simulation on the transformation of large amplitude second mode internal solitary waves over a slope-shelf topography
- XY680 EGU2011-2967
Antonio Martínez-Marrero and Juan M. Ugía
 Observations of near-inertial current variability associated with the passage of island-generated eddies
- XY681 EGU2011-4774
Nikolaos Bakas and Brian Farrell
 On the role of nonnormality in the overreflection of gravity waves
- XY682 EGU2011-10666
Riwal Plougonven, Albert Hertzog, and Lionel Guez
 Non-orographic and orographic sources of gravity waves above Antarctica and the Southern Ocean
- XY683 EGU2011-12697
Peter Spichtinger and Fabian Fusina
 Orographic gravity waves in a time-dependent flow
- XY684 EGU2011-4884
Marko Zirk and Rein Rõõm
 Orographic Drag Formation in Nonhydrostatic Pressure-Coordinate Dynamics I. Spectral Drag Resonances
- XY685 EGU2011-10299
Alexandre Paci, Christoph Knigge, Dieter Etling, Ted Johnson, Gavin Esler, Sebastien Cazin, Emmanuel Cid, Olivier Eiff, and Laurent Lacaze
 Topographic internal waves in the laboratory: two recent experiments carried in the CNRM-GAME stratified water tank
- XY686 EGU2011-10138
Yvan Dossmann, Francis Auclair, and Alexandre Paci
 Interaction of internal gravity waves generated over a ridge with strong density gradients
- XY687 EGU2011-13401
Marius Opsanger Jonassen, Hálfdán Ágústsson, Haraldur Ólafsson, and Joachim Reuder
 On the persistency of mountain generated gravity waves in Iceland.
- XY688 EGU2011-8620
Shaun Lovejoy, Julien Pinel, and Daniel Schertzer
 Atmospheric waves and fractional order wave equations: waves as emergent high Reynolds number phenomena

AS1.8/1.10 – High Resolution Cloud Models/dynamics and chemistry of atmospheric convection – Orals
 Convener: Shouting Gao | Co-Conveners: Donghai Wang, Xiaopeng Cui, Jun-Ichi Yano, Leo Donner, Holger Tost
Room: 8
 Chairperson: n.n.

- 15:30–15:45 EGU2011-12217
Martin Köhler, Thijs Heus, and Olaf Stiller
Does convection select moist environments?
- 15:45–16:00 EGU2011-2328
Hugh Morrison and **Wojciech Grabowski**
Impact of aerosols on cloud system-resolving model simulations of tropical deep convection
- 16:00–16:15 EGU2011-13196
Susan van den Heever
Aerosol Indirect Forcing of the Trimodal Distribution of Convection and the Water Vapor Budget of the Tropics
- 16:15–16:30 EGU2011-1413
Wei-Kuo Tao, Jiundar Chern, Toshi Matsui, Bo-Wen Shen, Xiping Zeng, Steve Lang, and Xiaowen Li
Using Multi-scale Modeling Systems and Satellite Data to Study the Precipitation Processes
- 16:30–16:45 EGU2011-1667
Jun-Ichi Yano
NAM-SCA: A New Approach for High-Resolution Cloud Modelling
- 16:45–17:00 EGU2011-3038
Alex Hoffmann, Michael Herzog, Tobias Gerken, and Hans Graf
From Calm to Storm: Selected Details of Various Phases in the Evolution of a Hector Storm from a High-resolution Coupled Atmosphere-Biosphere Model Experiment

AS1.8/1.10 – High Resolution Cloud Models/dynamics and chemistry of atmospheric convection – Posters
Convener: Shouting Gao | Co-Conveners: Donghai Wang, Xiaopeng Cui, Jun-Ichi Yano, Leo Donner, Holger Tost
Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY1 EGU2011-11442
Linda Smoydzin and Holger Tost
Impact of convective activity on tropospheric chemistry during the HOOVER/COPS/TRACKS campaign
- XY2 EGU2011-856
Toni Mitovski, Ian Folkins, Randall Martin, and Matthew Cooper
Impact of congestus clouds on the midlevel ozone concentrations
- XY3 EGU2011-824
Susana M. Mendes, Christopher S. Bretherton, and Alfredo Rocha
Assessing the saturated and unsaturated air relative contributions to tropical convective momentum transport
- XY4 EGU2011-4615
Lijuan Li, Bin Wang, Yongqiang Yu, Ye Pu, and Pengfei Lin
Influence of different convection parameterizations in an Atmosphere-Ocean coupled Model
- XY5 EGU2011-3772
Traute Crueger and Bjorn Stevens
Performance of Madden and Julian Oscillation in a multitude of ECHAM simulations
- XY6 EGU2011-9778
Sun-Hee Shin and Akio Kitoh
Effect of convection scheme on the boreal winter MJO
- XY7 EGU2011-12538
Amanda Gounou, Françoise Guichard, and Fleur Couvreur
An observationally-based modelling framework to study the sensitivity of the diurnal cycle over land
- XY8 EGU2011-7800
André Simon, Alexander Kann, Michal Neštiak, **Ingo Meirold-Mautner**, Ákos Horváth, Kálmán Csirmaz, Olga Ulbert, and Christine Gruber
Nowcasting and very short range forecasting of wind gusts generated by deep convection
- XY9 EGU2011-2132
Hector Teitelbaum, Maximilien Bolot, and Bernard Legras
Convection over Mendoza region, the underlying mechanism and the consequences
- XY10 EGU2011-2304
Frederic Laliberte, Olivier Pauluis, and Tiffany Shaw
New Climatological Diagnostics of Midlatitudes Moist Stability
- XY11 EGU2011-2369
Yushu Zhou and **Shouting Gao**
Effects of Vertical Wind Shear, Radiation and Ice Clouds on a Torrential Rainfall Event in China
- XY12 EGU2011-2534
Li Yao-dong, Zhang Shao-hong, and Hu Liang
A Study on the Precipitation Characteristic over the South China Sea Before and After the Monsoon Onset

- XY13 EGU2011-2790
Yongqing Wang, Nan Zhang, Min Liu, and Bizheng Wang
Systematical Model Errors in Simulating Cloud Cover during Tropical Cyclogenesis
- XY14 EGU2011-11033
Donghai Wang, Jinfang Yin, and Guoqing Zhai
Long-term In Situ Measurement of Cloud-Precipitation Microphysical Properties over East Asia
- XY15 EGU2011-681
Krushna Chandra Gouda and Prashant Goswami
Cloud Simulation over Western Ghats with a Non-hydrostatic Meso-scale Model
- XY16 EGU2011-1238
Xinyong Shen and Xiaofan Li
Precipitation and Cloud Statistics in the Deep Tropical Convective Regime
- XY17 EGU2011-1252
Shouting Gao and Xiaofan Li
Can Water Vapor Data Be Used to Estimate Precipitation Efficiency?

AS1.16 – African Monsoon Multidisciplinary Analysis (AMMA) – Orals

Convener: Christopher Taylor | Co-Conveners: Harald Kunstmann, Serge Janicot, Béatrice Marticorena, Lorenzo Genesio

Room: 10

Chairperson: Chris Taylor

- 13:30–13:45 EGU2011-11247
Florent Malavelle, Véronique Pont, Marc Mallet, Fabien Solmon, Jean-François Léon, and Catherine Liousse
Long-term simulations (2000-2007) of Biomass Burning and mineral dust optical properties with the RegCM model over West Africa (AMMA experiment). Comparisons with available AERONET, MODIS and MISR aerosol products
- 13:45–14:00 EGU2011-13188
Caroline Pierre, Eric Mougin, Béatrice Marticorena, and Gilles Bergametti
Simulation of aeolian dust emission over the Sahelian Belt in West Africa
- 14:00–14:15 EGU2011-11990
Adrien Deroubaix, Nadege Martiny, and Isabelle Chiapello
The use of aerosol remote sensing data sets for health impacts studies
- 14:15–14:30 EGU2011-10184
Fabienne Lohou, Bernard Cappelaere, Jean-Martial Cohard, Jerome Demarty, Sylvie Galle, Françoise Guichard, Laurent Kergoat, David Ramier, Christopher Taylor, and Frank Timouk
Surface recovering after a rain event: an AMMA inter-site study
- 14:30–14:45 EGU2011-2625
Amanda Gounou, Christopher Taylor, Françoise Guichard, Phil Harris, Richard Ellis, Fleur Couvreur, and Martin De Kauwe
Impact of Surface Heterogeneities on Convective Initiation in the Sahel
- 14:45–15:00 EGU2011-7144
Guillaume Tremoy, Françoise Vimeux, Olivier Cattani, Salla Mayaki, Ide Souley, and Guillaume Favreau
New isotopic measurements of near-surface water vapor in Niamey as a tool for studying convection at different time scales
- Chairperson: n.n.
- 15:30–15:45 EGU2011-7780
Juergen Bader and Belen Rodriguez-Fonseca
Decadal Emergence Variations of the Observed Inter-annual Rainfall Anomaly Patterns over West Africa
- 15:45–16:00 EGU2011-2457
Lauriane Batté and Michel Déqué
Seasonal predictions of summer precipitation over West Africa using coupled general circulation models: skill of the ENSEMBLES project multi-model forecasts
- 16:00–16:15 EGU2011-7717
Monerie Paul-Arthur, Fontaine Bernard, and Roucou Pascal
Evolution of the West African Monsoon at medium-term time horizon.
- 16:15–16:30 EGU2011-10236
Emmanouil Flaounas, Serge Janicot, Sophie Bastin, Rémy Roca, and Elsa Mohino
The teleconnection mechanism between the West African monsoon onset and the Indian monsoon onset: Observations and AGCM nudged simulations
- 16:30–16:45 EGU2011-3289
Romain Marteau, Benjamin Sultan, Vincent Moron, Agali Alhassane, Seydou B. Traré, and Christian Baron
The onset of the rainy season and farmers' sowing strategy for pearl millet cultivation in Southwest Niger

16:45–17:00 **Presentation of posters****AS1.16 – African Monsoon Multidisciplinary Analysis (AMMA) – Posters**

Convener: Christopher Taylor | Co-Conveners: Harald Kunstmann, Serge Janicot, Béatrice Marticorena, Lorenzo Genesio

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY18 EGU2011-11105
Julien Jouanno, Frédéric Marin, and **Yves du Penhoat**
Seasonal modes of surface cooling in the Gulf of Guinea
- XY19 EGU2011-8947
Belén Rodríguez-Fonseca, Teresa Losada, Elsa Mohino, Serge Janicot, and Juergen Bader
Multidecadal SST modulations of West African Interannual Rainfall Variability
- XY20 EGU2011-11987
Samo Diatta and Andreas H. Fink
Analysis and causes of non-stationary teleconnections impacting on West African Monsoon rainfall
- XY21 EGU2011-9997
Zengxin Zhang and Chongyu Xu
Changing features of seasonal precipitation in Sudan and the relations to atmospheric circulation during 1948-2005
- XY22 EGU2011-5859
Serge Janicot and Elsa Mohino
Role of MJO on African monsoon intraseasonal variability
- XY23 EGU2011-7287
Romain Marteau, Vincent Moron, Nathalie Philippon, and Bernard Fontaine
Multi-scale approach of the onset of the rainy season over Sudano-Sahelian belt: spatial coherence and potential predictability.
- XY24 EGU2011-2663
D. Emmanuel Poan, Fleur Couvreur, Romain Roehrig, and Jean-Philippe Lafore
Intraseasonal variability of precipitable water in West Africa
- XY25 EGU2011-2452
Abdou Karim Gueye, Sylvie Thiria, Awa Niang, Salam Sawadogo, Serge Janicot, and Benjamin Sultan
Estimation of rainfall in Senegal using Self-Organizing Map
- XY26 EGU2011-13918
Rosalind Cornforth and Brian Hoskins
Moist singular vector sensitivity analysis applied to understanding African easterly wave evolution and predictability
- XY27 EGU2011-11640
Juan Cuesta, Cyrille Flamant, John Marsham, Peter Knippertz, Douglas Parker, and Richard Forbes
Rainfall over the Hoggar massif, Algeria: analysis of driving mechanisms using ECMWF outputs and observations
- XY28 EGU2011-11000
Regis Dupuy, Christophe Duroure, Etienne Fontaine, Christophe Goubeyre, Wolfram Wobrock, Alfons Schwarzenboeck, Dominique Bouniol, and Alain Protat
In-situ statistical validation of airborne reflectivity measurements during AMMA2006 and Megha-Tropiques 2010 experiments: importance of hydrometeor growth processes and particle size distribution variability.
- XY29 EGU2011-4761
Françoise Guichard, Fleur Couvreur, Amanda Gounou, Dominique Bouniol, Anna Agustí-Panareda, and Jean-Marcel Piriou
What is the accuracy of the boundary layer diurnal cycle in meteorological analyses over West Africa?
- XY30 EGU2011-4837
Françoise Guichard, Christopher M. Taylor, Amanda Gounou, Fleur Couvreur, Richard J. Ellis, and Philip P. Harris
Simulation of daytime convective initiation in the Sahel: an evaluation of numerical weather forecast models with satellite data
- XY31 EGU2011-8520
Cécilia Bobée, Catherine Mering, Milena Palibrk, Julien Andrieu, and Benoît Toulouse
Assessing the present-day vegetation dynamics in the Sahelian environments using MODIS dataset. A Geostatistical approach
- XY32 EGU2011-13289
Eric Mougin, Laurent Kergoat, Pierre Hiernaux, Manuela Grippa, Franck Timouk, Nogmana Soumaguel, Mamadou Diawara, Marc Arjounin, Marielle Gosset, Julien Viarre and the Gourma Team
An anomalously wet year in Sahel during 2010: Consequences on surface conditions and fluxes.

- XY33 EGU2011-4043
Bernard Lacaze and Benoit Toulouse
Green vegetation cover trends in Sahelian Western Africa observed from SPOT VGT 2001-2010
- XY34 EGU2011-11567
Christel Bouet, **Béatrice Marticorena**, Gilles Bergametti, Jean Louis Rajot, Guy Cautenet, Karine Desboeufs, and Paola Formenti
How surface properties influence mineral dust emissions in the Sahelian region? A modelling case study during AMMA.
- XY35 EGU2011-13921
Jean-Noel Poda, Marie-Françoise Courel, and Marc Bui
Approche Éco Santé sur la trilogie Pollution Santé Sociétés: cas de la ville de Ouagadougou, Burkina Faso

AS2.1 – Air-Land Interactions (General Session) (co-sponsored by iLEAPS) – Orals

Convener: Thomas Foken | Co-Conveners: Andreas Ibrom

Room: 12

Chairperson: Foken

- 10:30–10:45 EGU2011-9984
Nicola Arriga, Gerardo Fratini, Antonio Forgione, Alessio Boschi, Carlo Trotta, and Dario Papale
Field Intercomparison of Gas Analysers and Ultrasonic Anemometers for Eddy Covariance Measurements
- 10:45–11:00 EGU2011-9172
Patrick Sturm, Werner Eugster, and Alexander Knohl
Instrumental and methodological limitations of CO₂ isotopologue eddy covariance measurements
- 11:00–11:15 EGU2011-4908
Wittaya Kessomkiat, **Harrie-Jan Hendricks Franssen**, Alexander Graf, and Harry Vereecken
An improved procedure for determining random errors of eddy covariance measurements for data assimilation
- 11:15–11:30 EGU2011-10008
Romain Baghi, Claire Delon, Pierre Durand, Corinne Jambert, Christian Jarnot, Jean-Michel Martin, Romain Mathon, Dominique Serça, and Nicolas Striebig
Tower-based and airborne sampler for disjunct eddy covariance measurements of biogenic VOC
- 11:30–11:45 EGU2011-9385
Shannon Brown, Jon Warland, Ralf Staebler, Eduardo Santos, Claudia Wagner-Riddle, and Paul Bartlett
Estimating a Lagrangian Length Scale using CO₂ Measurements in Two Plant Canopies
- 11:45–12:00 EGU2011-3953
Ryan McGloin, Hamish McGowan, David McJannet, Freeman Cook, and Stewart Burn
Quantification of Evaporation from a Small Water Storage Reservoir: An Inter-comparison of the Scintillometry and Eddy Covariance Methods

LUNCH BREAK

Chairperson: Sun

- 13:30–13:45 EGU2011-10347
Eva Falge, Andrei Serafimovich, and Peter Werle
The impact of covariance measures on the energy balance closure
- 13:45–14:00 EGU2011-3066
Paul Stoy and Matthias Mauder
Energy balance closure at global-distributed eddy covariance research sites: the role of landscape-level heterogeneity
- 14:00–14:15 EGU2011-4506
Doojdao Charuchittipan, Matthias Mauder, Jens-Peter Leps, Frank Beyrich, and Thomas Foken
Average length extension and its effects on the eddy-covariance measurements during the LITFASS-2003 experiment
- 14:15–14:30 EGU2011-10475
Rogier Floors, Sven-Erik Gryning, Alfredo Peña, and Ekaterina Batchvarova
Analysis of diabatic flow modification in the internal boundary layer
- 14:30–14:45 EGU2011-11162
Gitta Lasslop, Markus Reichstein, Mirco Migliavacca, and Alessandro Cescatti
Bias in flux partitioning due to the choice of the driving temperature

- 14:45–15:00 EGU2011-6384
Anneke van de Boer, Alexander Graf, Arnold F. Moene, and Dirk Schüttemeyer
 Uncertainty analysis of analytical flux footprint models
 Chairperson: Ibrom
- 15:30–15:45 EGU2011-11160
Pavel Sedlak, Henrique F. Duarte, and Monique Y. Leclerc
 Influence of low-level jets on the nocturnal budget of turbulence kinetic energy in a forest canopy
- 15:45–16:00 EGU2011-5237
Jielun Sun
 Vertical Variations of Mixing Lengths During CASES99
- 16:00–16:15 EGU2011-2935
 Wai Chi Cheng and **Chun-Ho Liu**
 Flow Pattern and Pollutant Removal Behavior for Idealized 2D Urban Street Canyons in Different Thermal Stratifications using Large-Eddy Simulation
- 16:15–16:30 EGU2011-11730
Craig Smith and Fernando Porte-Agel
 Large eddy simulation of drainage flows
- 16:30–16:45 EGU2011-6401
Gilles Boulet, Albert Olioso, Jonas Chirouze, Eric Ceschia, Vincent Rivalland, Ghani Chehbouni, and Jean-Pierre Lagouarde
 An empirical expression to relate aerodynamic and surface temperatures for use within single-source energy balance models.
- 16:45–17:00 EGU2011-2527
Mark Reyers, Andreas Krüger, Christiane Werner, Joaquim G. Pinto, Stefan Zacharias, and Michael Kerschgens
 The simulation of the opposing fluxes of latent heat and CO₂ over various land-use types - coupling a gas exchange model to a mesoscale atmospheric model

AS2.4 – Boundary Layers in High Latitudes: Physical and Chemical Processes over Snow, Ice, Ocean and Land – Orals

Convener: William Neff | Co-Conveners: Günther Heinemann, Anna Jones, Stefania Argentini, Philip Anderson

Room: 19

Chairperson: TBD

- 08:30–08:45 EGU2011-2134
Roberto Udisti, Silvia Becagli, Uri Dayan, Christian Lanconelli, Franco Lucarelli, Alcide di Sarra, Angelo Lupi, Claudia Di Biagio, Rita Traversi, and Vito Vitale
 Polar aerosol: insights from the size distribution and chemical composition of atmospheric particulate collected in the Arctic and Antarctica.
- 08:45–09:00 EGU2011-1411
Udo Friess, Holger Sihler, Rolf Sander, Denis Pöhler, and Ulrich Platt
 The Vertical Distribution of BrO and Aerosols in the Arctic: Measurements by Active and Passive DOAS
- 09:00–09:15 EGU2011-5769
Joseph Erbland, Joël Savarino, Samuel Morin, and Markus M. Frey
 Sustained surface nitrate recycling on the Antarctic plateau throughout the last climatic cycle : a stable isotopic view
- 09:15–09:30 EGU2011-3867
Ryan Spackman, Ru-shan Gao, William Neff, Joshua Schwarz, Laurel Watts, David Fahey, John Holloway, Thomas Ryerson, Jeff Peischl, and Charles Brock
 Depletion of Black Carbon Mass in the Springtime Arctic Boundary Layer
- 09:30–09:45 EGU2011-6285
Timo Vihma, Eveliina Tuovinen, and Hannu Savijärvi
 The effect of the Antarctic katabatic winds on near-surface temperatures
- 09:45–10:00 EGU2011-3091
Lars Ebner, Günther Heinemann, Verena Haid, and Ralph Timmermann
 Mesoscale modeling in the Weddell Sea using a regional NWP model and a global sea ice-ocean model

AS2.4 – Boundary Layers in High Latitudes: Physical and Chemical Processes over Snow, Ice, Ocean and Land – Posters

Convener: William Neff | Co-Conveners: Günther Heinemann, Anna Jones, Stefania Argentini, Philip Anderson

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: TBD

- XY36 EGU2011-294
Christophe Genthon, Delphine Six, Olivier Traulle, and Eric Aristidi
Two years of atmospheric boundary layer tower observation at Dome C, Antarctic plateau
- XY37 EGU2011-12574
Andrey Grachev, Robert Albee, Ola Persson, and Taneil Uttal
Multi-year measurements of turbulent surface fluxes in Canadian Arctic at Eureka observatory
- XY38 EGU2011-5339
Ola Persson
Impacts of seasonal differences in surface energy flux balances over Arctic sea ice
- XY39 EGU2011-738
Luca Di Liberto, Francesco Cairo, Marcel Snels, Guido Di Donfrancesco, Angelo Viola, Ilaria Pietroni, Stefania Argentini, Federico Angelini, Marion Maturilli, and Roland Neuber
Lidar observations of PBL dynamics in the Arctic
- XY40 EGU2011-3311
Georg Jocher
Quantification of flux components generated by near surface gravity waves, one option of Eddy Covariance Measurements during polar night conditions
- XY41 EGU2011-780
Ilaria Pietroni, Marianna Nardino, Igor Petenko, Stefania Argentini, and Angelo Viola
Behaviour of surface layer turbulent fluxes as a function of micro-meteorological conditions at Ny-Alesund - Svalbard
- XY42 EGU2011-9939
Anna Jones, Neil Brough, Greg Huey, David Tanner, and Eric Wolff
Pernitric acid in a coastal Antarctic boundary layer
- XY43 EGU2011-12358
Christoph Elsässer, Dietmar Wagenbach, Hans Oerter, Anna Wegner, Anton Wallner, Susanne Preunkert, and Margareta Hansson
10Be and 210Pb in Antarctic air and firn: A tool for examining the air-firn transfer of sub-micron aerosol
- XY44 EGU2011-1272
William Vicars, Joseph Erbland, and Joël Savarino
Comprehensive isotopic composition of nitrate in Antarctic snow and atmospheric aerosol samples: Towards interpretation of the polar ice core record
- XY45 EGU2011-2140
Roberto Udisti, Silvia Becagli, Maurizio Busetto, Massimo Chiari, Uri Dayan, Daniele Frosini, Silvia Nava, Francesco Rugi, Mirko Severi, and Rita Traversi
Antarctic aerosol collected at Station Concordia (Dome C, East Antarctica). Seasonal trends in size distribution and chemical composition.
- XY46 EGU2011-2148
Silvia Becagli, Giulia Calzolari, Costanza Ghedini, Franco Lucarelli, Alcide di Sarra, Mauro Mazzola, Claudia Di Biagio, Rita Traversi, Vito Vitale, and **Roberto Udisti**
First results on size distribution and chemical composition of Arctic aerosol (Ny Ålesund - Svalbard Islands and Thule - Greenland) during the 2010 campaign.
- XY47 EGU2011-1650
Thomas Ernstdorf, Günther Heinemann, and Clemens Drüe
Aircraft-based studies of katabatic winds and boundary layer structures over the NOW polynya near Greenland during summer
- XY48 EGU2011-6976
Philippe Ricaud, Christophe Genthon, Jean-Luc Attié, Andrea Pellegrini, Thomas Rose, Yann Courcoux, Jean-François Vanacker, and Lorenzo Moggio
Summer to winter diurnal variabilities of temperature and water vapour in the surface atmosphere as observed by HAMSTRAD over Dome C, Antarctica
- XY49 EGU2011-3099
Xiangshan Tian-Kunze, Lars Kaleschke, Rolf Weller, Gert Koenig-Langlo, Keiichiro Hara, Michel Legrand, and Anna E. Jones
A lagrangian backward trajectory model for the sea salt aerosol production and transport in the coastal antarctic regions
- XY50 EGU2011-9221
Douglas Davis, **William Neff**, Yuhang Wang, Tao Zeng, Paul Wine, Kimberly Brady, Rodney Weber, Mike Nicovich, Andreas Beyersdorf, and Richard Arimoto
Dynamical Processes Governing Transport of Atmospheric Sulfur to the South Pole
- XY51 EGU2011-9244
William Neff, Daniel Gattas, and Douglas Davis
Inferring the stable boundary layer depth at the South Pole using short tower data

- XY52 EGU2011-5492
Brie Van Dam, Detlev Helmig, and William Neff
 Boundary layer and near surface turbulence characterization at GEOSummit Station, Greenland using a sodar and micrometeorological data during June-July 2010
- XY53 EGU2011-9554
William Neff, Brie Van Dam, Detlev Helmig, and Mathew Shupe
 A Seasonal Climatology of the Boundary Layer at GEOSummit Station, Greenland using an Acoustic Sounder
- XY54 EGU2011-1609
Sandra Morelli
 Modeled surface heat fluxes over Terra Nova Bay polynya
- XY55 EGU2011-3179
Martin Bauer, David Schröder, Günther Heinemann, and Sascha Willmes
 Ice production of polynyas in the Laptev Sea calculated from mesoscale NWP model simulations for the winters 2007/08 and 2008/09
- XY56 EGU2011-8835
Gerit Birnbaum, André Ehrlich, Christof Lüpkes, Jörg Hartmann, Wolfgang Dierking, and Bruno Schyska
 Formation of melt ponds and resulting changes in surface albedo: Observations from the aircraft campaign MELTEX over the Beaufort Sea

AS3.2 – Aerosol Chemistry and Microphysics (General Session) – Orals

Convener: Douglas Worsnop | Co-Conveners: Astrid Kiendler-Scharr, Thomas Mentel

Room: 8

Chairperson: Astrid Kiendler-Scharr, Doug Worsnop

- 08:30–09:00 EGU2011-5833
Maria Kanakidou and Kostas Tsigaridis
 Organic aerosols in the Earth System: An overview of our understanding
- 09:00–09:15 EGU2011-7853
Ben Murphy, Neil Donahue, Christos Fountoukis, and Spyros Pandis
 Simulating the Oxidative Aging of Ambient Organic Compounds Using the 2-D Volatility Basis Set
- 09:15–09:30 EGU2011-11638
Noenne Prisle, David Topping, Tomi Raatikainen, Miikka Dal Maso, and Harri Kokkola
 Importance of surfactant representations for predicted cloud droplet numbers using the ECHAM5.5-HAM2 aerosol-climate model
- 09:30–09:45 EGU2011-3671
Holger Tost and Kirsty Pringle
 Organic aerosol in a global model: improved representation, ageing and water uptake
- 09:45–10:00 EGU2011-3292
Camille Mouchel-Vallon, Peter Bräuer, Teresa Raventos-Duran, Richard Valorso, Marie Camredon, Hartmut Herrmann, and Bernard Aumont
 Organics chemistry in atmospheric aqueous phase: Development of an explicit modelling tool

COFFEE BREAK

Chairperson: Doug Worsnop, Maria Kanakidou

- 10:30–11:00 EGU2011-4365
Jesse Kroll, Sean Kessler, James Hunter, Theodora Nah, Kelly Daumit, Anthony Carrasquillo, Eben Cross, Kevin Wilson, and Douglas Worsnop
 Effect of photochemical aging on the partitioning and oxidation state of atmospheric organic carbon
- 11:00–11:15 EGU2011-11101
Luisa Schöne, Dirk Hoffmann, and Hartmut Herrmann
 Kinetic measurements on radical reactions of isoprene oxidation products in the tropospheric multiphase system
- 11:15–11:30 EGU2011-11912
Francis Pope, Pete Gallimore, Pattanun Achakulwisut, Mary Björkegren, Jason Lee, and Markus Kalberer
 Importance of aerosol phase and water uptake for organic aerosol oxidation mechanisms
- 11:30–11:45 EGU2011-415
Gouri Ganbavale, Claudia Marcolli, Andreas Zuend, and Thomas Peter
 Temperature dependency of activity coefficients in Organic aerosols.

- 11:45–12:00 EGU2011-9372
Christopher Pöhlker, Meinrat O. Andreae, Paulo Artaxo, Mary K. Gilles, Arthur L. D. Kilcoyne, Scot T. Martin, Ryan C. Moffet, Ulrich Pöschl, Bärbel Sinha, and Mackenzie Smith (4), Kenia T. Wiedemann
 STXM-NEXAFS Investigations of Laboratory Secondary Organic Aerosols and Amazonian Background Aerosols

LUNCH BREAK

Chairperson: Jesse Kroll, Thomas Mentel

- 13:30–13:45 EGU2011-12168
Miikka Dal Maso and the JPAC H₂SO₄-campaign Team
 The role of natural plant emissions and sulphuric acid on atmospheric nanoparticle formation
- 13:45–14:00 EGU2011-7434
Matthew McGrath, Kari Lehtinen, Theo Kurten, Markku Kulmala, and Hanna Vehkamäki
 Rethinking the first nucleation theorem in atmospheric nucleation
- 14:00–14:15 EGU2011-4640
Andre S. H. Prevot, Lisa Pfaffenberger, Peter DeCarlo, Maarten Heringa, Roberto Chirico, Stephen Platt, Josef Dommen, and Urs Baltensperger
 Comparison of secondary organic aerosol formation in the dark, with UV and visible light
- 14:15–14:30 EGU2011-5866
Maria Cristina Facchini, Emanuela Finessi, Stefano Decesari, Lara Giulianelli, Marco Paglione, Risto Hillamo, Tomi Raatikainen, Colin D. O'Dowd, Astrid Kiendler-Scharr, Doug R. Worsnop and the EUCAARI-NMR Team
 Recurrent oxidized organic aerosol types over Europe from AMS and NMR measurements: results from EUCAARI project
- 14:30–14:45 EGU2011-5701
Astrid Kiendler-Scharr, Eiko Nemitz, Andre Prevot and the EUCAARI-AMS Team
 Particulate organic nitrate concentrations in Europe as observed by aerosol mass spectrometry
- 14:45–15:00 EGU2011-13124
Thorsten Hoffmann and the HUMPPA-COPEC SOA Team
 Field measurements of formation and evolution of biogenic SOA using on-line and off-line mass spectrometric techniques in a boreal forest in Finland (HUMPPA - COPEC campaign 2010)
- 15:00–15:15 EGU2011-11642
Alex Huffman, Bärbel Sinha, Rebecca Garland, and Uli Pöschl
 Fluorescent biological aerosol particle concentrations and size distributions measured in pristine tropical rainforest air during AMAZE-08

AS3.2 – Aerosol Chemistry and Microphysics (General Session) – Posters

Convener: Douglas Worsnop | Co-Conveners: Astrid Kiendler-Scharr, Thomas Mentel

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Thomas Mentel, Astrid Kiendler-Scharr

- XY57 EGU2011-12252
Dirk Olivé, Maria Sand, Terje Berntsen, Øyvind Seland, Alf Kirkevåg, Trond Iversen, and Jean-Francois Lamarque
 Online oxidant chemistry in the aerosol module of CAM4-Oslo
- XY58 EGU2011-3025
Richard Valorso, Bernard Aumont, Marie Camredon, Camille Mouchel-Vallon, Teresa Raventos-Duran, Julia Lee-Taylor, and Sasha Madronich
 Explicit modeling of the VOC/NOX/SOA system: sensitivity of SOA formation to the gas phase oxidation scheme
- XY59 EGU2011-5809
Manuel Santiago, Ariel F. Stein, Fantine Ngan, and Marta G. Vivanco
 Modelling the aerosol mass formed in a smog chamber under different VOCs/NOX conditions
- XY60 EGU2011-3811
François Benduhn and Ken S. Carslaw
 A New Hybrid Solver for Inorganic Aerosol Liquid Phase Atmospheric Gas Phase Exchange for Use in Global Models.
- XY61 EGU2011-3812
François Benduhn and Ken S. Carslaw
 Global Scale Simulations of Inorganic Gas/Aerosol Exchange with a new Hybrid Solver

- XY62 EGU2011-10564
Jo Browse, Ken Carslaw, Steven Arnold, and Olivier Boucher
Modelling the seasonal cycle of aerosol characteristics in the Arctic: the importance of wet deposition
- XY63 EGU2011-5933
Swen Metzger, Benedikt Steil, Li Xu, Joyce Penner, and Jos Lelieveld
EQSAM4 - Aerosol water parameterization for atmospheric modeling
- XY64 EGU2011-6006
Li Xu, Joyce Penner, Swen Metzger, and Jos Lelieveld
A comparison of inorganic aerosol thermodynamic properties predicted by EQSAM4 and EQUISOLV II
- XY65 EGU2011-4102
Paolo Tuccella, Gabriele Curci, and Guido Visconti
Simulations of aerosol-cloud-radiation feedback with coupled "online
- XY66 EGU2011-1290
Mingjin Tang, Jim Thieser, Nicolas Pouvesle, Gerhard Schuster, and John Crowley
Heterogeneous interaction of N₂O₅ with mineral dust aerosol
- XY67 EGU2011-5621
Manabu Shiraiwa, Markus Ammann, and Ulrich Pöschl
Gas uptake and chemical aging of amorphous semi-solid aerosol particles
- XY68 EGU2011-5607
Manabu Shiraiwa, Aurélie Rouvière, Yulia Sosedova, Hong Yang, Yingyi Zhang, Jonathan Abbatt, Markus Ammann, and Ulrich Pöschl
The role of long-lived reactive oxygen intermediates in the reaction of ozone with aerosol particles
- XY69 EGU2011-2923
Hui-Ming Hung and Wan-Jung Lu
The Phase Transition of Internally Mixed Ammonium Sulfate-Malonic Acid Aerosols Determined Using Attenuated Total Reflectance Infrared Spectroscopy
- XY70 EGU2011-11104
Janine Schindelka and Hartmut Herrmann
Mechanistic studies on the OH-initiated oxidation of acetone in the aqueous phase
- XY71 EGU2011-7075
Peter Bräuer, Camille Mouchel-Vallon, Andreas Tilgner, Bernard Aumont, and Hartmut Herrmann
Evaluation of prediction methods for aqueous phase rate constants of organics and CAPRAM mechanism development
- XY72 EGU2011-985
Igor Larin and Alexander Yermakov
Iron Catalysis of SO₂ Oxidation in Cloud Droplets
- XY73 EGU2011-8720
Jim Walker, Jon Wills, and Jonathan Reid
Direct comparison of the thermodynamic properties of sodium chloride and ammonium sulphate aerosol at relative humidities approaching saturation
- XY74 EGU2011-464
Mijung Song, Claudia Marcolli, Ulrich K. Krieger, and Thomas Peter
Liquid-liquid phase separations and hygroscopic properties of internally mixed organic/inorganic aerosol particles
- XY75 EGU2011-8697
Renyi Zhang and Alexei Khalizov
Effect of aging on morphology, hygroscopicity, and optical properties of soot aerosols
- XY76 EGU2011-12702
Ulrich Bundke, Björn Nillius, Joachim Curtius, Gregory Kok, Darrel Baumgardner, Roy Newton, and Patricia Keady
Measurements of the depolarization and intrinsic fluorescence properties of different aerosol samples
- XY77 EGU2011-13504
Angela Buchholz and Thomas Mentel
Closure between hygroscopic growth and CCN activity of secondary organic aerosol: using UNIFAC for water activity parametrization
- XY78 EGU2011-13810
Angela Buchholz, **Thomas Mentel**, Astrid Kiendler-Scharr, Florian Rubach, Christian Spindler, Ralf Tillmann, Einhard Kleist, and Jürgen Wildt
Chemical composition and microphysical properties of secondary organic aerosols from tree emissions
- XY79 EGU2011-9174
Mariana Adam, Jean-Philippe Putaud, Sebastiao Martins Dos Santos, Alessandro Dell'Acqua, and Carsten Gruening
Conversion of the aerosol optical properties from dry to ambient RH at the JRC-Ispira station for atmospheric research

- XY80 EGU2011-4996
Hang Su, Diana Rose, Yafang Cheng, Sachin S. Gunthe, Alfred Wiedensohler, and Ulrich Pöschl
Aerosol hygroscopicity distribution in size-resolved CCN measurements: the concept, validation and applications
- XY81 EGU2011-12470
Johannes Ofner, Natalja Balzer, Sergej Bleicher, Joelle Buxmann, Hinrich Grothe, Heinz-Ulrich Krüger, Ulrich Platt, Philippe Schmitt-Kopplin, and Cornelius Zetzsch
Aerosol-halogen interaction: Halogenation of secondary organic aerosols
- XY82 EGU2011-2171
Marta G. Vivanco, Manuel Santiago, Esther Borrás, Francisco Alacreu, and Milagros Ródenas
Aerosol growth from a mixture of toluene, 1,3,5-trimethylbenzene, octane and o-xylene for different humidity conditions
- XY83 EGU2011-6294
Harald Saathoff, Karl-Heinz Naumann, Ottmar Möhler, Ralf Tillmann, Thomas F. Mentel, Neil Donahue, and Thomas Leisner
Reaction of OH radicals with secondary organic aerosol from the ozonolysis of alpha-pinene
- XY84 EGU2011-3224
Astrid Kiendler-Scharr, Monika Springer, Sebastian Broch, **Thomas Mentel**, Florian Rubach, Ralf Tillmann, Katja Behnke, Jörg-Peter Schnitzler, Einhard Kleist, and Jürgen Wildt
Particle formation from stress-induced BVOC emissions from poplar is inhibited by isoprene
- XY85 EGU2011-8703
Neil M. Donahue, **Heber Chacon Madrid**, and Erica M. Trump
Thermodynamics and Diagnostics of a Two-Dimensional Volatility Basis Set
- XY86 EGU2011-10245
Judith Perlinger, Paul Doskey, Rosa Flores-Rangel, Bo Zhang, and Keenan Murray
Estimates of Total Molecular Polarity to Evaluate Atmospheric Evolution of Organic Aerosol
- XY87 EGU2011-3636
Corey Olson, Melissa Galloway, Ge Yu, Elizabeth Stone, Curtis Hedman, and **Frank Keutsch**
Hydroxycarboxylic Acid-Derived Organosulfates: Synthesis, Stability and Quantification in Ambient Aerosol
- XY88 EGU2011-4522
Yoshito Oshiro, Akihito Itoh, Sotaro Azechi, Yuka Somada, Daishi Handa, Takemitsu Arakaki, and Akira Tanahara
Characterization of heavy metal contents in the bulk atmospheric aerosols collected at Okinawa island, Japan by X-ray fluorescence spectrometric method (XRF)
- XY89 EGU2011-5274
Charles Chou, Wei-Ru Huang, Chung-Yao Lin, and Wei-Nai Chen
Spectral dependence of optical parameters of urban aerosols
- XY90 EGU2011-12433
Yafang Cheng, Hang Su, Alfred Wiedensohler, Maria Berghof, Birgit Wehner, Tong Zhu, Gregory Carmichael, and Yuanhang Zhang
Diurnal evolution of size-resolved soot mixing state in the megacity Beijing: mechanism and parameterizations
- XY91 EGU2011-9270
Sachin S. Gunthe and the CAREBeijing-2006 Team
Cloud condensation nuclei from fresh and aged air pollution in the megacity region of Beijing: size-resolved measurements and parameterization of aerosol chemical composition, hygroscopicity and CCN activity
- XY92 EGU2011-9310
Christopher Pöhlker, J. Alex Huffman, Janine Fröhlich-Nowoisky, and Ulrich Pöschl
Autofluorescence of Bioaerosol Standards - Characterization by Fluorescence Spectroscopy and Microscopy
- XY93 EGU2011-9366
Joshua A. McGrath, Jurgita Ovadnevaite, Max G. Adam, and Harald Berresheim
Concurrent High Resolution Mass Spectrometric Measurements of Aerosol and Gas Phase Sulfuric Acid and Methanesulfonic Acid in the Coastal Marine Atmosphere
- XY94 EGU2011-7078
Roy M. Harrison and Manuel Dall'Osto
Chemical Aging of Tropospheric Aerosols Evaluated by Single Particle Mass Spectrometry in the Field
- XY95 EGU2011-10709
Rupert Holzinger, Joseph Timkovsky, and Thomas Röckmann
Chemical composition of organic aerosol at polluted and remote sites
- XY96 EGU2011-11592
Ana Calvo, Luis Tarelho, Márcio Duarte, Célia Alves, Teresa Nunes, Margarita Evtugina, Casimiro Pio, Amaya Castro, and Roberto Fraile
Characterization of emissions from fireplace and wood stove combustion of three Mediterranean tree species

AS3.9 – Atmospheric composition: variability and trends – Orals

Convener: Oksana A. Tarasova | Co-Conveners: Geir O. Braathen, Sophie Szopa, Euan Nisbet, Justus Notholt, Martine De

Maziere, Ralf Sussmann

Room: 14

Chairperson: O.Tarasova and R. Sussmann

- 08:30–08:45 EGU2011-11736
Cyril Crevoisier, Colm Sweeney, Manuel Gloor, Jorge Sarmiento, and Pieter Tans
 Carbon fluxes and transport in North America: A new perspective from three-dimensional CO₂ sampling
- 08:45–09:00 EGU2011-13010
Christian Frankenberg, Hartmut Bösch, Michael Buchwitz, Andre Butz, Christopher W. O'Dell, Anmarie Eldering, Otto Hasekamp, Maximilian Reuter, Ilse Aben, and Acos Team
 Remote sensing of greenhouse gases using satellites - from SCIAMACHY to GOSAT
- 09:00–09:15 EGU2011-8655
Rona Thompson, Simona Castaldi, Riccardo Valentini, Philippe Bousquet, Frederic Chevallier, Philippe Ciais, Marco Miglietti, Edward Dlugokencky and the CHIOTTO and CARIBIC Team
 Global estimates of N₂O emissions: a comparison of top-down and bottom-up approaches
- 09:15–09:30 EGU2011-13387
Elena Kozlova, Thomas Seifert, Reimo Leppert, Luis Neves, Armin Jordan, Willi Brand, and Martin Heimann
 Seasonal, interannual and synoptic variability of long-lived atmospheric trace gases and O₂ at the Cape Verde Atmospheric Observatory (CVAO)
- 09:30–09:45 EGU2011-499
Cynthia Whaley, Kimberly Strong, and Dylan Jones
 Ground-based measurements of methane, nitrous oxide, carbon monoxide and ozone over Toronto and comparisons with the GEOS-Chem model
- 09:45–10:00 EGU2011-10407
Christoph Keller, Matthias Hill, Zita Ferenczi, Laszlo Haspra, Franz Conen, and Stefan Reimann
 First measurements of a suite of halogenated greenhouse gases over Eastern Europe

COFFEE BREAK

Chairperson: G. Braathen and S. Szopa

- 10:30–10:45 EGU2011-616
Guilhermet Julien, Preunkert Suzanne, Voisin Didier, and Legrand Michel
 Study of HUMic Like Substances in ice core from Col du Dôme
- 10:45–11:00 EGU2011-9647
Boris D. Belan, Gen Inoue, Toshinobu Machida, Shamil Maksyutov, Aleksandr V. Fofonov, Denis K. Davydov, and Mikhail Yu. Arshinov
 Vertical distribution of molecular hydrogen in the troposphere over southwestern part of Siberia
- 11:00–11:15 EGU2011-2599
Anneke Batenburg, Gerben Pieterse, Maarten Krol, Sylvia Walter, Ingeborg Levin, Martina Schmidt, Armin Jordan, Samuel Hammer, Camille Yver, and Thomas Röckmann
 Temporal and spatial variability in the isotopic composition of atmospheric molecular hydrogen: measurement time series from six EUROHYDROS stations
- 11:15–11:30 EGU2011-12153
Detlev Helmig and the The WMO-GAW VOC Team
 The WMO-GAW Volatile Organic Compound Program - Concept and Findings
- 11:30–11:45 EGU2011-9236
Michael Leuchner, Christian Plass-Dülmer, Ludwig Ries, Sonja Gubo, and Rita Junek
 Variability of NMHC sources at two high altitude GAW background sites in Germany
- 11:45–12:00 EGU2011-4482
Apostolos Voulgarakis, Drew Shindell, Olga Pechony, Kostas Tsigaridis, Miriam Marlier, and Greg Faluvegi
 Interannual variability of tropospheric aerosols and gases: exploring biomass burning emissions as a potential driver

LUNCH BREAK

Chairperson: E. Nisbet and M. De Maziere

- 13:30–13:45 EGU2011-7029
Jason Williams, Michiel van Weele, Vincent Huijnen, and Peter van Velthoven
 Changes in tropospheric CO and O₃ concentrations due to rising anthropogenic emissions from East Asia
- 13:45–14:00 EGU2011-11973
Thomas Trickl
 Twenty Years of Lidar Studies of Tropospheric Ozone at Garmisch-Partenkirchen
- 14:00–14:15 EGU2011-12062
Konstantinos V. Varotsos, Christos Giannakopoulos, and Maria Tombrou
 Climate change impact on future air quality in Europe: A two-way approach
- 14:15–14:30 EGU2011-1344
Theo Ridder, Justus Notholt, Markus Rex, Otto Schrems, Thorsten Warneke, and Lin Zhang
 First Observations of Ozone and Carbon Monoxide in the Western Pacific using Fourier Transform Infrared Spectrometry
- 14:30–14:45 EGU2011-727
Vadim Rakitin, Ekaterina Fokeeva, Evgeny Grechko, and Anatoly Dzhola
 Long-term CO total column variations and an influence of Moscow CO emissions on air pollution in city outskirts.
- 14:45–15:00 EGU2011-10092
Annette Wagner and the MACC GAW Team
 The Use of GAW Surface Observations of CO and O₃ Station Data for the Verification of MACC Global Reactive Gas Forecasts
- Chairperson: J. Notholt and O. Tarasova
- 15:30–15:45 EGU2011-12479
Aurélie Colomb, Cécile Gaimoz, Jean-Marc Pichon, David Picard, Karine Sellegri, Mickael Ribeiro, and Laetitia Bouvier
 Variability of ozone (O₃), nitrogen oxide (NO), nitrogen dioxide (NO₂), sulphur dioxide (SO₂) and carbon monoxide (CO) at the Puy de Dôme research station (France, 1465m a.s.l.) for the period 1995-2010
- 15:45–16:00 EGU2011-7540
François Hendrick, Philippe Demoulin, Karin Kreher, Martine De Mazière, Caroline Fayt, Christian Hermans, Bernard Lejeune, Christian Servais, and Michel Van Roozendael
 Trend analysis of stratospheric NO₂ above Jungfraujoch (46.5°N, 8.0°E) using long-term ground-based UV-visible and FTIR observations
- 16:00–16:15 EGU2011-5591
Yana Virolainen, Yuriy Timofeyev, Anton Rakitin, Anatoly Poberovsky, Maria Makarova, Alexander Polyakov, Dmitry Ionov, Vladimir Kostsov and the SPbSU Team
 Ground-based spectroscopic studies of atmospheric gaseous composition
- 16:15–16:30 EGU2011-13785
Bart Dils, Junbo Cui, Stephan Henne, Emmanuel Mahieu, Martin Steinbacher, and Martine De Mazière
 NDIR surface in situ and FTIR remote sensing measurements at the Jungfraujoch see different CO trends
- 16:30–16:45 EGU2011-4323
Simone Tilmes and the coauthors Team
 Ozonesonde climatology for Model Evaluation of the Troposphere and Lower Stratosphere
- 16:45–17:00 EGU2011-3187
Thomas Wagner, Steffen Beirle, Diego Loyola, Kornelia Mies, and Sander Slijkhuis
 Application of 15 years of global atmospheric water vapor column observations from GOME-1/2 and SCIAMACHY for climate studies

AS3.9 – Atmospheric composition: variability and trends – Posters

Convener: Oksana A. Tarasova | Co-Conveners: Geir O. Braathen, Sophie Szopa, Euan Nisbet, Justus Notholt, Martine De Mazière, Ralf Sussmann

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: J. Notholt and O. Tarasova

- XY97 EGU2011-1390
Peter Bergamaschi, Matteo Corazza, Arjo Segers, Alex Vermeulen, Alistair Manning, Maria Athanassiadou, Rona Thompson, Isabelle Pison, Philippe Bousquet, Ute Karstens and the Atmospheric Measurements Team
 Top-down estimates of European CH₄ and N₂O emissions based on 5 different inverse models

- XY98 EGU2011-4619
Mike Newland, David Oram, Johannes Laube, Chris Hogan, Bill Sturges, Claire Reeves, Patricia Martinerie, Paul Fraser, Emmanuel Witrant, Thomas Blunier, Jakob Schwander, Carl Brenninkmeijer, Tanja Schuck, Michel Bolder, Thomas Röckmann, Carina van der Veen, Harald Bönisch, Andreas Engel, and Graham Mills
 Emission estimates of several long lived ozone depleting substances and greenhouse gases from top-down modeling
- XY99 EGU2011-7837
Vanessa Sherlock, Debra Wunch, Gretchen Keppel-Aleks, Paul Wennberg, Geoffrey C. Toon, Janina Messerschmidt, Marc C. Geibel, Dietrich G. Feist, Nicholas Deutscher, Sara Mikaloff Fletcher and the TCCON and GOSAT Team
 Recent developments in the Total Carbon Column Observing Network (TCCON)
- XY100 EGU2011-5951
Oksana A. Tarasova, Kazuto Suda, Ed Dlugokencky, Doug Worthy, Tuomas Laurila, Sander Houweling, and Jim Butler
 The state of greenhouse gases in the atmosphere using global observations through 2009
- XY101 EGU2011-6785
Simon O'Doherty, Matt Rigby, Alistair Manning, Jens Mühle, Ben Miller, Ray Wang, Peter Simmonds, Dickon Young, Brian Grealley, Stefan Reimann and the S. O'Doherty Team
 Global and regional emissions of HFC-143a (CH₃CF₃) and HFC-32 (CH₂F₂) from in situ and air archive atmospheric observations
- XY102 EGU2011-7891
Ping Xiao, Simon O'Doherty, and Dudley E Shallcross
 Bromoform and Dibromomethane from AGAGE stations
- XY103 EGU2011-3536
Bernard Lejeune, Emmanuel Mahieu, Parvatha Suntharalingam, Pierre Duchatelet, Christian Servais, and Philippe Demoulin
 Trend evolution and seasonal variation of tropospheric and stratospheric carbonyl sulfide (OCS) above Jungfraujoch.
- XY104 EGU2011-7493
Daniel Stone, Stewart Vaughan, Trevor Ingham, Lisa Whalley, Mathew Evans, and Dwayne Heard
 Long term measurements and modelling of OH and HO₂ radicals at a tropical marine location
- XY105 EGU2011-12064
Mary Fowler, David Lowry, Rebecca Fisher, Mathais Lanoisellé, and Euan Nisbet
 The long-term (1996-2010) London record of carbon monoxide and molecular hydrogen: evidence for improved air quality
- XY106 EGU2011-11955
Christian Plass-Dülmer, Stefan Reimann, Markus Wallasch, Sverre Solberg, Dieter Klemp, Patrice Coddeville, and Emmanuel Mahieu
 NMHC Climatology from Central European Mountain Observatories
- XY107 EGU2011-6598
Sebastian Traud
 Emission of trace gases and their atmospheric transport above Southern and Eastern Asia
- XY108 EGU2011-14025
Lisa Klanner, Thomas Trickl, and Hannes Vogelmann
 The Zugspitze High-Power Raman Lidar System: Highlights from 2010
- XY109 EGU2011-1746
Peter Krizan and Wang Gengchen
 Ozone concentration in the lower troposphere in Europe and in the east Asia
- XY110 EGU2011-5685
Andrea Mues, Astrid Manders, Martijn Schaap, Peter Bultjes, and Rainer Stern
 Impact of the extreme meteorological conditions during the summer 2003 in Europe on air quality - an observation and model study
- XY111 EGU2011-13173
Erika von Schneidmesser, Rebecca Wilson, Zoe Fleming, Nicola Carslaw, Paul Monks, Gaelle Clain, Stephan Henne, Oivind Hodenbrog, and Igor Kononov
 A Megacity's Oxidizing Footprint and Urban and Rural European Ozone Trends
- XY112 EGU2011-8756
Achim Strunk, Twan van Noije, and Jason Williams
 A decadal simulation of the tropospheric composition with TM5 using the IPCC AR5 emissions
- XY113 EGU2011-7002
 Pierre Duchatelet, Wuhu Feng, Martyn Chipperfield, Roland Ruhnke, Peter Bernath, Chris Boone, Kaley Walker, Philippe Demoulin, and **Emmanuel Mahieu**
 The evolution of the inorganic fluorine budget since the mid-1980s based on FTIR measurements at northern mid-latitudes

- XY114 EGU2011-6413
Pierre Duchatelet, Rodolphe Zander, **Emmanuel Mahieu**, Jens Mühle, Philippe Demoulin, Bernard Lejeune, Ginette Roland, Christian Servais, and Olivier Flock
First retrievals of carbon tetrafluoride (CF₄) from ground-based FTIR measurements: production and analysis of the two-decadal time series above the Jungfraujoch
- XY115 EGU2011-1297
Emmanuel Mahieu, Jeremy Harrison, Peter Bernath, Geoffrey Toon, Curtis Rinsland, Philippe Demoulin, Pierre Duchatelet, Bernard Lejeune, Christian Servais, and Martine De Mazière
First retrievals of methyl chloride from ground-based high-resolution FTIR solar observations
- XY116 EGU2011-2752
Francis J. Schmidlin, Christopher E. Ashburn, E. Thomas Northam, and George B. Brothers
Impact on Estimated Ozone Trends Utilizing Measurements from Ground-, Balloon-, and Satellite-Instruments
- XY117 EGU2011-6117
Melanie Coldewey-Egbers, Diego Loyola, Walter Zimmer, Michel van Roozendaal, Christophe Lerot, Martin Dameris, Hella Garny, Peter Braesicke, MariLiza Koukouli, and Dimitris Balis
Spatial patterns of observed and modelled total ozone trends 1995-2009
- XY118 EGU2011-10825
Prijitha J. Nair, Sophie Godin-Beekmann and the ozone trends Team
Relative trends of stratospheric ozone in the mid-latitudes
- XY119 EGU2011-4994
Gennadi Milinevsky and the Dobson Team
Ozone layer study over Kyiv by Dobson spectrophotometer
- XY120 EGU2011-5062
Beatriz Monge-Sanz, Martyn Chipperfield, Daniel Cariolle, Wuhu Feng, and Johannes Flemming
The new linear scheme for stratospheric ozone COPCAT: A good alternative for long-term simulations with global models
- XY121 EGU2011-9583
Apostolos Voulgarakis and Drew Shindell
The potential of stratospheric ozone changes to influence the abundance of sulfate aerosols in the troposphere
- XY122 EGU2011-9593
Hyun Hee Lee, Ji Yi Lee, Seung Muk Yi, Yong Pyo Kim, and Chang Hee Kang
Temporal trend of particulate PAHs at Seoul, Korea
- XY123 EGU2011-6788
Robert Stepa, **Elena Alina Olaru**, Sabina Stefan, and Ion Udrea
Temporal Variation of Total Carbon Content and Magnetic Susceptibility of PM₁₀ Samples Collected in Bucharest Region of Romania
- XY124 EGU2011-4760
Stephanie Schüttauf, Frank Zimmermann, and Jörg Matschullat
Chemical composition of fog and cloud water at the Erzgebirge summit, Germany
- XY125 EGU2011-2187
Alexander de Meij and Jos Lelieveld
Global and regional trends in aerosol optical depth based on remote sensing products and pollutant emission estimates between 2000 and 2009.
- XY126 EGU2011-6718
Iolanda Ialongo, Antti Arola, Jukka Kujanpää, Niilo Kalakoski, and Johanna Tamminen
Global scale UV trends derived from satellite UV erythemal products
- XY127 EGU2011-8150
Fabrizio Niro and the ENVISAT Atmospheric-Chemistry Team
The extension of the ENVISAT Atmospheric-Chemistry missions beyond 2010: status and perspectives
- XY128 EGU2011-13241
Wissam Chehade, Mark Weber, and John P. Burrows
Temperature dependent O₃ absorption cross sections for GOME, SCIAMACHY and GOME-2: Re-analysis of Flight Model Data and Retrieval Tests.
- XY129 EGU2011-6343
Sebastian Dikty, Mark Weber, Folkard Wittrock, Wissam Chehade, and John P. Burrows
GOME, SCIAMACHY, and GOME-2 total column WFDOAS ozone data (1995-2010): validation with satellite and ground-based observations
- XY130 EGU2011-12754
Faiza Azam, Klaus Bramstedt, Alexei Rozanov, Heinrich Bovensmann, and John Burrows
SCIAMACHY Lunar Occultation Water Vapor Retrieval and Inter-comparisons
- XY131 EGU2011-12769
Ralf Sussmann, Tobias Borsdorff, Markus Rettinger and the NDACC water vapor Team
Decadal trends of column-integrated water vapor from the NDACC-FTIR network

- XY132 EGU2011-12790
Ralf Sussmann, Markus Rettinger, Lisa Klanner, Thomas Trickl, and Hannes Vogelmann
 Set up of a long-term, near-infrared to far-infrared radiative closure experiment at Mt. Zugspitze. Quantifying the greenhouse effect of water vapor and ice clouds
- XY133 EGU2011-8213
Fabrizio Niro and the ENVISAT Atmospheric-Chemistry Team
 The ENVISAT-ESA Atmospheric-Chemistry dataset: operational data availability and re-processing status
- XY134 EGU2011-3688
Emmanuel Mahieu, Pierre Duchatelet, Rodolphe Zander, Peter F. Bernath, Alex Brown, Chris D. Boone, and Kaley A. Walker
 Trend and lifetime of sulfur hexafluoride at mid-latitudes deduced from ACE-FTS occultation measurements

AS3.12 – Atmospheric Monitoring using Commercial Aircraft, Unmanned Aircraft Systems, Ships and Trains: Platforms of Opportunity – Posters

Convener: Tanja Schuck | Co-Conveners: Angela Baker, Carl Brenninkmeijer, Andreas Volz-Thomas, JEAN-PIERRE CAMMAS, Toshinobu Machida, Manfred Lange, Joachim Reuder

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY135 EGU2011-7013
Annette Filges, Christoph Gerbig, Harald Franke, and Christoph Klaus
 CO₂, CH₄ and CO measurements by compact cavity ring-down
- XY136 EGU2011-8761
Karl Beswick, Martin Gallagher, Darrel Baumgardner, Steve Devereau, and Philippe Nedelec
 In-board detection of cloud on commercial aircraft: using the BCP in IAGOS
- XY137 EGU2011-7668
 Andreas Petzold, Amir Ibrahim, Harald Franke, Christoph Klaus, Markus Herrmann, Markus Fiebig, and **Andreas Volz-Thomas**
 Aerosol Measurements on IAGOS Aircraft
- XY138 EGU2011-8311
 Fernand Karcher, Jean-Pierre Cammas, Yvan Lemaître, Philippe Nédélec, and **Andreas Volz-Thomas**
 Real-Time use of IAGOS observations
- XY139 EGU2011-13681
 Harald Franke and **Andreas Volz-Thomas**
 Maintenance requirements for a global distributed research infrastructure
- XY140 EGU2011-6584
Andreas Volz-Thomas and the IAGOS Team
 In-Service Aircraft for a Global Observing System- A new European Research Infrastructure
- XY141 EGU2011-6349
Carl Brenninkmeijer and the CARIBIC Team
 The CARIBIC Atmospheric Chemistry Flying Observatory
- XY142 EGU2011-3145
Tanja Schuck, Carl Brenninkmeijer, Andreas Zahn, and Peter van Velthoven
 First long-term observations of SF₆ and N₂O in the extra-tropical tropopause region
- XY143 EGU2011-9069
David Oram, Johannes Laube, Adam Wisher, Debbie O'Sullivan, Tanja Schuck, and Carl Brenninkmeijer
 Halocarbon measurements in the UTLS: results from the CARIBIC aircraft project
- XY144 EGU2011-2480
Angela Baker, Carl A.M. Brenninkmeijer, Franz Slemr, and Tanja J. Schuck
 Composition and trends of non-methane hydrocarbons over Europe observed by the CARIBIC aircraft
- XY145 EGU2011-11510
Sergey Assonov, Carl A.M. Brenninkmeijer, and Tanja J. Schuck
 Magnitude of gross CO₂-biosphere exchange flux during the Indian summer monsoon as evidenced by CARIBIC aircraft CO₂ isotope data.
- XY146 EGU2011-2606
Anneke Batenburg, Tanja Schuck, Angela Baker, Carl Brenningmeijer, and Thomas Röckmann
 Correlations between the deuterium content of molecular hydrogen and other trace gases in the UTLS region obtained from CARIBIC samples
- XY147 EGU2011-2624
Christoph Dyroff, Andreas Zahn, and Carl A. M. Brenninkmeijer
 Evaluation of UT/LS humidity in the ECMWF model using five years of CARIBIC observations
- XY148 EGU2011-12273
Felix Geiger, Marco Neumaier, Carl A. M. Brenninkmeijer, Detlev Sprung, Joel Brito, and Andreas Zahn
 Airborne CARIBIC measurements in the UTLS: Distribution, seasonal cycle and variability of acetone

- XY149 EGU2011-11908
David Moore, John Remedios, and Andreas Zahn
Comparison of acetone measurements by the MIPAS-E satellite instrument to CARIBIC aircraft data
- XY150 EGU2011-2901
Franz Slemr, Ralf Ebinghaus, Hans Kock, Carl Brenninkmeijer, Markus Hermann, Andreas Weigelt, Andreas Zahn, Peter van Velthoven, and Bengt Martinsson
CARIBIC observations of gaseous mercury in the lowermost stratosphere
- XY151 EGU2011-2910
Markus Hermann, Jost Heintzenberg, Andreas Weigelt, Antony Clarke, Vladimir Kapustin, Bruce Anderson, Kenneth Thornhill, Peter van Velthoven, Andreas Zahn, and Carl Brenninkmeijer
Nearly Global Aerosol Mapping in the Upper Troposphere and Lowermost Stratosphere with Data from the CARIBIC Project
- XY152 EGU2011-6289
Valérie Thouret, **Jean-Pierre Cammas**, Hannah Clark, Régina Zbinden, Gilles Athier, Damien Boulanger, Jean-Marc Cousin, Philippe Nédelec, and Fernand Karcher
Overview of O₃ and CO interannual variabilities and trends based on MOZAIC data.
- XY153 EGU2011-9613
Gary Morris, Barry Lefer, Bernhard Rappenglueck, Christine Haman, Christopher Boxe, Scott Hersey, Daewon Byun, Valerie Thouret, **Jean Pierre Cammas** and the NOAA ESRL Team
Ozone profile observations in Houston, Texas (1994 - 2010) from aircraft, balloons, and satellites
- XY154 EGU2011-8318
Johannes Stauffer, Johannes Staehelin, and René Stübi
Comparison of ozone measurements of MOZAIC with ozonesondes based on backward trajectory analysis
- XY155 EGU2011-10289
Régina Zbinden, Valérie Thouret Thouret, Jean-Pierre Cammas, Herman Smit, Gilles Athier, Damien Boulanger, Jean-Marc Cousin, Philippe Nedelec, and Fernand Karcher
A tropospheric air mass study over the Mid-Northern latitudes deduced from the MOZAIC program: Climatology and "Trends" of O₃, CO and WV (1994-2009).
- XY156 EGU2011-6541
Pavlos Kalabokas, Andreas Volz-Thomas, Valerie Thouret, Jean-Pierre Cammas, Damien Boulanger, and Christos Repapis
Examination of the atmospheric conditions associated with high and low vertical ozone measurements in the lower troposphere over the Eastern Mediterranean
- XY157 EGU2011-6684
Karin Thomas, Martin Schultz, Hans-Werner Pätz, Andreas Volz-Thomas, Olaf Stein, Philippe Nedelec, and Valerie Thouret
High NO_y and CO concentrations in the UT seen in MOZAIC flights - Comparison with MACC Reanalysis
- XY158 EGU2011-10189
Ole Amund Søvde, Tanja Schuck, Carl Brenninkmeijer, Helmut Ziereis, Andreas Zahn, and Ivar S. A. Isaksen
CARIBIC flights in the chemical transport model Oslo CTM2
- XY159 EGU2011-2791
Tomoko Shirai, Toshinobu Machida, Shamil Maksyutov, Hidekazu Matsueda, Yousuke Sawa, Yosuke Niwa, and Kaz Higuchi
Observed and simulated short timescale variability of CO₂ over Narita Airport
- XY160 EGU2011-4316
Taku Umezawa, Shuji Aoki, Takakiyo Nakazawa, Toshinobu Machida, Hidekazu Matsueda, Yousuke Sawa, Kentaro Ishijima, and Prabir Patra
Observations of atmospheric CH₄ and its carbon and hydrogen stable isotopic ratios in the upper troposphere over the western Pacific
- XY161 EGU2011-4330
Daisuke Goto, Shigeyuki Ishidoya, Shuji Aoki, Takakiyo Nakazawa, and Prabir Patra
Ten-year measurements of the tropospheric O₂/N₂ ratio over Japan and estimation of global CO₂ budget
- XY162 EGU2011-4329
Yosuke Niwa, Toshinobu Machida, Yousuke Sawa, Hidekazu Matsueda, Ryoichi Imasu, and Masaki Satoh
Carbon budget estimation by inverse modeling with atmospheric CO₂ concentrations from surface and CONTRAIL measurements
- XY163 EGU2011-2355
Hisashi Yashiro, Satoshi Sugawara, Kengo Sudo, Masayuki Takigawa, Shuji Aoki, and Takakiyo Nakazawa
Observed and Modeled Variations of Carbon Monoxide over the western part of the Pacific Ocean
- XY164 EGU2011-7200
Armin Rauthe-Schöch, **Tanja J. Schuck**, Angela K. Baker, Andreas Weigelt, Markus Hermann, Bengt G. Martinsson, Klaus-Peter Heue, Carl A. M. Brenninkmeijer, Sabine Eckhardt and the CARIBIC Team
The CARIBIC aircraft as a versatile tool for measuring Eyjafjallajökull's volcanic plumes in April/May 2010
- XY165 EGU2011-7744
Klaus-Peter Heue, Carl Brenninkmeijer, David Walter, Udo Frieß, and Ulrich Platt
CARIBIC DOAS NO₂ observation at Frankfurt Airport

- XY166 EGU2011-10525
Alexis Merlaud, Caroline Fayt, Xavier Toledo, Jeroen van Gent, Olivier Ronveaux, and Michel Van Roozendael
 DOAS measurements of NO₂ from an ultralight aircraft between Thailand and Belgium
- XY167 EGU2011-12130
Samuele Masieri, Stefano Zampolli, Sandro Gherardi, Giancarlo Cardinali, Cristina Carotta, Giorgio Giovanelli, Ladislav Sopkov, Ivan Tarlassi, and Mauro Gelli
 Urban air quality performed by a network of analyser onboard bus
- XY168 EGU2011-2793
Thomas Wagner, Steffen Beirle, Reza Shaiganfar, and Marloes Penning de Vries
 DOAS observations of atmospheric trace gases, aerosols and surface properties from unmanned aerial systems
- XY169 EGU2011-5637
Manfred Lange, Amit Teller, Stelios Ioannou, and Christos Keleshis
 Exploring the Potentials of Unmanned Aerial Systems for Assessing Atmospheric and Environmental Properties in the Eastern Mediterranean
- XY170 EGU2011-8107
Christian Behrens
 Development of MASC Sensor Carrier
- XY171 EGU2011-6480
Giacomo Colombatti, Alessio Aboudan, Carlo Bettanini, Enrico Friso, and Stefano Debei
 Airship for Earth atmosphere and surface investigations
- XY172 EGU2011-6372
Leopoldo Stefanutti, Michele Genisio, Guido Di Donfrancesco, Ralf Weigel, A. Robert MacKenzie, Konrad Kandler, Markus Hermann, Wolfgang Junkermann, Roderic L. Jones and the EFESTO (*) Team
 EFESTO- Evaluating Flight safety during volcanic Eruptions: a System to support air Traffic Operations
- XY173 EGU2011-13352
Marius Opsanger Jonassen, Hálfór Ágústsson, Ólafur Rögnvaldsson, Joachim Reuder, and Símon Elvar Vilhjálmsson
 On the potential of improving numerical weather prediction by real-time assimilation of atmospheric data from an Unmanned Aerial System (UAS).
- XY174 EGU2011-6488
 Priit Tisler, Rostislav Kouznetsov, Timo Palo, and **Timo Vihma**
 A UAV field campaign in Antarctica in summer 2010-2011

AS3.15 – Remote Sensing of Clouds and Aerosols: Techniques and Applications – Posters

Convener: Alexander Kokhanovsky | Co-Conveners: Jan Cermak, Gerrit de Leeuw

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY175 EGU2011-2641
Tobias Wehr, Paul Ingmann, Michael Eisinger, Dulce Lajas, and Alain Lefebvre
 EarthCARE: Simultaneous observation of clouds, aerosols and radiation from space
- XY176 EGU2011-7879
Stefan Buehler and the CloudIce Science Community Team
 The CloudIce Mission Proposal
- XY177 EGU2011-6292
Sebastien Wagner and Yves Govaerts
 Joint retrieval of hourly-resolved aerosol optical depths and surface reflectance using MSG/SEVIRI observations.
- XY178 EGU2011-3847
Jens Redemann and the The most knowledgeable group of co-authors alive Team
 The combined use of CALIOP, MODIS and OMI level 2 aerosol products for calculating direct aerosol radiative effects
- XY179 EGU2011-278
Linlu Mei, Yong Xue, Jie Guang, Yingjie Li, Ying Wang, Hui Xu, Chaolin Wu, Leiku Yang, Ziqiang Chen, and Xinwei He
 The retrieval of aerosol optical depth over land based on time series technique using MSG/SERVI data
- XY180 EGU2011-492
Florian Ernst, Christian v. Savigny, Alexei Rozanov, Vladimir Rozanov, Heinrich Bovensmann, and John Burrows
 Retrieval of stratospheric aerosol distributions from SCIAMACHY limb measurements: methodology, sensitivity studies and results

- XY181 EGU2011-13480
Andi Walther and Andrew Heidinger
Daytime Cloud Optical Microphysical Properties (DCOMP) algorithm
- XY182 EGU2011-10405
Luca Lelli, Alexander Kokhanovsky, Marco Vountas, Vladimir Rozanov, and John Burrows
Cloud retrieval from GOME in the oxygen A-Band with SNGome: dataset assessment and global long-term cloud properties.
- XY183 EGU2011-14161
Tatiana B. Zhuravleva, Sergey Yu. Andreev, Tatiana B. Bedareva, Dmitry M. Kabanov, Ilmir M. Nasrtdinov, and Sergey M. Sakerin
Joint use of ground-based measurements and MODIS data for estimating the direct aerosol radiative effect under conditions of elevated atmospheric turbidity in two regions of Asian part of Russia
- XY184 EGU2011-7878
Minzheng Duan
Speeding up the polarized radiative transfer model
- XY185 EGU2011-562
R. Lee Panetta, Chao Liu, and Ping Yang
Effects of water coating on optical scattering properties of fractal soot aggregates.
- XY186 EGU2011-3123
Jan Cermak
Low Clouds and Fog Along the South-Western African Coast - Satellite-Based Retrieval and Patterns
- XY187 EGU2011-1509
Felix Seidel, Alexander A. Kokhanovsky, and Michael E. Schaepman
Sensitivity of aerosol retrieval to surface albedo
- XY188 EGU2011-13146
Eleonora Zege, Iosif Katsev, and Alexander Prikhach
Techniques for improvement in-flight calibration of satellite optical sensors
- XY189 EGU2011-2843
Sonoyo Mukai, Itaru Sano, and Makiko Nakata
Radiative transfer simulation in the aerosol events
- XY190 EGU2011-12651
Pavel Litvinov, Oleg Dubovik, Didier Tanre, and Otto Hasekamp
Physical models vs semi-empirical models for surface reflectance treatment in application to problem of aerosol retrieval over land
- XY191 EGU2011-11360
Larysa Istomina, Wolfgang von Hoyningen-Huene, Alexander Kokhanovsky, Eckart Schultz, and John Burrows
Remote sensing of aerosols over snow using infrared AATSR observations
- XY192 EGU2011-1352
Nina Mateshvili, Didier Fussen, Giuli Mateshvili, Iuri Mateshvili, Filip Vanhellemont, Erkki Kyrölä, Christine Bingen, Cedric Tétard, Emmanuel Dekemper, and Nicolas Loodts
Stratospheric and tropospheric aerosol extinction profiles over Georgia, South Caucasus in 2009-2010 as retrieved from twilight sky spectral measurements.
- XY193 EGU2011-10322
Larisa Sogacheva, Pekka Kolmonen, Anu-Maija Sundström, Edith Rodriguez, and Gerrit de Leeuw
Aerosol Optical Depth over Boreal Forests using AATSR: seasonal variation
- XY194 EGU2011-892
Konstantin Baibakov, Norm O'Neill, Andreas Herber, Christoph Ritter, Karl-Heinz Schulz, and Otto Schrems
Starphotometry at two High Arctic stations.
- XY195 EGU2011-5768
Dmytro Martynenko, Thomas Holzer-Popp, Lars Klueser, Marion Schroedter-Homscheidt, and Gerhard Gesell
Synergetic retrieval of aerosol properties from MetOp
- XY196 EGU2011-10266
Pekka Kolmonen, Larisa Sogacheva, Anu-Maija Sundström, Edith Rodriguez, and Gerrit de Leeuw
The retrieval of aerosol properties and ground reflectance with the AATSR dual view algorithm
- XY197 EGU2011-1268
Lars Klüser, Dmytro Martynenko, and Thomas Holzer-Popp
Application of singular vector decomposition for mineral dust retrieval from IASI over land and ocean
- XY198 EGU2011-13423
Christophe Lerot, Rob Spurr, Jeroen van Gent, and Michel Van Roozendaal
Simultaneous retrieval of atmospheric gases and cloud properties using the Ring effect
- XY199 EGU2011-14146
Ovidiu-Gelu Tudose, Marius-Mihai Cazacu, Adrian Timofte, Ioan Balin, and Doina Nicolae
Performances analysis of a new powerful LIDAR configuration for 3D monitoring of tropospheric aerosols and clouds

- XY200 EGU2011-4247
Øyvind Frette, **Yi-Chun Chen**, Børge Hamre, Are Folkestad, Kai Sørensen, Dominique Durand, Richard Santer, Francis Zagolski, Knut Stamnes, and Jakob J. Stamnes
Retrieval of aerosol climatology along the Norwegian coast
- XY201 EGU2011-4504
Gerrit de Leeuw, Thomas Holzer-Popp and the Aerosol-cci Team
Aerosol models for the retrieval of aerosol properties from satellite observations
- XY202 EGU2011-5187
Tianhai Cheng, Xingfa Gu, Donghai Xie, Hao Chen, and Jing Guo
Multi-angle Polarized Remote Sensing of Non-Spherical Aerosol Particles
- XY203 EGU2011-5647
Anu-Maija Sundström, Pekka Kolmonen, Meri Hannukainen, Larisa Sogacheva, Edith Rodriguez, and Gerrit de Leeuw
Aerosol retrievals over India with the AATSR Dual View Algorithm
- XY204 EGU2011-8608
Cristiana Bassani, Rosa Maria Cavalli, Sergio Ugo de Ceglie, and Maria Lo Moro
Hyperspectral at-sensor radiance for aerosol and surface reflectance retrievals
- XY205 EGU2011-8861
Bijoy Vengasseril Thampi, Kunjukrishnapillai Rajeev, Manoj K Mishra, and **Krishnaswamy Parameswaran**
CALIPSO Observations of the Transport of Mineral Dust over the Arabian Sea and Indian Ocean during the Asian Summer Monsoon Season
- XY206 EGU2011-11151
Tingyao He, Fei Gao, Samo Stani?, Klemen Bergant, Darko Veberič, Xiaoquan Song, and Aleš Dolžan
Tracking of Urban Aerosols Using a Scanning Mie Lidar
- XY207 EGU2011-12143
Deborah Claire Stein-Zweers, Pepijn Veefkind, Bram Sanders, Maarten Sneep, and Johan de Haan
Latest aerosol algorithm developments for OMI and TROPOMI
- XY208 EGU2011-12561
Víctor Estellés, Monica Campanelli, Tim Smyth, Pilar Utrillas, and José Antonio Martínez-Lozano
The European SKYRAD users network package (ESR.pack): validation of products in comparison to AERONET
- XY209 EGU2011-12679
Jonas von Bismarck, Thomas Ruhtz, René Preusker, Jürgen Fischer, André Hollstein, and Marco Starace
Simultaneous retrieval of trace gas and aerosol properties with a compact hyperspectral Sun and aureole photometer
- XY210 EGU2011-13032
Harjinder Sembhi, John Remedios, Timothy Trent, David Moore, Reinhold Spang, and Mike Fromm
Observing Sarychev Peak volcanic aerosols with high-resolution infrared limb emission spectra from the MIPAS-E instrument: plume transport and stratospheric sulphate signatures.
- XY211 EGU2011-1377
Marco Vountas, Wolfgang von Hoyningen-Huene, Jongmin Yoon, and John P. Burrows
Analysis of Aerosol Optical Thickness Retrievals from Satellite Data over large urban Agglomerations
- XY212 EGU2011-3589
Maria Ofelia Vieitez and Piet Stammes
Development of aerosol altitude retrieval from GOSAT observations of the oxygen A-band
- XY213 EGU2011-7143
Kai-Uwe Eichmann, Harjinder Sembhi, Christian von Savigny, Alexander Kokhanovsky, Heinrich Bovensmann, and John P. Burrows
Comparison of limb cloud top height retrievals from SCIAMACHY and MIPAS
- XY214 EGU2011-2073
Ping Wang, Ronald van der A, Olaf Tuinder, and Piet Stammes
FRESCO v6: improvements in cloud detection and new applications
- XY215 EGU2011-1588
Cornelia Schlundt, Alexander A. Kokhanovsky, Vladimir V. Rozanov, and John P. Burrows
Determination of cloud optical thickness over snow using satellite measurements in the oxygen A-band
- XY216 EGU2011-3243
Maarten Sneep, Johan de Haan, and Pepijn Veefkind
Cloud retrieval using the oxygen A-band in support of trace gas retrievals from TROPOMI
- XY217 EGU2011-2081
Anja Hünerbein and Ulla Wandinger
Synergetic cloud product from EARTHCARE's imaging spectrometer and atmospheric lidar
- XY218 EGU2011-8017
Reinhold Spang and the MIPclouds Team
Fast Retrieval of Cloud Parameter from IR-Limb observations: The MIPAS Cloud Processor, First Results and Product Validation

- XY219 EGU2011-10510
Ákos Horváth and Seethala Chellappan
Evaluating 3D effects in 1D VIS-NIR cloud retrievals using LES cloud fields and 3D radiative transfer
- XY220 EGU2011-11836
Frank Kaspar, Martin Stengel, Maarit Lockhoff, Abhay Devasthale, Karl-Göran Karlsson, Jan Fokke Meirink, and Rainer Hollmann
Long-term satellite-based cloud properties derived from AVHRRs within the EUMETSAT Satellite Application Facility on Climate Monitoring
- XY221 EGU2011-10924
Anke Kniffka, Maarit Lockhoff, Rainer Hollmann, and Martin Stengel
Relation of Liquid Water Path to Cloud Type from SEVIRI on the Meteosat Second Generation satellite
- XY222 EGU2011-10951
Thomas Nauss and **Alexander Kokhanovsky**
Retrieval of warm cloud optical properties using simple approximations
- XY223 EGU2011-8930
Suniti Sanghavi, Jochen Landgraf, and Ulrich Platt
Retrieval of aerosol optical depth and vertical distribution using O2 A- and B-band SCIAMACHY observations.
- XY224 EGU2011-13495
David Diner, Rachel Hodos, **Anthony Davis**, Michael Garay, Suniti Sanghavi, John Martonchik, Paul von Allmen, Alexander Kokhanovsky, and Pengwang Zhai
Multi-Angle Aerosol Retrievals Without Lookup Tables: A Feasibility Study for MISR
- XY225 EGU2011-12827
Sebastián Gimeno García, Franz Schreier, and Thomas Trautmann
Three-dimensional radiative transfer: Effects of cloud variability on reflected radiances.

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

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

Room: 15

Chairperson: n.n.

- 08:30–08:45 EGU2011-917
Björn Machalett, Eric A. Oches, Eddie Haam, Zhongping Lai, and Wilfried Endlicher
Late Pleistocene Aeolian Dust Dynamics in Central Asia and their Teleconnection with Short-term Climate Oscillations and Abrupt Climate Events in the Northern Hemisphere
- 08:45–09:00 EGU2011-4931
Denis-Didier Rousseau, Pierre Antoine, Christine Hatté, France Lagroix, Caroline Gauthier, Adriana Sima, Masa Kageyama, Markus Fuchs and the ACTES team members & ACTES fellows Team
Millennial-scale record in European eolian deposits: Data-model comparison (ACTES & EOLE projects)
- 09:00–09:15 EGU2011-3208
Charlotte Skonieczny, Aloys Bory, Viviane Bout-Roumazielles, Wafa Abouchami, Steve Galer, Bruno Malaizé, Francis Grousset, Roger François, Celine Liorzou, and Claire Bassoulet
A 25 ka record of the aeolian terrigenous signal in the North-Eastern Tropical Atlantic Ocean
- 09:15–09:30 EGU2011-8084
Jean Robert Petit and Barbara Delmonte
Climatic parameters influencing Glacial Interglacial changes in dust concentration in Antarctic ice cores
- 09:30–09:45 EGU2011-1487
Samuel Albani, Natalie Mahowald, Gisela Winckler, Michelle Goman, Bette Otto-Bliesner, Barbara Delmonte, Valter Maggi, and David McGee
Data synthesis and modeling of Holocene dust
- 09:45–10:00 EGU2011-1986
Charlie Bristow and Karen Hudson-Edwards
Fertilizing the Amazon and Equatorial Atlantic with dust from the Bodélé Depression in Chad

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-11508
Béatrice Marticorena, Jean Louis Rajot, Bernadette Chatenet, and Catherine Schmechtig
Mineral dust over West Africa : Highlights from the AMMA international program

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

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

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

Hall XL | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: n.n.

- XL35 EGU2011-8245
Pierre Antoine, Denis-Didier Rousseau, Christine Hatté, France Lagroix, Markus Fuchs, Olivier Moine, Caroline Gauthier, Jiri Svoboda, and Lenka Lisa
 Dolní Věstonice (Czech Republic): a new high-resolution loess-palaeosol record of the last climatic cycle in Central Europe
- XL36 EGU2011-13043
Erzsebet Horvath, Manfred Frechen, Agnes Novothny, Paul Königer, Christine Thiel, Lara Wacha, Christian Rolf, Ulrich Hambach, Gabriella Barta, and Bernadett Bajnoczi
 High resolution multi-proxy study of the Süttő loess-palaeosol sequence, Hungary
- XL37 EGU2011-7191
Janneke IJmker, Georg Stauch, Kai Hartmann, Bernhard Diekmann, Elisabeth Dietze, Alexandra Hilgers, Stephan Opitz, Bernd Wünnemann, and Frank Lehmkuhl
 Geochemical and sedimentological analyses of dune fields on the NE Tibetan Plateau and their environmental implications
- XL38 EGU2011-3951
Joseph Mason, Mark Sweeney, and Paul Hanson
 Evidence for Eolian Remobilization of Loess in the Central Great Plains, USA, and Implications for Paleoclimatic Interpretation of the Loess Record
- XL39 EGU2011-11374
Maarten Prins, Kay Beets, Gert-Jan Weltje, and Hongbo Zheng
 Reconstructing paleo-wind strength variability from loess grain-size distributions: an application to the late Quaternary Mangshan loess-paleosol sequence, China
- XL40 EGU2011-6314
Jan-Berend Stuut and Maarten Prins
 Downwind changes in grain size of aeolian dust; examples from marine and terrestrial archives
- XL41 EGU2011-11398
 Xiangtong Huang, Hedi Oberhänsli, **Hans von Suchodoletz**, and Phillippe Sorrel
 Aeolian dust deposition in the Aral Sea - implications for changes in atmospheric circulation in Central Asia during the past 2.000 years
- XL42 EGU2011-8959
Menno Rudolf Bloemsmma, Gert Jan Weltje, Jan Berend Stuut, and Matthias Zabel
 Modelling the relation between grain-size distribution and geochemical composition: application to a marine record of mixed fluvial-aeolian provenance (Late Quaternary, offshore Northern Senegal)
- XL43 EGU2011-2103
Anna Wegner, Hubertus Fischer, and Urs Ruth
 Changes in the phase lag of dust concentration and size in the EPICA-DML ice core during the last transition
- XL44 EGU2011-1370
Natalia Sudarchikova and Uwe Mikolajewicz
 Mineral dust under different climate conditions with a particular focus on the Antarctic region

- XL45 EGU2011-2094
Károly Barta, Andrea Farsang, Gábor Négyesi, József Szatmári, and Máté Bartus
Estimation of nutrient movement caused by wind erosion on chernozem soil with wind channel experiments
- XL46 EGU2011-9167
Harvey Elliott, **Nilton Renno**, Earle Williams, Brian Russell, Matt Balme, Steve Metzger, Asmin Pathare, Steven Rogacki, Robert Gillespie, and Stephen Musko
Diagnosing the Electrical Structure of Dust Devils
- XL47 EGU2011-3294
Charlotte Skonieczny, Aloys Bory, Viviane Bout-Roumazeilles, Wafa Abouchami, Steve Galer, Xavier Crosta, Aboubacry Diallo, Thierno Ndiaye, Celine Liorzou, and Claire Bassoulet
A multi-proxy study of present-day aeolian terrigenous particles deposited between 2006 and 2008 at M'Bour, Senegalese coast
- XL48 EGU2011-13029
Slobodan Nickovic, Mirjam Vujadinovic, Ana Vukovic, Vladimir Djurdjevic, Goran Pejanovic, and Milan Dacic
Database of mineral composition in arid soils and its application in atmospheric transport of iron embedded in dust
- XL49 EGU2011-12052
Tanja Stanelle, Isabelle Bey, Christian Reick, and Thomas Raddatz
A new parameterization for deriving potential dust sources in the emission scheme of the global climate-aerosol model ECHAM6-HAM
- XL50 EGU2011-12102
Christos Spyrou, Christina Mitsakou, Panos Athanasiadis, George Kallos, and Christina Kalogeri
Study of the radiative effects of desert dust on weather and climate
- XL51 EGU2011-12308
Sigurður Jónsson and Haraldur Ólafsson
Modeling the transport of resuspended ash from the Eyjafjallajökull eruption
- XL52 EGU2011-4215
Adriana Sima, Masa Kageyama, Denis-Didier Rousseau, Gilles Ramstein, Yves Balkanski and the ACTES Team
Modeling dust emission variations in Eastern Europe related to North-Atlantic abrupt climate changes of the last glacial period
- XL53 EGU2011-1119
John Marsham, Peter Knippertz, Nick Dixon, Douglas Parker, and Grenville Lister
Summertime dust uplift over West Africa
- XL54 EGU2011-8041
Kornelija Špoler ?ani?, Nataša Strelec Mahovi?, Iva Kav?i?, and Zvezdana Benceti? Klai?
Saharan dust episodes in urban aerosol in Croatia
- XL55 EGU2011-7547
Francesca Guarneri, **Marco Gaetani**, Caterina Busillo, Francesca Calastrini, and Massimiliano Pasqui
Summer Mediterranean SST impact on circulation mechanisms responsible for Saharan dust transport
- XL56 EGU2011-1269
Lars Klüser, Dmytro Martynenko, and Thomas Holzer-Popp
Exploitation of IASI thermal infrared observations for dust research applications

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

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

Room: 4

Chairperson: Ana M. Tarquis

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

- 16:30–16:45 EGU2011-10049
Nicolas Dalezios
 Assesment of Cotton Production in Drought-Prone Areas in Greece
- 16:45–17:00 EGU2011-13418
Anne Gobin
 Climate impacts on biomass production in belgium

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

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

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Anne Gobin and Nicolas Dalezios

- XY359 EGU2011-200
Mónica Alexandra Rodrigues, Alfredo Rocha, Ana Monteiro, Hervé Quénol, and José Rodrigues de Freitas
 Simulation of the Climatic Risks episodes in the Demarcated Douro Region Vineyards using the WRF model
- XY360 EGU2011-4111
Mónica Alexandra Rodrigues, Ana Monteiro, Maria Helena Pina, Hervé Quénol, and José Rodrigues de Freitas
 Contribution of the Agriculture Advices in the Prevention and Evaluation of Risks in Vineyard within the Demarcated Douro Region
- XY361 EGU2011-12324
Barbara Köstner, Johannes Franke, Thoralf Hänsel, Matthias Kuhnert, Marco Lorenz, and Tobias Donix
 Importance of different climate projections for the analysis of climate impact on agricultural production
- XY362 EGU2011-13018
Francesca Todisco, Francesco Mannocchi, and Lorenzo Vergni
 Intensity-duration-frequency curve for the agricultural drought
- XY363 EGU2011-13074
 Luigi Perini, Luca Salvati, **Antonella De Angelis**, and Sofia Bajocco
 Climate change assessment: proposal for a standardized index
- XY364 EGU2011-13285
Marijn van der Velde
 Contrasting crop responses to extreme weather events
- XY365 EGU2011-13638
 Mario Cunha and **Christian Richter**
 Modelling the Cyclical Behaviour of Wine Production in Douro Region Using a Time-Varying Parameters Approach
- XY366 EGU2011-1784
 M. Carmen Cartagena, **M.Teresa Castellanos**, A.Maria Tarquis, M. Jesús Cabello, Francisco Ribas, and Augusto Arce
 Risk of nitrate pollution in agricultural systems
- XY367 EGU2011-13729
Jose Luis Valencia, Fredi Leonidas, Antonio Saa-Requejo, Jose María Gascó, and Ana Maria Tarquis
 Spatial and temporal precipitation patterns of the Ebro River Basin, Spain
- XY368 EGU2011-6827
Jose M Anton, Juan B Grau, Ana M Tarquis, Raúl Sánchez, Leonor Rodriguez, and Diego Andina
 Some past decision theory models for euro construction model codes and for road drainage in Spain, and modest hints with multi-criteria methods for agro and environmental assurance
- XY369 EGU2011-1894
Ruben Moratíel, José M Durán, Richard L. Snyder, and Ana M. Tarquis
 Future reference evapotranspiration in Duero Valley (Spain)
- XY370 EGU2011-1944
Pieranna Servadio, Simone Bergonzoli, and Davide Dell'Unto
 Effects on some soil qualities following the traffic of high axle load machinery at different water contents
- XY371 EGU2011-5076
Angelica Giarolla, Priscila S. Tavares, Chou S. Chan, and Renan L. B. Souza
 Evaluation of seasonal forecasts of surface air temperature from Eta model for a soybean producing location in Brazil
- XY372 EGU2011-2737
Saeb Khresat
 Assessment of the risks from climate change and water scarcity on agriculture production in Jordan

- XY373 EGU2011-3252
Araya Berhe, Saskia Keesstra, and Leo Stroosnijder
Simple model for assessing climatic constraints under the past and present agriculture in the northern Ethiopia
- XY374 EGU2011-5917
Eline Vanuytrecht and Dirk Raes
Assessment of the 'CO₂ fertilization effect' on crops with the AquaCrop model
- XY375 EGU2011-6284
Franziska Strauss, Franz Sinabell, and Erwin Schmid
The relative weight of weather risks in crop production volatility in Austria
- XY376 EGU2011-6508
Jose M Anton, **Juan Bautista Grau**, Colombo Speroni, Lisandro De los Rios, Diego Andina, and Ana Maria Tarquis
Mathematical model for the arrangement and the cleaning of the river basin and surroundings of the river sandy grounds to its passage by the city of Salta (Argentina)
- XY377 EGU2011-10291
Antonio Saa, **Ana Tarquis**, M^a Rosario García, M^a Cruz Díaz, and Fernando Burgaz
Extreme temperature events analyzed with Fast Fourier Transform
- XY378 EGU2011-13624
Fulgencio Buendia, Rafael Bermudez, Ana Maria Tarquis, and Diego Andina
FMECA Application in Rainfall Hazard Prevention

NP6.3/AS4.11 – Turbulence in the Atmosphere (co-organized) – Posters

Convener: Carlos Yagüe | Co-Conveners: Francesco Tampieri, Joan Cuxart

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 13:30–15:00

Chairperson: Francesco Tampieri

- XY577 EGU2011-772
Panayiotis Dimitriadis, Panos Papanicolaou, and Demetris Koutsoyiannis
Hurst-Kolmogorov dynamics applied to temperature fields for small turbulence scales
- XY578 EGU2011-991
Luís Martins, Otávio Acevedo, Guilherme Welter, Franciano Puhales, and Felipe Costa
Testing stationarity hypothesis and its influence on low frequency turbulent flux variability
- XY579 EGU2011-3775
Wojciech Grabowski, Lian-Ping Wang, Andrzej Wyszogrodzki, and Orlando Ayala
Toward the assessment of the role of cloud turbulence in warm-rain development
- XY580 EGU2011-4044
Markus Vennebusch, Steffen Schön, and Axel Nothnagel
Characterisation of Atmospheric Turbulence with Space-Geodetic Observation Techniques
- XY581 EGU2011-5265
Jinkyu Hong, Kyunghee Seol, Young-Hwa Byun, Chun-Ho Cho, and Joon Kim
Uncertainty analysis of carbon exchange modeling in a forest due to kB-1 parameterizations
- XY582 EGU2011-7108
Mireia Udina, Maria Rosa Soler, Pau Casso, Samuel Viana, and Carlos Yagüe
High resolution WRF model simulation of gravity waves induced by topographical features
- XY583 EGU2011-9265
Carlos Román-Cascón, Francisco Salamanca, Carlos Yagüe, Gregorio Maqueda, and Samuel Viana
Study of the interaction between fog and turbulence
- XY584 EGU2011-9522
Juan Carlos Sánchez-Perrino, Jorge Navarro, Carlos Yagüe, Pedro A. Jiménez, Elena García-Bustamante, Ángela Hidalgo, and Jesús Fidel González-Rouco
WRF simulations of the Atmospheric Boundary Layer over homogeneous terrain: representation of nocturnal processes
- XY585 EGU2011-9290
James Wanliss and Miguel Larsen
Turbulent development at 80 km altitude
- XY586 EGU2011-9978
Giovanni Bonafè, Francesco Tampieri, Luca Caporaso, and Francesca Di Giuseppe
Optimizing the estimation of the height of the stable boundary layer using surface turbulence measurements and soundings
- XY587 EGU2011-11221
Alexandre Paci, Gert-Jan Steeneveld, Dan Dobrovolschi, Bernard Beaudoin, Anne Belleudy, Jean-Christophe Canonici, Frederic Murguet, Herve Schaffner, Bert Holtslag and the IMFT/OTE Team
CNRM-GAME stratified water flume: sensing the atmospheric boundary layer in a large water channel

XY588 EGU2011-12831

Julien Pinel, Shaun Lovejoy, and Daniel Schertzer
Atmospheric Waves as a high Reynold's number, scaling phenomena

HS4.3/AS4.13/NH1.12 – Towards practical applications in ensemble hydro-meteorological forecasting (including Arne Richter Award for Outstanding Young Scientists Lecture) (co-organized) – Orals

Convener: Maria-Helena Ramos | Co-Conveners: Florian Pappenberger, Jutta Thielen-del Pozo, Albrecht Weerts, YI HE, Linna Zhao

Room: 33

Chairperson: Jutta Thielen and Helen Yi

13:30–13:45 EGU2011-9093

Vincent Fortin, François Anctil, Richard Turcotte, Juan-Alberto Velazquez, and Bruce Davison
Challenges and rewards of multimodel ensemble hydrological forecasting

13:45–14:00 EGU2011-12613

Rodrigo Cauduro Dias de Paiva, Walter Collischonn, Marie-Paule Bonnet, Luis Gustavo Gonçalves de Gonçalves, Diogo Costa Buarque, and Carlos André Bulhões Mendes
Use of an ensemble approach to evaluate the importance of initial conditions and atmospheric forcing on hydrological prediction uncertainty in the Amazon River basin

14:00–14:15 EGU2011-5397

Durga Lal Shrestha, Thomas Pagano, Qj Wang, and David Robertson
Application of Ensemble Dressing for Hydrological Applications

14:15–14:30 EGU2011-7261

Tommaso Diomede, Chiara Marsigli, Andrea Montani, and Tiziana Paccagnella
Comparison of calibration techniques for a limited-area ensemble precipitation forecast using reforecasts

14:30–14:45 EGU2011-13889

Masahiro Ryo, Oliver C. Saavedra V., Toshio Koike, and Dang Ngoc Tinh
Development of an early flood warning system based on ensemble method using quantitative precipitation forecasts in Huong River, Vietnam

14:45–15:00 EGU2011-373

Sara Liguori, Miguel Rico-Ramirez, Alma Schellart, and Adrian Saul
High-resolution ensemble rainfall forecasts in urban hydrological applications

Chairperson: Maria-Helena Ramos and Albrecht Weerts

15:30–15:45 EGU2011-11937

Jutta Thielen-del Pozo and the EFAS Team
The state of the art of the European Flood Alert System

15:45–16:00 EGU2011-7105

Schalk Jan van Andel and Arnold H. Lobbrecht
Experiences from introducing ensemble hydrological predictions in practice

16:00–16:15 EGU2011-2303

François Anctil, Darwin Brochero, and Christian Gagné
Which optimization criterion leads to the reliable simplification of a hydrological ensemble prediction system with a Backward greedy selection of members?

16:15–16:30 EGU2011-13058

Julie Demargne, **Limin Wu**, Satish Regonda, and James D Brown
Experimental hydrologic ensemble forecast service in the U.S. National Weather Service

16:30–17:00 EGU2011-14192

Florian Pappenberger
Squaring the Circle: The hydro-meteorological forecast chain (Arne Richter Award for Outstanding Young Scientists Lecture)

HS4.3/AS4.13/NH1.12 – Towards practical applications in ensemble hydro-meteorological forecasting (including Arne Richter Award for Outstanding Young Scientists Lecture) (co-organized) – Posters

Convener: Maria-Helena Ramos | Co-Conveners: Florian Pappenberger, Jutta Thielen-del Pozo, Albrecht Weerts, YI HE, Linna Zhao

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Florian Pappenberger and Linna Zhao

A293 EGU2011-10303

Florian Pappenberger, Jutta Thielen, Hannah Cloke, and Maria-Helena Ramos
Recent Advances and case studies in medium range flood forecasting: A follow on review

- A294 EGU2011-12950
Ioanna Zalachori and Maria-Helena Ramos
Ensemble hydrological forecasting based on weather predictions from the TIGGE database
- A295 EGU2011-11299
Konrad Bogner, Florian Pappenberger, and Jutta Thielen
Combining hydrological multi-model ensemble forecasts
- A296 EGU2011-13813
Fabrizio Tonelli, Laura Casicci, Andrea Montani, Silvano Pecora, and Mirella Vergnani
Pre-operational use of a meteorological and hydrological/hydraulic ensemble approach on the Po River
- A297 EGU2011-8623
Mathieu Le Lay, Laetitia Moulin, Pierre Bernard, Thibault Mathevet, Joël Gailhard, and Rémy Garçon
Operational use of ensemble hydrometeorological forecasts at EDF (French producer of energy)
- A298 EGU2011-13811
Nicola Reborá, Francesco Silvestro, and Luca Ferraris
Probabilistic discharge forecasting on small and medium size basins: an operational perspective
- A299 EGU2011-3874
Isidora Jankov
Ensemble Prediction System for Hydrometeorological Testbed (HMT) Application
- A300 EGU2011-3587
Étienne Gaborit, François Anctil, Geneviève Pelletier, and Vincent Fortin
On the reliability of spatially disaggregated global ensemble rainfall forecasts
- A301 EGU2011-13545
Scott Sinclair and Geoff Pegram
PyTOPKAPI - an open source hydrological model used to estimate soil moisture in near real time over South Africa for flood potential & drought monitoring and remote sensing model intercomparison
- A302 EGU2011-5518
Vera Thiemig, **Florian Pappenberger**, Peter Burek, Ad De Roo, and Jutta Thielen
Evaluation of Precipitation Products for an Operational Pan-African Flood Forecasting System
- A303 EGU2011-3439
Michael Strauch, Christian Bernhofer, Sérgio Koide, Martin Volk, Carsten Lorz, and Franz Makeschin
Using precipitation data ensemble and Bayesian Model Averaging for uncertainty analysis in hydrologic modeling.
- A304 EGU2011-5267
Prafulla Pokhrel, Quan Jun Wang, and David Robertson
A Bayesian Joint Probability Post-Processing Tool for Quantifying Uncertainty in Predictions from a Deterministic Water Balance Model
- A305 EGU2011-11762
Guillaume Thirel, Peter Salamon, Peter Burek, Milan Kalas, and Jutta Thielen
Assimilation of the MODIS Snow Cover Area in the LISFLOOD model for the European Flood Alert System (EFAS)
- A306 EGU2011-9773
Benjamin Renard, Maria-Helena Ramos, Mark Thyer, Jerome Le Coz, Flora Branger, Dmitri Kavetski, and George Kuczera
Tracking the role of streamflow uncertainty in hydrological ensemble predictions
- A307 EGU2011-5641
Shailesh Kumar Singh, Einar Örn Hreinsson, **Ross Woods**, Hilary McMillan, and Andras Bardossy
Improving calibration strategy of physically based model by using critical events
- A308 EGU2011-8789
Ioanna Zalachori, Annie Randrianasolo, and **Maria-Helena Ramos**
How much the length of data samples influences forecast verification and post processing of hydrological ensemble predictions?
- A309 EGU2011-10569
Jan Bliefert, András Bárdossy, and Christian Ebert
Verification of the precipitation forecasts of a limited area model and a regional ensemble prediction model for flood-producing situations in Central Europe.
- A310 EGU2011-6660
Alessandro Ceppi, Giovanni Ravazzani, Alessio Salandin, Davide Rabuffetti, and Marco Mancini
Real-time hydro-meteorological forecasts: re-analysis of some operational case studies
- A311 EGU2011-9797
Lorenzo Alfieri, Jutta Thielen-del Pozo, and Peter Salamon
Improving risk prevention through flash flood ensemble early warning

Room: 32

Chairperson: Cyril Simon Wedlund and Guillaume Gronoff

- 08:30–08:45 EGU2011-3133
John Plane, Hilke Oetjen, Alfonso Saiz-Lopez, Bifford Williams, and Marcelo Miranda
The Sodium Nightglow
- 08:45–09:00 EGU2011-2305
Tom Slanger and Deepali Saran
The FeO Nightglow
- 09:00–09:15 EGU2011-3463
Jean-Claude Gérard, Lauriane Soret, and Arnaud Stiepen
The Mars and Venus airglow: observations and excitation processes
- 09:15–09:30 EGU2011-9532
Guillaume Gronoff, Cyril Simon Wedlund, Christopher Mertens, Jean Lilensten, Stephen Bougher, and Mathieu Barthelemy
UV airglow - remote sensing of the Martian upper atmosphere
- 09:30–09:45 EGU2011-8939
Cyril Simon Wedlund, Guillaume Gronoff, and Stephen Bougher
Retrieving exospheric temperatures from dayglow emissions at Mars
- 09:45–10:00 EGU2011-2924
Georg Fischer, William S. Kurth, Ulyana A. Dyudina, Anthony Wesley, Christopher Go, Marc Delcroix, Philippe Zarka, Donald A. Gurnett, and Andrew P. Ingersoll
A giant thunderstorm in Saturn's northern hemisphere
- 10:00–10:15 EGU2011-2579
Tai-Yin Huang, Cheng-Ling Kuo, Chih-Yu Chiang, Alfred Chen, Han-Tzong Su, and Rue-Ron Hsu
ISUAL 630nm Observations of Lightning-Induced Transient Emissions (LITEs)

PS7.2/AS4.16 – Aurora, Airglow and Transient Luminous Events in Planetary Atmospheres (co-organized) – Posters

Convener: Cyril Simon Wedlund | Co-Conveners: Guillaume Gronoff, Tom Slanger, Yoav Yair

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Guillaume Gronoff and Tom Slanger

- Z86 EGU2011-12377
Romain Maggiolo, Marius Echim, **Cyril Simon Wedlund**, Johan De Keyser, Yongliang Zhang, and Jean-Gabriel Trotignon
Combining in-situ data from Cluster with UV images from TIMED to improve the knowledge of polar cap arcs
- Z87 EGU2011-8758
Cyril Simon Wedlund, Herve Lamy, Björn Gustavsson, Tima Sergienko, Ingrid Sandahl, and Urban Brändström
3D reconstruction and modelling of N₂⁺ and OI auroral emissions using the Auroral Large Imaging System (ALIS)
- Z88 EGU2011-2321
Paul Johnson, Charles Malone, Murtadha Khakoo, Jason Young, Bahar Ajdari, Xianming Liu, Joseph Ajello, and Isik Kanik
Electron-Nitrogen Collision Processes Relevant to Planetary Atmospheres
- Z89 EGU2011-14078
Arturo López Ariste, Bernard Gelly, Francois Leblanc, Claude Le Men, and Cyril Simon Wedlund
Polarization of Sodium Na emission lines in Mercury's exosphere
- Z90 EGU2011-14144
Véronique Bommier
Possible density diagnostic by collisional depolarization in planetary atmospheres
- Z91 EGU2011-13378
Mathieu Barthelemy, Jean Lilensten, Cyril Simon Wedlund, Guillaume Gronoff, Helene Menager, Steve Miller, Mackenzie Lystrup, Hanna Rothkael, and Joran Moen
New results in polarimetry of planetary thermospheric emissions: Earth and jovian cases.
- Z92 EGU2011-2692
Tom Slanger, David Huestis, and Manuel Bautista
The Emission Intensity Ratio for O(1S) Transitions
- Z93 EGU2011-9537
Guillaume Gronoff, Christopher Mertens, and Cyril Simon Wedlund
The AtMoCiad database, a necessary element for the upper atmosphere community

- Z94 EGU2011-3116
Arnaud Stiepen, Jean-Claude Gérard, and Jean-Loup Bertaux
Characterization of the CO₂ and haze densities in the thermosphere-mesosphere region of Venus based on SPICAV observations of the nitric oxide UV nightside airglow
- Z95 EGU2011-13975
Antonio García Muñoz, Enric Pallé, Pilar Montañés Rodríguez, Antonio Cabrera-Lavers, and Felipe Murgas
A multi-site ground-based search for Venus' lightning flashes
- Z96 EGU2011-2834
Daria Dubrovin, Sander Nijdam, Eddie van Veldhuizen, Ute Ebert, Yoav Yair, and Colin Price
Sprite discharges on Jupiter, Saturn and Venus: Laboratory Experiments in Planetary Gas Mixtures
- Z97 EGU2011-4166
Gordon James
Visible discharge near an active high-frequency dipole in the ionosphere
- Z98 EGU2011-9442
Philippe Ailleris
Towards a better understanding of unusual atmospheric events: the Unidentified Aerospace Phenomena (UAP) Observations Reporting Scheme.

ESS1/AS4.17/CL4.8 – International Collaboration and Integration Strategies for Climate and other Geosciences Informatics (co-organized) – Posters

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

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: David Arctur, Mauro Messerotti

- XL168 EGU2011-1599
Lisa Raymond, **Cynthia Chandler**, Roy Lowry, Ed Urban, Gwenaëlle Moncoiffe, Peter Pissierssens, and Cathy Norton
Data Publication: An Example of Data Repository and Library Cooperation
- XL169 EGU2011-12341
Andrew Maffei, Cynthia Chandler, Laura Stolp, Janet Fredericks, and Nancy Galbraith
Rolling Deck to Repository (R2R): A Controlled Vocabulary and Ontology Development Effort for Oceanographic Research Cruise Event Logging
- XL170 EGU2011-13450
Sarah Cornell and Cat Downy
Building a useful and usable data legacy from major interdisciplinary research programmes: the QUEST experience.
- XL171 EGU2011-3946
Jay Pearlman, Max Craglia, Francis Bertrand, Gregoire Dubois, Steffen Fritz, Gerimantas Gaigalas, **Stefano Nativi**, and Stefan Niemeyer
Interdisciplinary Approaches for Decision-making Information Across Forestry, Biodiversity and Drought
- XL172 EGU2011-2653
Giovanni Lapenta and Soteria Consortium
Progress within the SOTERIA FP7 EC-funded Consortium.
- XL173 EGU2011-9993
André Csillaghy, Robert Bentley, Abouharham Jean, and Helio Team
The architecture of the e-Infrastructure HELIO
- XL174 EGU2011-13723
Jean Abouharham, Peter Gallagher, Robert D. Bentley, Andre' Csillaghy, and The HELIO Team
A tool for Space weather science: The Heliophysics Features Catalogue
- XL175 EGU2011-13962
Mauro Messerotti, Alessandro Marassi, Andrej Santin, Valentina Alberti, Antonio Volpicelli, Chris Perry, Philip Richards, Robert D. Bentley, and The HELIO Team
The Heliophysics Event Catalogue (HEC): an advanced tool of the Heliophysics Integrated Observatory (HELIO) for space weather event characterisation
- XL176 EGU2011-13727
Hanna Sathiapal and The HELIO Team
HELIO-lab - From Backyard Observations to Heliospheric Science
- XL177 EGU2011-13939
Massimo Ramella and Giulia Iafrate
The astronomer's Virtual Observatory as a tool for students, teachers and amateur astronomers
- XL178 EGU2011-2488
Delia-Georgeta Dumitras, Cristina Ghinet, Stefan Marincea, Oana Gabriela Sebe, and Raluca-Mihaela Maftei
From the geological museum collections to teaching Earth Sciences

- XL179 EGU2011-314
Denis Zhilin
Neogeoscience and scientific education
- XL180 EGU2011-14057
Mauro Messerotti
Dissemination, education and public outreach: a roadmap for meteorology of space
- XL181 EGU2011-13726
Ann Jabro and Jay D. Jabro
Education and communication plans to address community misunderstanding of the Soil Vapor Extraction technique
- XL182 EGU2011-4502
Olga Malandraki and the SEPServer Team
Data Services and Analysis Tools for Solar Energetic Particle Events and Related Electromagnetic Emissions - SEPServer
- XL183 EGU2011-11214
Antonio Guerrero, Consuelo Cid, Elena Saiz, Yolanda Cerrato, and Jesus Aguado
Space Weather Service developed at UAH
- XL184 EGU2011-12445
Joerg-Micha Jahn and Heather A. Elliott
Predicting Space Weather With Pattern Recognition
- XL185 EGU2011-6086
Wim Som de Cerff, Maarten Plieger, Ge Verver, and Else van den Besselaar
The EURO4M web based Climate Information Bulletin environment
- XL186 EGU2011-6409
Sandro Fiore and Giovanni Aloisio
Metadata harvesting, map-enabled data access and distributed monitoring in the Climate-G testbed
- XL187 EGU2011-9387
Kevin Marsh
Climate Data from the BADC
- XL188 EGU2011-10391
Lizzie Froude, Kevin Hodges, and Robert Gurney
Storm Prediction Information for Decision Making at Sea

BG5.1 – Integration of Environmental, Socio-Economic and Climatic Change Studies in Northern Eurasia (co-listed) –

Orals

Convener: Pavel Groisman | Co-Conveners: Amber Soja, Alexey V. Eliseev, Chaba Mátyás

Room: 23

Chairperson: n.n.

- 08:30–08:45 EGU2011-5341
Evgeny Gordov, Vasily Bogomolov, Elena Genina, Igor Okladnikov, Tamara Shulgina, and Alexander Titov
Characteristics of on-going changes of Siberia climate
- 08:45–09:00 EGU2011-12740
Eric Wood, Tara Troy, Ming Pan, Michael Rawlins, and Xiaogang Shi
Documenting the uncertainty of the terrestrial water cycle across NESSPI and its effect on trend and attribution studies
- 09:00–09:15 EGU2011-4422
Olga Zolina, Clemens Simmer, and Sergey Gulev
Extreme precipitation characteristics over Eurasian continent: uncertainties of estimation and climate variability
- 09:15–09:30 EGU2011-12523
Terry Callaghan, Stef Bokhorst, Ross Brown, Pavel Y. Groisman, Cecilia Johansson, Margareta Johansson, Niklas Labba, Vladimir Radionov, and Jan Åge Riseth
Winter snow melt events in the Eurasian Arctic: consequences analysed from scientific and indigenous knowledge
- 09:30–09:45 EGU2011-3882
Reginald Muskett and Vladimir Romanovsky
Permafrost Ecosystem Changes Across Eurasia and North America Using Multi-Satellite Measurements
- 09:45–10:00 EGU2011-9665
Vladimir Alexeev
Tundra fires and sea ice in the Arctic

COFFEE BREAK

Chairperson: Csaba Mátyás, Alexey Eliseev

- 10:30–10:45 EGU2011-9564
Dennis Lettenmaier, Ted Bohn, Shamil Maksyutov, and Qianlai Zhuang
 Understanding the interaction of carbon and water budgets in the Eurasian Arctic
- 10:45–11:00 EGU2011-1515
Alexey V. Eliseev
 Uncertainty of climate and carbon cycle changes in North Eurasia due to uncertainty in values of terrestrial biota governing parameters
- 11:00–11:15 EGU2011-13014
Qianlai Zhuang, Jerry Melillo, David Kicklighter, John Reilly, Sergey Paltsev, Andrei Sokolov, Yongxia Cai, Anatoly Shvidenko, Nadejda Tchebakova, Andrey Sirin and the ,Anna Peregon and Guangsheng Zhou Team
 Changes of land use and land cover, biogeochemistry, and their feedbacks to climate in northern Eurasia
- 11:15–11:30 EGU2011-11686
Anatoly Shvidenko, Dmitry Schepaschenko, and Ian McCallum
 Productivity of Russian forests during recent decades (1960-2010s)
- 11:30–11:45 EGU2011-9646
Nadja Tchebakova, Elena Parfenova, Galina Lysanova, Evgeni Shvetsov, and Amber Soja
 An agroclimatic potential in southern Siberia in a changing climate during the XXI century
- 11:45–12:00 EGU2011-5582
Mikhail Yu. Arshinov and Boris D. Belan
 New particle formation events in the Siberian boreal zone

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

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

Room: 19

Chairperson: n.n.

- 13:30–13:45 EGU2011-13514
Sarah Cornell
 Social perspectives on environmental risk and uncertainty
- 13:45–14:00 EGU2011-11580
Jon Olav Skøien, Grégoire Dubois, Phuong Truong, Dan Cornford, and Michael Shulz
 Uncertainty propagation in assessing ecosystems similarities - an example application using eHabitat
- 14:00–14:15 EGU2011-5932
Kristin Vogel, Carsten Riggelsen, and Frank Scherbaum
 Learning Ground Motion Models from Data using Bayesian Networks
- 14:15–14:30 EGU2011-7767
Johan deHaan, Maarten Sneep, and Pepijn Veefkind
 Retrieval algorithms for TROPOMI - improving error estimates of retrieved quantities by using Optimal Estimation with explicit a priori data
- 14:30–14:45 EGU2011-1880
Lindsay Collins, Ken Carslaw, Graham Mann, Kirsty Pringle, and Dominick Spracklen
 A systematic approach to computer model evaluation, using a global aerosol model
- 14:45–15:00 EGU2011-11001
Wouter Dorigo, Robert Parinussa, Klaus Scipal, Yi Liu, Richard de Jeu, and Wolfgang Wagner
 Error characterisation of global active and passive microwave soil moisture data sets

Chairperson: n.n.

- 15:30–15:45 EGU2011-9677
Heiko Mueller, Qing Liu, Quan Bai, Corne Kloppers, and Andrew Terhorst
 Enabling Assessment and Propagation of Information Quality in the South Esk Hydrological Sensor Web
- 15:45–16:00 EGU2011-5384
Lucy Bastin, Matthew Williams, John Paul Gosling, Phuong Truong, Dan Cornford, Gerard Heuvelink, and Frederic Achard
 Web Based Expert Elicitation of Uncertainties in Environmental Model Inputs
- 16:00–16:15 EGU2011-8339
Judith Versteegen, Floor van der Hilst, Derek Karssenber, and André Faaij
 Communicating Uncertainty in Spatial Decision Support Systems - a Case Study of Bioenergy-Crop Potentials in Mozambique

- 16:15–16:30 EGU2011-3230
Didier G. Leibovici, Amir Pourabdollah, and Mike Jackson
 Meta-propagation of Uncertainties for Scientific Workflow Quality Management in Interoperable Spatial Data Infrastructures
- 16:30–16:45 EGU2011-10149
Siegbert Kunz and Kym Watson
 A Spatial Information Infrastructure for linking environmental and health data: the approach to information fusion including uncertainty handling in the EO2HEAVEN project
- 16:45–17:00 EGU2011-5554
Lydia E. Gerharz, Benjamin Proß, Christoph Stasch, and Edzer Pebesma
 A Web-based Uncertainty-enabled Information System for Urban Air Quality Assessment

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

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

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Dan Cornford

- XL199 EGU2011-769
Euan Macrae, Clare Bond, and Zoe Shipton
 Quantification of uncertainty in geoscience interpretation: a statistical analysis of the factors that affect interpretational ability
- XL200 EGU2011-2965
Antonia K. Runge, Frank Scherbaum, and Carsten Riggelsen
 Quantification of expert knowledge for PSHA using graphical tools
- XL201 EGU2011-2642
Christopher Moseley, Claus Döring, Bernd Ahrends, and Oleg Panferov
 Uncertainties in regional climate scenarios data and their effect on results of impact models in forestry
- XL202 EGU2011-3372
Rachel Lowe, David Stephenson, Trevor Bailey, Tim Jupp, Richard Graham, and Adrian Tompkins
 Communicating probabilistic climate-sensitive disease risk forecasts
- XL203 EGU2011-13186
Dan Cornford, Richard Jones, Alexis Boukouvalas, and Remi Barillec
 Statistical Issues of Managing Uncertainties in Environmental Models
- XL204 EGU2011-13126
Dan Cornford, Edzer Pebesma, Stefano Nativi, Matthew Williams, Christoph Stasch, Richard Jones, and Lydia Gerharz
 Realising the Uncertainty Enabled Model Web
- XL205 EGU2011-4077
Kerry Gallagher, Thomas Bodin, Malcolm Sambridge, Dominik Weiss, Malin Kylander, and David Large
 Inference of abrupt changes in noisy data records using Bayesian transdimensional changepoint models
- XL206 EGU2011-5057
Matthias Vanmaercke, Jean Poesen, Faruk Ocakoglu, Mahmood Arabkhedri, and Maria Radoane
 How long should we measure to obtain reliable average catchment sediment yields?
- XL207 EGU2011-11108
 Mohamar Ouedraogo, **Aurore Degré**, Eléonore Beckers, and Charles Debouche
 A methodology to assess the exactness of Stream Network modeling process on agricultural watersheds
- XL208 EGU2011-10893
Philipp Weihs and the actinicflux Team
 The influence of the spatial resolution of topographic input data on the accuracy of 3-D UV actinic flux and irradiance calculations
- XL209 EGU2011-7018
Nadine Goris and Hendrik Elbern
 Singular vector based uncertainties of initial values and emissions for the ZEPTEP-2 campaign
- XL210 EGU2011-2566
Maurice Cox, Alistair Forbes, Nigel Fox, Peter Harris, Graham Machin, and Michael de Podesta
 Metrological issues in producing gridded temperature data sets
- XL211 EGU2011-9630
Greg Timms, Ben Howell, Paulo de Souza, Claire D'Este, Daniel Smith, Ross Atkins, and Chris Sharman
 Automated Assessment and Visualisation of Measurement Uncertainties in a Low-Cost Marine Sensor Network
- XL212 EGU2011-7137
Richard Wartenburger, Alexander Stickler, and Stefan Brönnimann
 Quality Control of Selected Historical Radiosonde Observations from 1948-1966

- XL213 EGU2011-8871
David Huard and Diane Chaumont
 Bayesian uncertainty analysis of climatological changes in IDF curves
- XL214 EGU2011-7428
Nikos Gianniotis, Carsten Riggelsen, and Frank Scherbaum
 Ensembles of Ground Motion Models
- XL215 EGU2011-9504
Anja Vrežko and Tomaž Podobnikar
 Error Assessment of DEM generated from Contours

ML2 – Arthur Holmes Medal Lecture by William A. Dietrich (co-listed) – Orals

Convener: Tuija Pulkkinen

Room: D

Chairperson: Tuija Pulkkinen

- 12:15–13:15 EGU2011-14169
William E. Dietrich
 Three grand challenges in geomorphology: rock, climate, and life (Arthur Holmes Medal Lecture)

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

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

Room: 13

Chairperson: Douglas Maraun

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

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

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

Room: 11

Chairperson: n.n.

- 08:30–08:45 EGU2011-4955
 Fabrice Ardhuin and **Aron Roland**
 Validation of numerical waves models in strong currents, a tribute to Owen Phillips.
- 08:45–09:00 EGU2011-13650
Aron Roland, Tai-Wen Hsu, Jian-Ming Liao, Yaron Toledo, and Shan-Hwei Ou
 On the extension of the Wave Action Equation for higher order depth and current effects

- 09:00–09:15 EGU2011-4644
Victor Shrira and Sergei Annenkov
Evolution of random wind wave fields under rapidly changing wind
- 09:15–09:30 EGU2011-9313
Alexander Soloviev, Silvia Matt, and Atsushi Fujimura
Air-sea interface in hurricane conditions
- 09:30–09:45 EGU2011-4892
Yuliya Troitskaya, Daniil Sergeev, Oleg Druzhinin, Alexander Kandaurov, and Olga Ermakova
Laboratory investigation and direct numerical simulation of wind effect on steep surface waves
- 09:45–10:00 EGU2011-9201
Paul Liu
Contemplating Ocean Wave Measurements

COFFEE BREAK

Chairperson: n.n.

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

LUNCH BREAK

Chairperson: n.n.

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

Friday, 08 April

AS1.1 – Dynamical Meteorology (General Session) – Orals

Convener: Gwendal Rivière | Co-Conveners: Olivia Martius, Vanda Grubišić?

Room: 12

Chairperson: n.n.

- 08:30–09:00 EGU2011-1483
Geoffrey Vallis and Pablo Zurita-Gotor
The Height of the Tropopause and the General Circulation
- 09:00–09:15 EGU2011-1236
Ron McTaggart-Cowan, Claude Girard, Andre Plante, and Michel Desgagne
The utility of upper boundary nesting in NWP
- 09:15–09:30 EGU2011-5197
Masato Mori, Masahide Kimoto, and Masahiro Watanabe
Summertime blocking and Rossby wave breaking over Siberia in a high-resolution GCM
- 09:30–09:45 EGU2011-4847
Eli Galanti, Nili Harnik, and Olivia Martius
The anomalously zonal structure of the Atlantic jet during winter of 2009-10 - possible causes and implications
- 09:45–10:00 EGU2011-3041
Arnaud Czaja and Nicholas Blunt
A new mechanism for ocean-atmosphere coupling in midlatitudes

COFFEE BREAK

Chairperson: n.n.

- 10:30–11:00 EGU2011-3403
Andreas Dörnbrack, Johannes Wagner, Alexander Gohm, and Andreas Schäfler
The mesoscale structure of a mature polar low: Airborne measurements and numerical simulations
- 11:00–11:15 EGU2011-5568
Michael Reeder, Thomas Spengler, and Ruth Musgrave
Rossby Waves, Fronts and Wildfires in Southern Australia
- 11:15–11:30 EGU2011-1911
Mireia Mateu, Germán Delgado, Bernat Codina, and Ángel Redaño
Tropopause folding detection using WRF 30 km resolution simulations initialized with JRA data
- 11:30–11:45 EGU2011-6449
Jean-Pierre Chaboureau, Florian Pantillon, Dominique Lambert, Evelyne Richard, and Chantal Claud
Tropical transition of a Mediterranean storm by jet crossing
- 11:45–12:00 EGU2011-7028
Michael Sprenger, Michael Graf, and Richard Moore
Synoptic- and Mesoscale Weather Situations Associated with Tornadoes in Europe

AS1.1 – Dynamical Meteorology (General Session) – Posters

Convener: Gwendal Rivière | Co-Conveners: Olivia Martius, Vanda Grubišić?

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- XY1 EGU2011-1386
Stephan Pfahl and Noemi Niedermann
Daily co-variations in near-surface relative humidity and temperature over the ocean
- XY2 EGU2011-9608
Bruno Dereemble, Guillaume Lapeyre, and Michael Ghil
Influence of an SST front on the position and strength of the atmospheric jet
- XY3 EGU2011-1607
Rui Wang, Shaodong Zhang, and Jinsong Ping
Radiosonde observations of mid-latitude planetary waves in the lower atmosphere over America and China

- XY4 EGU2011-6018
Alvaro de la Camara, Ana M. Mancho, Carlos R. Mechoso, Encarna Serrano, and Kayo Ide
A Lagrangian study of large-scale horizontal transport in the southern stratospheric polar vortex
- XY5 EGU2011-1830
Cheng Sun and Jianping Li
Interaction between Monthly Mean Circulation and Synoptic-Eddy Intensity in the North-Atlantic Sector
- XY6 EGU2011-8269
Pablo Zurita-Gotor and Javier Blanco-Fuentes
Zonal-index persistence in the two-layer model
- XY7 EGU2011-3706
David Brayshaw, Jerome Sauliere, Brian Hoskins, and Michael Blackburn
Further basic ingredients of the Northern Hemisphere storm tracks
- XY8 EGU2011-2372
Cholaw Bueh
Two types of Arctic Oscillations and their different climatic impacts in Winter
- XY9 EGU2011-2424
Bernd Schalge, Richard Blender, and Klaus Fraedrich
Blocking detection using synoptic filters
- XY10 EGU2011-2555
Tim Woollings, **Joaquim G. Pinto**, and João A. Santos
On the dynamical evolution of North Atlantic ridges and poleward jet stream displacements
- XY11 EGU2011-5570
Zuowei Xie and Cholaw Bueh
The relationship between WP pattern and its upstream circulation anomalies
- XY12 EGU2011-5695
Virginie Guemas and Francis Codron
Differing impacts of resolution changes in latitude and longitude on the mid-latitudes in the LMDZ Atmospheric GCM
- XY13 EGU2011-5688
Da-Hee Choi, Jong-Seong Kug, Fei?Fei Jin, Won?Tae Kwon, Hee-Jeong Baek, and ChunHo Cho
Role of synoptic eddy feedback on climate change in the Northern Hemisphere under global warming
- XY14 EGU2011-6930
Dieter H.W. Peters, Andrea Schneidereit, and Axel Gabriel
The seasonal behavior of Rossby wave breaking processes on the Northern Hemisphere
- XY15 EGU2011-8016
Chris Weijenborg, **Hylke de Vries**, and Reindert Haarsma
On the direction of wave-breaking in atmospheric blocking
- XY16 EGU2011-9188
Javier Blanco-Fuentes and Pablo Zurita-Gotor
The driving of baroclinic anomalies at different time scales and its role for self-maintenance
- XY17 EGU2011-10392
Ara Arakelian and Francis Codron
Feedbacks between eddies and the zonal-mean flow in the simplified configuration of GCM
- XY18 EGU2011-3408
Sebastian Schemm and Heini Wernli
Warm Conveyor Belts in Idealized Moist Baroclinic Wave Life-Cycles
- XY19 EGU2011-8652
Philippe Arbogast and Karine Maynard
Manual PV modifications of initial conditions; application to windstorm Klaus
- XY20 EGU2011-13489
Clara Iwabe and Rosmeri da Rocha
Numerical evaluation of potential vorticity anomaly at upper levels on the secondary cyclogenesis event
- XY21 EGU2011-10257
Thomas Toniazzo, Steven J. Abel, Robert Wood, Carlos R. Mechoso, Grant Allen, and Leonard C. Shaffrey
Large-scale and synoptic meteorology in the South-East Pacific during the observations campaign VOCALS-REx in Spring 2008
- XY22 EGU2011-5224
Ying Liu and Donghai Wang
A Comprehensive Analysis of the Structure of a Northeast-cold-vortex and the
- XY23 EGU2011-13278
José M. Castanheira and Luis Gimeno
Baroclinic waves phase-lockings by double tropopause events
- XY24 EGU2011-11135
Ivan Fore, Jón Egill Kristjánsson, Øyvind Sætra, Øyvind Breivik, Bjørn Røsting, and Mel Shapiro
The full life cycle of a polar low over the Norwegian Sea observed by three research aircraft flights

- XY25 EGU2011-2772
Steven Cavallo
Sensitivity between sea ice and tropopause polar cyclone intensity
- XY26 EGU2011-6437
Ivana Stiperski and Vanda Grubiši?
Influence of secondary orography on boundary-layer separation and rotors
- XY27 EGU2011-13380
Marius Opsanger Jonassen, Joan Cuxart, Maria Antonia Jimenez, Haraldur Ólafsson, and Joachim Reuder
Simulating a high pressure situation over France using WRF and MesoNH
- XY28 EGU2011-13313
Marius Opsanger Jonassen, Haraldur Ólafsson, Joachim Reuder, and Jan Asle Olseth
Multi-scale variability of winds in the complex topography of Southwestern Norway.
- XY29 EGU2011-7671
Katja Trachte, Rütger Rollenbeck, and Jörg Bendix
Nocturnal convective clouds at the eastern Andes of South Ecuador
- XY30 EGU2011-9696
Dominique Lambert and Jean-Pierre Cammas
Rossby wave interactions with Mediterranean and subtropical latitudes

AS1.2 – Numerical weather prediction, data assimilation and ensemble forecasting – Orals

Convener: Haraldur Ólafsson | Co-Conveners: Jian-Wen Bao

Room: 10

Chairperson: H. Ólafsson, Jian-Wen Bao

- 13:30–13:45 EGU2011-4757
Zavisa Janjic, Tom Black, Ratko Vasic, Eric Rogers, Brad Ferrier, and Geoff DiMego
Multi-scale Eulerian NMMB model within the NOAA Environmental Modeling System: advances on global and meso scales
- 13:45–14:00 EGU2011-3753
Fedor Mesinger, Sin Chan Chou, Jorge Gomes, Dusan Jovic, Lazar Lazic, André Lyra, Josiane Bustamante, Paulo Bastos, Sandra Morelli, and Ivan Ristic
An upgraded Version of the Eta Model
- 14:00–14:15 EGU2011-9664
Xiang-Yu Huang
WRFDA 2011 Overview
- 14:15–14:30 EGU2011-12382
Martin Granerød and Haraldur Ólafsson
The predictability of an extreme event of convective precipitation
- 14:30–14:45 EGU2011-3910
Jian-Wen Bao, Evelyn Grell, Jeff Whitaker, Tom Hamill, and Georg Grell
Probabilistic Distribution of Subgrid Convection and Ensemble Prediction
- 14:45–15:00 EGU2011-10439
Jørn Kristiansen, Silje L. Sørland, Trond Iversen, Dag Bjørge, and Morten Ø. Køltzow
High-resolution ensemble prediction of a polar low development
- Chairperson: H. Ólafsson, Jian-Wen Bao
- 15:30–15:45 EGU2011-10390
Lizzie Froude
Prediction of Extratropical Cyclones by TIGGE Ensemble Prediction Systems
- 15:45–16:00 EGU2011-1322
Maria-del-Mar Vich, Romualdo Romero, Evelyne Richard, Philippe Arbogast, and Karine Maynard
Comparison of three different methods of perturbing the potential vorticity field in mesoscale forecasts of Mediterranean heavy precipitation events: 10 June 2000 and 9 October 2002
- 16:00–16:15 EGU2011-3740
Yuanfu Xie, Shuyuan Liu, and SauNei Hui
Precipitation Forecasts Improvement by Assimilating Radar Reflectivity for Typhoon Morakot
- 16:15–16:30 EGU2011-9863
Paul Kucera, Barbara Brown, Louisa Nance, Christopher Williams, Kathryn Crosby, and Michelle Harrold
Evaluation of Experimental Models for Tropical Cyclone Forecasting in Support of the NOAA Hurricane Forecast Improvement Project (HFIP)
- 16:30–16:45 EGU2011-3909
Huiling Yuan and Yuanfu Xie
Severe weather case studies using the Space and Time Multiscale Analysis System (STMAS)

16:45–17:00 EGU2011-3862

Isidora Jankov and the ESRL/CIRA/NESDIS Team

An evaluation of Brightness Temperatures Simulated by Various WRF-ARW Microphysical Algorithms for an Atmospheric River Event

AS1.2 – Numerical weather prediction, data assimilation and ensemble forecasting – Posters

Convener: Haraldur Ólafsson | Co-Conveners: Jian-Wen Bao

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: H. Ólafsson, Jian-Wen Bao

- XY31 EGU2011-2571
linlin Qi and Jianhua Sun
The Application of the Coupled model in the Numerical Simulation of the Local Radiation Fog
- XY32 EGU2011-3913
Sara Michelson and Jian-Wen Bao
Sensitivity of the Simulated Structure of Tropical Storms to
- XY33 EGU2011-3916
Laura Bianco, Sara Michelson, Jian-Wen Bao, and Chris Fairall
Effects of Sea Spray on the Structure of Tropical Storm in a Coupled Atmosphere-Wave-Ocean Model
- XY34 EGU2011-3995
Tieh Yong Koh and Jun Siang Ng
Improved diagnostics for NWP verification
- XY35 EGU2011-5376
Myung-Seo Koo, Hoon Park, Song-You Hong, and **Hyeong-Bin Cheong**
Horizontal Diffusion in a Global Atmospheric Model with a Double Fourier Series (DFS) Dynamic Core
- XY36 EGU2011-5832
Gert-Jan Steeneveld, Ivar van der Velde, Ben Wichers Schreur, **Reinder Ronda**, and Bert Holtslag
Modeling and Forecasting the Onset and Duration of a Fog Event during Frost Conditions
- XY37 EGU2011-5877
Reinder Ronda, gert-Jan Steeneveld, and bert Holtslag
Can we forecast fog using meso-scale models?
- XY38 EGU2011-5891
Christina Tavalato and Leopold Haimberger
Variational Bias Correction for Radiosonde Wind Direction Bias
- XY39 EGU2011-6234
Vladimir Gordin and Philipp Bykov
Three-Dimensional Geometry of Atmospheric Fronts. Analysis and Forecast.
- XY40 EGU2011-7593
Javier Amezcua, Eugenia Kalnay, and **Paul Williams**
The effects of the RAW filter on the climatology and forecast skill of the SPEEDY model
- XY41 EGU2011-7658
Regis Borde, Philip Watts, and Hans Joachim Lutz
Comparison of Cloud Top Height products to set the altitude of Atmospheric Motion Vectors derived from MSG images.
- XY42 EGU2011-8120
Christina Thoma and Andreas Bott
Introducing a nudging system for the one dimensional fog model PAFOG
- XY43 EGU2011-8265
Erika Dautz and Alexander Gohm
The Interruption of Alpine Foehn by a Cold Front: A Modeling Case Study
- XY44 EGU2011-8978
Gunnar Livik, Haraldur Ólafsson, and Marius Opsanger Jonassen
Forecasting winds in Spitzbergen in different weather regimes
- XY45 EGU2011-9393
Duygu Akta? and Yurdanur Ünal
Heatwave occurrences over Ankara and its simulations by WRF-ARW
- XY46 EGU2011-9840
Werner Schneider and Andreas Bott
Realistic case studies of a new time splitting approach for one dimensional advection schemes in numerical weather prediction models.
- XY47 EGU2011-10069
Dirk Lauwaet, Koen De Ridder, and Praveen Pandey
Assimilating remotely sensed cloud optical thickness into a mesoscale model

- XY48 EGU2011-11748
Heiner Körnich, David Tan, and Gert-Jan Marseille
Impact of different Aeolus sampling scenarios on the stratospheric analysis
- XY49 EGU2011-12465
Gökay B?y?k and Bar?s Onol
Simulations and Sensitivity Analysis of Heavy Rainfall Events over Northern Turkey using WRF-ARW
- XY50 EGU2011-12496
Huan Meng, Wenze Yang, and Ralph Ferraro
The Development of AMSU-A Fundamental CDR's
- XY51 EGU2011-12755
Thomas Dubos, Nicholas Kevlahan, and Mani Mehra
Adaptive wavelet discretization of PDEs on the sphere
- XY52 EGU2011-12783
Suraj Polade and Felix Ament
Quantitative precipitation forecast verification of short range ensemble systems over southern Germany
- XY53 EGU2011-13156
Peter Lauritzen and John Thuburn
Evaluating advection/transport schemes using interrelated tracers, scatter plots and numerical mixing diagnostics
- XY54 EGU2011-13433
Marius Opsanger Jonassen, Hálfván Ágústsson, Haraldur Ólafsson, Joachim Reuder, and Dubravka Rasol
Improving a numerical weather prediction model by assimilating unmanned aerial vehicle data. A case study.
- XY55 EGU2011-12964
Ariane Frassoni dos Santos de Mattos, Josiane Silva, Rafael Ferreira, Saulo Ribeiro de Freitas, and Manoel Alonso Gan
Intercomparison and evaluation of cumulus parameterization schemes of the regional model BRAMS over South America

AS2.1 – Air-Land Interactions (General Session) (co-sponsored by iLEAPS) – Orals

Convener: Thomas Foken | Co-Conveners: Andreas Ibrom

Room: 19

Chairperson: Foken

- 08:30–08:45 EGU2011-7015
Rebecca Hiller, Bruno Neining, Dominik Brunner, Nina Buchmann, and Werner Eugster
Aircraft-based methane flux estimates for an agriculturally dominated valley in Switzerland
- 08:45–09:00 EGU2011-11426
Irene Lehner and Sonia I. Seneviratne
In-situ comparison of evapotranspiration estimates at the Rietholzbach catchment
- 09:00–09:15 EGU2011-11914
Erik Sahlée, Anna Rutgersson, Eva Podgrajsek, and David Bastviken
Eddy-covariance measurements of methane fluxes from a Swedish lake
- 09:15–09:30 EGU2011-2645
Chuixiang Yi and Hongbin Chen
Cooperative control of katabatic flows within canopies with terrain slope, canopy structure, and thermal velocity
- 09:30–09:45 EGU2011-840
Bhishma Tyagi, Achanta Naga Venkata Satyanarayana, Manabottam Mandal, Manoj Kumar, and Nc Mahanti
Land surface-atmosphere energy exchanges during pre-monsoon thunderstorm activity over barren and agriculture field sites at two tropical stations
- 09:45–10:00 EGU2011-530
Thomas Bell and Walter Oechel
Vertical and Lateral Carbon Flux in a Larrea/Cardón Ecosystem near La Paz, BCS, Mexico

AS2.1 – Air-Land Interactions (General Session) (co-sponsored by iLEAPS) – Posters

Convener: Thomas Foken | Co-Conveners: Andreas Ibrom

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Foken

- XY56 EGU2011-31
George Burba and Dan Anderson
Efficacy of using eddy covariance method for gas and energy flux measurements in disciplines and applications beyond micrometeorology
- XY57 EGU2011-5124
Taro Nakai, Hiroki Iwata, and Yoshinobu Harazono
Comparison of CO₂ fluxes from mixing ratio and mass density with a closed-path gas analyzer
- XY58 EGU2011-6263
Sami Haapanala, **Janne Rinne**, Olli Peltola, Ivan Mammarella, and Timo Vesala
Intercomparison of gas analyzers for methane flux measurements
- XY59 EGU2011-9108
Alexander Moravek, Ivonne Trebs, Michael Welling, and Thomas Foken
Development of a relaxed eddy accumulation system for the determination of biosphere-atmosphere exchange fluxes of peroxyacetyl nitrate
- XY60 EGU2011-3644
Josh DiGangi, Erin Boyle, **Frank Keutsch** and the BEACHON-ROCS Team
Formaldehyde Flux Measurements via Eddy Covariance Above a Ponderosa Pine Forest: First results from BEACHON-ROCS 2010 and Analysis of Source Terms
- XY61 EGU2011-13181
Milan Fischer, Miroslav Trnka, Jiří Kuřera, Josef Urban, Jan Balek, Petr Hlavinka, Matěj Orság, and Zdeněk Žalud
Gap filling strategy for Bowen ratio energy balance method
- XY62 EGU2011-6538
Alexander Graf, Anneke van de Boer, Arnold F. Moene, Dirk Schüttemeyer, and Harrie-Jan Hendricks-Franssen
Feasibility study on footprint-based spatial flux decomposition from multiple eddy covariance measurements in a mosaic landscape
- XY63 EGU2011-9714
Irene Lehner, Ivo Peter, and Natascha Kijun
Footprint under low wind conditions
- XY64 EGU2011-10872
Daniele Masseroni, Giovanni Ravazzani, Chiara Corbari, and Marco Mancini
Assessing correlation between footprint size and exogenous variables for eddy covariance stations in Po Valley, Italy
- XY65 EGU2011-1351
Dave McJannet, Freeman Cook, Ryan McGloin, Hamish McGowan, and Stewart Burn
Measurements of Evaporation From Open Water Using Scintillometry
- XY66 EGU2011-4903
Clemens Drüe, Günther Heinemann, Alexander Graf, and Thomas Pütz
A new tower for monitoring atmosphere-forest exchange processes at TERENO site Wüstebach
- XY67 EGU2011-7920
Stephanie Schrade, Axel Knaps, and Marc von Hobe
Using measurements on a meteorological tower to understand local carbon dioxide cycling
- XY68 EGU2011-10721
Pavel Sedlak, David Hanslian, Jiri Hosek, Dalibor Janous, and Katerina Potuznikova
Can single-point measurements near a mountain ridge top give evidence of an airflow direction over the ridge?
- XY69 EGU2011-4687
Rim Zitouna Chebbi, Laurent Prévot, Frédéric Jacob, and Marc Voltz
Characterizing land surface evapotranspiration within hilly watersheds
- XY70 EGU2011-8449
Tamás Weidinger, László Horváth, Zita Takács, Attila Machon, Andrea Pogány, Árpád Mohácsi, Zoltán Bozóky, Zoltán Nagy, Krisztina Pintér, and Zoltán Istenes
Long term concentration gradient measurements of trace gases (ozone, nitrogen oxides and ammonia) for flux calculation; results and uncertainties
- XY71 EGU2011-4455
Tangtang Zhang and **Jun Wen**
Land-atmospheric water and energy cycle of the winter wheat field in the Loess Plateau, China
- XY72 EGU2011-928
Peng Zhao, Johannes Lüers, Chong Bum Lee, Jonh Tenhunen, and Thomas Foken
Energy and matter exchange in an atmosphere-ecosystem over a complex terrain in Korea
- XY73 EGU2011-8226
Björn Brötz, **Rafael Eigenmann**, Volkmar Wirth, and Thomas Foken
Valley wind controlled transport of near-ground air into the upper boundary layer - Observations and simulations

- XY74 EGU2011-8151
Linda Voß and Siegfried Raasch
The influence of small scale heterogeneities on the near surface turbulence structure and the energy balance closure
- XY75 EGU2011-6952
Gabriele Schenk and Kurt Roth
Characterizing surface energy fluxes with the aid of measured soil temperature profiles
- XY76 EGU2011-11212
Aurélien Campoy, Agnès Ducharne, Frédéric Hourdin, Frédérique Cheruy, Jan Polcher, Martial Mancip, Laurent Fairhead, Martial Haeffelin, and Jean-Charles Dupont
Influence of the soil drainage boundary condition on land surface fluxes in a general circulation model
- XY77 EGU2011-8531
Megan Daniels, Eric Pardyjak, Wilfried Brutsaert, Daniel Nadeau, Susana Fernandez-Vidal, Guillermo Barrenetxea, and Marc Parlange
Observed effects of soil moisture on surface fluxes and slope winds in an alpine valley
- XY78 EGU2011-9662
Edgar Pavia
Modeling soil surface energy fluxes from solar radiation, latent heat, and surface plus air temperature measurements
- XY79 EGU2011-7833
Johanne H. Rydsaa, Frode Stordal, Giacomo Gerosa, and Angelo Finco
A model study of stomatal uptake of ozone in a coastal Mediterranean maquis ecosystem
- XY80 EGU2011-7302
Mirosław Zimnoch, Paulina Wach, Kazimierz Rozanski, Jolanta Godłowska, Jadwiga Mazur, and Krzysztof Kozak
Determination of ²²²Rn exhalation rates in an urban area - comparison of top-down and bottom-up approach
- XY81 EGU2011-5020
Hendrik Wouters and Koen De Ridder
The impact of the urban surface forcing on temperature and humidity near the ground in the city of Paris during summer 2006: model evaluation and results.
- XY82 EGU2011-1910
Christoph Irschick, Thomas Liener, Albin Hammerle, and Georg Wohlfahrt
Inverse Estimation of the Parameters of a Canopy Gross Photosynthesis Model
- XY83 EGU2011-4473
zhenchao li and Zhigang Wei
Simulation and Improvement of Common Land Model on the Bare Soil of Loess Plateau Underlying Surface
- XY84 EGU2011-4468
Suosuo Li and Shihua Lv
The Determination of the Aero Dynamical Parameters and Application in Land Surface Model at Maqu Area in the Up Yellow River
- XY85 EGU2011-9657
Rosa Maria Nascimento dos Santos and Gilberto Fisch
Observed Nocturnal Boundary Layer Structure During Wet and Dry Season in Amazônia
- XY86 EGU2011-11579
Romain Baghi, Claire Delon, Pierre Durand, Corinne Jambert, Christian Jarnot, and Dominique Serça
Biosphere-atmosphere exchanges on a Mediterranean downy oak forest
- XY87 EGU2011-4478
Yuchun Chen and Zhenchao Li
The Application & Comparison of Several Flux Profile Relations in CoLM
- XY88 EGU2011-2532
Stefan Zacharias, **Mark Reyers**, Joaquim G. Pinto, Jan H. Schween, Susanne Crewell, and Michael Kerschgens
Heat and moisture budgets from airborne measurements and high resolution model simulations
- XY89 EGU2011-11046
Petr Hlavinka, Miroslav Trnka, Jan Balek, Milan Fischer, Josef Eitzinger, and Zdeněk Žalud
Parameterization of SoilClim software using Monte Carlo approach
- XY90 EGU2011-4428
Yinhuan Ao, Yuchun Chen, and Bo Han
The Observation and Numerical Simulation of Convective Boundary Layer in Badain Jaran Desert
- XY92 EGU2011-5495
Yoonjin Lim, Kun-Young Byun, Tae-Young Lee, Jinkyu Hong, and Joon Kim
A land data assimilation system using the MODIS-derived land data and its applications
- XY93 EGU2011-11058
Petr Džuránek, Jan Šafanda, Vladimír Čermák, and Milan Krešl
Long-term monitoring of the air - ground temperature coupling in the Czech Republic

- XY94 EGU2011-11088
Jan Šafanda, Antonio Correia, and Petr Džurković
 Inter-annual variations of the mean annual air - ground temperature difference at Caravelinha station in south-central Portugal
- XY95 EGU2011-4149
Evangelia-Maria Giannakopoulou and Ralf Toumi
 The Diurnal Variation of the Persian Gulf Summertime Low Level Jet
- XY96 EGU2011-3597
Sébastien Garrigues, Albert Olioso, Jean-Christophe Calvet, Sébastien Lafont, Eric Martin, André Chanzy, Dominique Courault, Olivier Marloie, Véronique Desfonds, and Nadine Bruguier
 Multi-Year Assessment of Surface Vegetation Atmosphere Transfer (SVAT) Modelling Uncertainties over a Mediterranean Agricultural Site
- XY97 EGU2011-10280
Fabienne Lohou and Edward Patton
 Land-surface response to shallow cumulus
- XY98 EGU2011-10969
Jan-Peter Muller, Philip Lewis, Jurgen Fischer, Peter North, and Uwe Framer
 The ESA GlobAlbedo Project for mapping the Earth's land surface albedo for 15 years from European sensors

AS3.12 – Atmospheric Monitoring using Commercial Aircraft, Unmanned Aircraft Systems, Ships and Trains: Platforms of Opportunity – Orals

Convener: Tanja Schuck | Co-Conveners: Angela Baker, Carl Brenninkmeijer, Andreas Volz-Thomas, JEAN-PIERRE CAMMAS, Toshinobu Machida, Manfred Lange, Joachim Reuder

Room: 8

Chairperson: n.n.

- 08:30–09:00 EGU2011-9121
Jennifer Logan
 The MOZAIC program: a treasure trove of data for defining atmospheric composition, evaluating models, assessing trends, and validating satellite retrievals.
- 09:00–09:15 EGU2011-1717
Jean-Pierre Cammas, Valérie Thouret, Thomas Noiret, Alexandre Berger, Bastien Sauvage, Philippe Nédelec, Jean-Marc Cousin, Herman Smit, and Andreas Volz-Thomas
 Width of the tropics: analysis of MOZAIC aircraft observations over Africa from 1994 to 2008
- 09:15–09:30 EGU2011-6455
Toshinobu Machida, Hidekazu Matsueda, and Yousuke Sawa
 High-frequency and long-range observations of atmospheric CO₂ by CONTRAIL project
- 09:30–09:45 EGU2011-12025
Andreas Zahn, Christoph Dyroff, Carl A.M. Brenninkmeijer, Tanja Schuck, Armin Raute-Schöch, and Peter F.J. van Velthoven
 CARIBIC passenger aircraft (2005-2010): What we have learnt so far from the trace gas distributions in the UTLS
- 09:45–10:00 EGU2011-1767
Helmut Ziereis, Greta Stratmann, Hans Schlager, Paul Stock, Klaus Gottschaldt, Ulrich Schumann, Carl A. M. Brenninkmeijer, Tanja Schuck, Andreas Zahn, and Markus Hermann
 Reactive nitrogen in the tropopause region: Six years of observations from CARIBIC

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-2333
Prabir Patra, Yosuke Niwa, Tanja Schuck, Carl Brenninkmeijer, Toshinobu Machida, Hidekazu Matsueda, and Yousuke Sawa
 Carbon balance of South Asia constrained by passenger aircraft CO₂ measurements
- 10:45–11:00 EGU2011-9599
Ignacio Pisso, Prabir Patra, Masuyuki Takigawa, Takakiyo Nakazawa, Yousuke Sawa, Toshinobu Machida, and Hidekazu Matsueda
 Constraints on CO₂ flux emissions: reconstructions of in-situ measurements from Lagrangian stochastic inversion

- 11:00–11:15 EGU2011-3031
Yosuke Sawa, Toshinobu Machida, Hidekazu Matsueda, and Yosuke Niwa
 Global distributions and transport of CO₂ in upper troposphere obtained by commercial aircraft observations
- 11:15–11:30 EGU2011-13243
Kentaro Ishijima, Prabir Patra, Toshinobu Machida, Hidekazu Matsueda, Yosuke Sawa, Taku Umezawa, Shuji Aoki, and Takakiyo Nakazawa
 Source emission signals in variabilities of nitrous oxide and methane in the upper troposphere over the western Pacific deduced from tagged tracer simulations
- 11:30–11:45 EGU2011-11063
Jason Williams, Peter van Velthoven, Tanja Schuck, and Carl Brenninkmeijer
 Modeling the impact of increasing Asian emissions on the chemical composition of the UTLS: Seasonal comparisons against CARIBIC measurements
- 11:45–12:00 EGU2011-9929
Hella Riede, Patrick Jöckel, Rolf Sander, Ralph Lehmann, Heini Wernli, Carl A. M. Brenninkmeijer, and the CARIBIC team
 CARIBIC airborne observations in the UTLS interpreted by Lagrangian model diagnostics

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-6926
Annica Ekman, Markus Hermann, Peter Groß, Jost Heintzenberg, Dong-Chul Kim, and Chien Wang
 Sub-micrometer Aerosol Particles in the UT/LMS Region as Measured by CARIBIC and Modeled Using the MIT-CAM3 Global Climate Model
- 13:45–14:00 EGU2011-9740
Griša Možnik and Anthony Hansen
 Estimates of aerosol black carbon concentrations at the tropopause, from measurements taken on board commercial aircraft
- 14:00–14:15 EGU2011-9282
Mariusz Pagowski, Stuart Mckeen, and Georg Grell
 Evaluation of assimilation of ozone soundings and aircraft measurements on forecasting surface ozone in the USA.
- 14:15–14:30 EGU2011-9724
Hiroshi Tanimoto, Hideki Nara, Hitoshi Mukai, Yukihiro Nojiri, Yasunori Tohjima, Toshinobu Machida, Yoko Yokouchi, and Shigeru Hashimoto
 Long-term monitoring of atmospheric trace gases and aerosols in Asia and Oceania using voluntary observing ships
- 14:30–14:45 EGU2011-3940
Kuo-Ying Wang, Shih-Wan Chang, Teng-Chun Chang, Chi-Cha Wang, Ching-Jui Chiu, Chun-Ju Lin, Hui-Chen Chien, Pei-Chiao Lin, and Shih-Chuan Tai
 Pacific Greenhouse Gases Measurement (PGGM) Project Ship-Based Measurement 2009-2010 Results
- 14:45–15:00 EGU2011-5986
Nikolai Elansky, Igor Belikov, Elena Berezina, Alexander Elokhov, Olga Lavrova, Natalya Pankratova, Alexey Rakin, Alexander Safronov, Andrey Skorokhod, and Roman Shumsky
 TROICA experiments 1995-2010: Atmospheric species spatial distribution and temporal variations over Eurasia

Chairperson: n.n.

- 15:30–15:45 EGU2011-12374
Julien Pinel, Shaun Lovejoy, and Daniel Schertzer
 How the fractal and gently sloping nature of aircraft trajectories can lead to spurious conclusions about atmospheric dynamics: results from TAMDAR and research aircraft
- 15:45–16:00 EGU2011-3672
Stephanie Mayer, Joachim Reuder, Marius Jonassen, and Martin Müller
 The UAS SUMO: A successful story of an alternative tool for atmospheric boundary layer studies
- 16:00–16:15 EGU2011-8579
Jens Dünnermann and Burkhard Wrenger
 Enabling Small Scale UAS Measurements by using the new AMOR Platform
- 16:15–16:30 EGU2011-8278
Norman Wildmann, Prof. Dr. habil. Jens Bange, and Dr.-Ing. Aline van den Kroonenberg
 Airborne meteorological measurement unit for small UAVs

- 16:30–16:45 EGU2011-4815
Cornelius Claussen, Marco Möller, Michael Niesen, and Kurt Roth
 A Comprehensive and Modular UAS for Earth Observations
- 16:45–17:00 EGU2011-8886
Stefania Amici, Maria Fabrizia Buongiorno, Emanuele Luigi De Angelis, Fabrizio Giulietti, and Matteo Turci
 An unmanned aerial system for thermal observation

AS3.15 – Remote Sensing of Clouds and Aerosols: Techniques and Applications – Orals

Convener: Alexander Kokhanovsky | Co-Conveners: Jan Cermak, Gerrit de Leeuw

Room: 14

Chairperson: n.n.

- 08:30–08:45 EGU2011-2447
Oleg Dubovik, Maurice Herman, Andriy Holdak, Tatyana Lapyonok, Didier Tanre, Jean-Luc Deuze, Fabrice Ducos, and Anton Lopatin
 An approach for comprehensive retrieval of aerosol properties from enhanced satellite observations.
- 08:45–09:00 EGU2011-1984
Otto Hasekamp, Pavel Litvinov, and Andre Butz
 Aerosol optical and microphysical properties from POLDER-PARASOL multi-angle photo-polarimetric measurements
- 09:00–09:15 EGU2011-5392
Ramesh P. Singh, Dimitris G. Kaskaoutis, Waseem Mehdi, and Manish Sharma
 Seasonal Trends of Atmospheric Aerosols over India Sub-Continent
- 09:15–09:30 EGU2011-2835
Itaru Sano, Sonoyo Mukai, Makiko Nakata, Brent Holben, and Nobuyuki Kikuchi
 Biomass burning aerosols retrieved from combination of near-UV radiance and near-IR polarization
- 09:30–09:45 EGU2011-2876
Olga Kalashnikova, Michael Garay, Ralph Kahn, Irina Sokolik, and Omar Torres
 Analysis of MISR 10-year aerosol products in dust-laden conditions
- 09:45–10:00 EGU2011-1328
Thomas Holzer-Popp, de Leeuw Gerrit and the aerosol_cci Team
 Extensive aerosol retrieval algorithm evaluation within the ESA aerosol_cci project

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2011-10041
Peter North, Suzanne Bevan, William Grey, Andreas Heckel, Carsten Brockmann, Juergen Fischer, Luis Gomez-chova, Rene Preusker, and Peter Regner
 Global retrieval of long-term aerosol datasets from ERS-2, ENVISAT and Sentinel-3
- 10:45–11:00 EGU2011-13421
Luis Guanter, Luis Gómez-Chova, and Jose Moreno
 Cloud screening and AOD retrieval from ENVISAT/MERIS data: validation with AERONET data and surface reflectance data over inland waters.
- 11:00–11:15 EGU2011-8598
Alexei Lyapustin, Yujie Wang, Robert Levy, Christina Hsu, Omar Torres, Gregory Leptoukh, and Jeff Reid
 A comparison between MODIS Dark Target, Deep Blue and MAIAC Aerosol Algorithms over North Africa
- 11:15–11:30 EGU2011-8935
Gregory Leptoukh
 Quality Issues in Multi-sensor Aerosol Level 3 Satellite Data
- 11:30–11:45 EGU2011-457
Yong Xue, Hui Xu, and Linlu Mei
 Ten-Year Aerosol Optical Mapping from Remotely-Sensed Data over Land Surface in China
- 11:45–12:00 EGU2011-6197
Christoforos Tsamalis, Alain Chédin, and Sophie Peyridieu
 Daily observation of dust aerosols infrared optical depth and altitude from IASI and AIRS and comparison with other satellite instruments

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2011-4009
Knut Stamnes, Yongzhen Fan, Wei Li, Børge Hamre, Øyvind Frette, Are Folkestad, Kai Sørensen, and Jakob J. Stamnes
 Retrieval of Aerosol and Marine Parameters in Coastal Waters from MERIS Data: The OC-SMART Algorithm
- 13:45–14:00 EGU2011-4723
Yohei Shinozuka, Jens Redemann, Phil Russell, John Livingston, Antony Clarke, Steve Howell, and Jim Podolske
 Horizontal variability of aerosol optical properties observed during the ARCTAS airborne experiment
- 14:00–14:15 EGU2011-8137
Omar Torres, Hiren Jethva, and Pawan Bhartia
 Retrieval of Aerosol Optical Depth Above clouds using OMI near-UV observations
- 14:15–14:30 EGU2011-9103
Michel Legrand and the Michel Legrand Team
 Remote sensing in the TIR of mineral dust over arid land from satellite and ground surface
- 14:30–14:45 EGU2011-455
Nataly Chubarova, Yelena Nezval', Mikhail Sviridenkov, and Alexander Smirnov
 Smoke aerosol and its radiative effects during extreme fire event over Central Russia in summer 2010
- 14:45–15:00 EGU2011-8045
Kirk Knobelspiesse, Brian Cairns, and Matteo Ottaviani
 The importance of observational correlation for aerosol retrievals over the ocean

Chairperson: n.n.

- 15:30–15:45 EGU2011-3784
Peter Pilewskie and Sebastian Schmidt
 Improvements in cloud and aerosol remote sensing from hyperspectral shortwave observations
- 15:45–16:00 EGU2011-10527
Gareth Thomas, Caroline Poulsen, Andrew Sayer, Richard Siddans, Haiyan Huang, Christopher Arnold, and Don Grainger
 Recent developments in the Oxford-RAL Aerosol and Cloud (ORAC) algorithm: Lessons learnt from GRAPE and GlobAEROSOL
- 16:00–16:15 EGU2011-10562
 Rainer Hollmann, **Anke Kniffka** and the ESA Cloud-CCI Team
 The ESA Cloud-CCI project
- 16:15–16:30 EGU2011-124
Hermann Mannstein and Stephan Kox
 METEOSAT Observations of the Daily Variation of Cirrus
- 16:30–16:45 EGU2011-14154
Claudia Emde
 Polarized radiative transfer simulations in the cloudy atmosphere
- 16:45–17:00 EGU2011-2280
Alexander Kokhanovsky and Vladimir Rozanov
 Optical particle sizing in vertically inhomogeneous turbid media

AS3.16 – Remote-Sensing of Atmospheric Carbon Dioxide and Methane – Orals

Convener: Hartmut Boesch | Co-Conveners: Sander Houweling, Michael Buchwitz, Justus Notholt, Martine De Maziere, Ralf Sussmann

Room: 12

Chairperson: n.n.

- 13:30–13:45 EGU2011-1501
Masakatsu Nakajima, Akihiko Kuze, Hiroshi Suto, and Kei Shiomi
 GOSAT two years operation on orbit and its follow-on program
- 13:45–14:00 EGU2011-3662
Sandrine Guerlet, Andre Butz, Otto Hasekamp, Dinand Schepers, and Ilse Aben
 Retrieval of XCO₂ and XCH₄ from GOSAT and comparison with TCCON measurements.
- 14:00–14:15 EGU2011-5657
Maximilian Reuter, Michael Buchwitz, Oliver Schneising, Jens Heymann, Heinrich Bovensmann, and John P. Burrows
 Retrieval of atmospheric CO₂ from satellite near-infrared nadir spectra in the frame of ESA's climate change initiative

- 14:15–14:30 EGU2011-7160
Justus Notholt, Thorsten Warneke, Paul Wennberg, Geoffrey Toon, David Griffith, Janina Messerschmidt, and Gretchen Keppel-Aleks
 Current status of the ground-based greenhouse gas observations within the Total Carbon Column Observing Network (TCCON)
- 14:30–14:45 EGU2011-1053
Nicholas Deutscher, Vanessa Sherlock, Sara Mikaloff-Fletcher, David Griffith, Ronald Macatangay, John Robinson, Dan Smale, Brian Connor, and Justus Notholt
 Understanding CO₂ Fluxes with Southern Hemisphere TCCON column and surface measurements and tagged tracer modeling
- 14:45–15:00 EGU2011-9572
Charles Miller, Le Kuai, Brian Connor, Debra Wunch, Run-Lie Shia, Geoffrey Toon, Paul Wennberg, and Yuk Yung
 Retrieval of CO₂ vertical profile information from TCCON
- Chairperson: n.n.
- 15:30–15:45 EGU2011-7221
Christoph Gerbig, Roberto Kretschmer, and Frank-Thomas Koch
 Are column measurements of GHGs better suited for inverse modeling than in-situ measurements?
- 15:45–16:00 EGU2011-12074
Frederic Chevallier
 Monitoring the CO₂ surface emissions and surface sinks from space
- 16:00–16:15 EGU2011-13011
 Julia Marshall and **Martin Heimann**
 Detection of greenhouse gas point and regional scale sources from next generation space instruments
- 16:15–16:30 EGU2011-9029
 Michael Gunson, **Annmarie Eldering**, David Crisp, and Charles Miller
 The Orbiting Carbon Observatory (OCO-2) Mission and ACOS
- 16:30–16:45 EGU2011-9865
Heinrich Bovensmann and the CarbonSat Team
 CarbonSat - Quantification of natural and man-made greenhouse gas surface fluxes from satellite observations of atmospheric CO₂ and CH₄ column amounts
- 16:45–17:00 EGU2011-9955
Gerhard Ehret, Pierre Flamant and the MERLIN Science Advisory Group Team
 The Methane Remote Lidar Mission MERLIN

AS3.16 – Remote-Sensing of Atmospheric Carbon Dioxide and Methane – Posters

Convener: Hartmut Boesch | Co-Conveners: Sander Houweling, Michael Buchwitz, Justus Notholt, Martine De Mazière, Ralf Sussmann

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

- XY99 EGU2011-560
Manvendra Dubey
 Solar Fourier Transform Spectrometry in mid-near infrared and visible-ultraviolet to monitor greenhouse gas and co-emitted pollutant emissions from Four Corners, NM power plants
- XY100 EGU2011-13967
Martine De Mazière, Filip Desmet, Christian Hermans, Alexis Merlaud, Francis Scolas, Pierre Gérard, Cindy Senten, Jean-Luc Baray, Valentin Duflot, and Jean-Marc Metzger
 New TCCON compliant measurements at Ile de La Réunion
- XY101 EGU2011-9738
Janina Messerschmidt, Huilin Chen, Christoph Gerbig, Krzysztof Katrynski, Frank-Thomas Koch, Jost Valentin Lavric, Justus Notholt, Wouter Peters, Christian Rödenbeck, and Thorsten Warneke
 Automated FTS measurements at the site Bialystok in comparison with in-situ measurements and model data
- XY102 EGU2011-10043
Jon Angelbratt and Johan Mellqvist
 A new method to detect long term trends of methane (CH₄) and nitrous oxide (N₂O) total columns measured within the NDACC ground-based high resolution solar FTIR network
- XY103 EGU2011-11210
 Frank Forster, **Ralf Sussmann**, Markus Rettinger and the NDACC-TCCON-Intercomparison Team
 First comparison of column-averaged methane derived from near-infrared and mid-infrared solar spectra

- XY104 EGU2011-3391
Whitney Bader, Bernard Lejeune, Philippe Demoulin, Pierre Duchatelet, Ginette Roland, Kengo Sudo, Hisashi Yashiro, and Emmanuel Mahieu
 Extension of the long-term total column time series of atmospheric methane above the Jungfraujoch station: analysis of grating infrared spectra between 1976 and 1989
- XY105 EGU2011-7901
Vanessa Sherlock, John Robinson, Brian Connor, Hisako Shiona, Nicholas Deutscher, David Griffith, Ronald Macatangay, Isamu Morino, and Osamu Uchino
 Southern Hemisphere validation of GOSAT XCO₂ and XCH₄ from TCCON solar FTS measurements in Australia and New Zealand
- XY106 EGU2011-10168
Dietrich Feist, Marc Geibel, Ronald Macatangay, Nicholas Deutscher, Nicholas Jones, and David Griffith
 Intercomparison of total column trace gas measurements by two TCCON FTIR instruments at Wollongong, Australia
- XY107 EGU2011-3895
Susanne Dohe, Eliezer Sepúlveda, Matthias Schneider, Angel Gómez, Omaira Garcíá, Emilio Cuevas, Frank Hase, Thomas Blumenstock, and Juan Carlos Guerra
 Total Carbon Column Observing Network (TCCON) activities at Izana Atmospheric Research Center, Tenerife Island (28.3 N, 16.5 W) and KIT Campus North, Karlsruhe, Germany (49.1 N, 8.5 E)
- XY108 EGU2011-6594
Christoph Popp, Dominik Brunner, and Brigitte Buchmann
 Compiling columnar averaged CO₂ and CH₄ mixing ratios from ground-based in-situ measurements for evaluating satellite-based greenhouse gas products
- XY109 EGU2011-326
Jens Heymann, Oliver Schneising, Maximilian Reuter, Michael Buchwitz, Vladimir V. Rozanov, Heinrich Bovensmann, and John P. Burrows
 Error characterization of SCIAMACHY WFM-DOAS XCO₂: Impact of aerosols and cirrus clouds
- XY110 EGU2011-12578
Clark Weaver, Jianping Mao, Stephen R. Kawa, and James Abshire
 Retrievals of CO₂ and Surface Pressure from GOSAT TANSO FTS radiances in pristine conditions
- XY111 EGU2011-412
Austin Cogan, Hartmut Boesch, Robert Parker, Diane Knappett, Tatsuya Yokota, Yokio Yoshida, and The ACOS Team
 A New Approach to Constrain Aerosols in Retrievals of Atmospheric CO₂ from GOSAT
- XY112 EGU2011-1047
Michael Buchwitz, Hartmut Boesch, Otto Hasekamp, Guenter Lichtenberg, Cyril Crevoisier, Gabriele Stiller, Martine De Maziere, Dominik Brunner, Frederic Chevallier, and Claus Zehner
 ESA Climate Change Initiative (CCI) project GHG-CCI: A project to deliver the Essential Climate Variable (ECV) Greenhouse Gases
- XY113 EGU2011-2913
Stefan Noël, Klaus Bramstedt, Alexei Rozanov, Heinrich Bovensmann, and John P. Burrows
 Retrieval of Stratospheric CH₄ Profiles from SCIAMACHY Solar Occultation Measurements using a DOAS approach
- XY114 EGU2011-11710
Robert Parker, Hartmut Boesch, Austin Cogan, Paul Palmer, Annemarie Fraser, Liang Feng, Thorsten Warneke, Janina Messerschmidt, Nicholas Deutscher and the The TCCON Team
 One year of global CH₄ observations from GOSAT: Validation and model comparison
- XY115 EGU2011-7127
Florian M. Schwandner, Simon A. Carn, Elisabet M. Head, and Christopher G. Newhall
 Volcanic carbon dioxide emissions: observations from space using GOSAT FTS SWIR data
- XY116 EGU2011-12309
Christian Frankenberg, Andre Butz, Joshua B. Fisher, Geoffrey C. Toon, Akihiko Kuze, Tatsuya Yokota, Grayson Badgley, and John Worden
 Global remote sensing of chlorophyll fluorescence using high-resolution O₂ A-band spectra recorded by the GOSAT satellite
- XY117 EGU2011-11664
Cyril Crevoisier, Delphine Nobileau, Raymond Armante, Laurent Crépeau, Thibaud Thonat, Jérôme Pernin, Noëlle A. Scott, and Alain Chédin
 The recent increase of methane as seen by IASI onboard MetOp-A in the tropical band
- XY118 EGU2011-3167
Andre Galli, Andre Butz, Otto Hasekamp, Jochen Landgraf, Paul Tol, and Ilse Aben
 New Evaluation Algorithm for Methane Retrieval from TROPOMI Measurements

- XY119 EGU2011-598
Thomas Krings, Konstantin Gerilowski, Michael Buchwitz, Heinrich Bovensmann, John P. Burrows, Andreas Tretner, Torsten Sachs, and Jörg Erzinger
 Carbon dioxide (CO₂) emission rate estimates for coal fired power plants and analysis from MAMAP airborne instrument data
- XY120 EGU2011-10567
changsub shim, Ray Nassar, and Jhoon Kim
 Atmospheric CO₂ budget analysis over East Asia with satellite sensing and GEOS-Chem
- XY121 EGU2011-10851
Charles Miller
 CARVE: The Carbon in Arctic Reservoirs Vulnerability Experiment
- XY122 EGU2011-10977
Ling-Xi Zhou
 In-situ atmospheric measurement and comparison with satellite retrieval of column CO₂ and CH₄ mole fractions
- XY123 EGU2011-3863
Annamarie Eldering, Stanley Sander, Jean-Francois Blavier, David Rider, John Worden, Kevin Bowman, Jessica Neu, and Vijay Natraj
 Improving Carbon Flux Estimates with Diurnal Profiling of Greenhouse Gases from Geostationary Orbit
- XY124 EGU2011-2433
Hartmut Boesch, Paul Palmer, Mike Cutter, Liang Feng, Alan O'Neil, Anthony Freeman, and John Worden
 The Tropical Carbon Mission (TCM): quantifying tropical carbon fluxes from space
- XY125 EGU2011-11132
 James Abshire, Clark Weaver, Haris Riris, **Jianping Mao**, Xiaoli Sun, Graham Allan, William Hasselbrack, and Edward Browell
 Analysis of Pulsed Airborne Lidar measurements of Atmospheric CO₂ Column Absorption from 3-13 km altitudes
- XY126 EGU2011-8274
Christoph Kiemle, Mathieu Quatrevalet, Gerhard Ehret, Axel Amediek, Andreas Fix, and Martin Wirth
 Performance Simulations for the Space-based Methane Lidar Mission MERLIN
- XY127 EGU2011-10183
Susanne Schweitzer, Jin-Guo Wang, James Brooke, Philip Martin, Vasili Kasiutsich, Veronika Proschek, Christoph Gerbig, Gottfried Kirchengast, Peter Bernath and the IRDAS-EXP Team
 A long-range link experiment demonstrating infrared-laser occultation for measurement of atmospheric greenhouse gases
- XY128 EGU2011-12598
Edward Browell, Jeremy Dobler, F. Wallace Harrison, and Berrien Moore III
 Development and Validation of CO₂ and O₂ Laser Measurements for Future Active XCO₂ Space Mission

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

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

Room: 15

Chairperson: Gregor C. Leckebusch

- 13:30–13:45 EGU2011-110
x. I. Wang, y. Feng, g. p. Compo, j. s. Whitaker, p. d. Sardeshmukh, r. j. Allen, and v. r. Swail
 Extra-tropical cyclone activity in the ensemble of 20th Century Reanalysis (20CRv2)
- 13:45–14:00 EGU2011-4411
Yulia Zyulyaeva, Irina Rudeva, and Sergey Gulev
 Centennial and decadal scale changes of synoptic activity in 20C Reanalysis (1871-2008): reliability and evaluation
- 14:00–14:15 EGU2011-6731
Oliver Krueger and Hans von Storch
 On air pressure and past storm activity - an assessment of the informational value of proxies for past storm activity
- 14:15–14:30 EGU2011-6829
Urs Neu, Mirseid Akperov, Angela Coccozza, Masaru Inatsu, Sarah Kew, Kevin Keay, Christoph C. Raible, Irina Rudeva, Sven Ulbrich, Xiaolan L. Wang and the IMILAST Team
 Intercomparison of mid latitude storm diagnostics (IMILAST) - first results
- 14:30–14:45 EGU2011-1688
Mirseid G. Akperov and Igor I. Mokhov
 Estimation of tendencies of change for different characteristics of extratropical cyclones and anticyclones in the Northern Hemisphere

- 14:45–15:00 EGU2011-1349
Carsten Frederiksen, Jorgen Frederiksen, Janice Sisson, and Stacey Osbrough
 Observed Changes and Projections in Southern Hemisphere Mid-latitude Storms, Rainfall and Circulation
 Chairperson: Joaquim G. Pinto
- 15:30–15:45 EGU2011-11166
Helen Dacre and Marc Stringer
 A 3-dimensional composite study of cyclone structure and evolution
- 15:45–16:00 EGU2011-7467
 John Kouroutzoglou, Helena A. Flocas, Ian Simmonds, Kevin Keay, and **Maria Hatzaki**
 On the vertical structure of Mediterranean explosive cyclones employing a high resolution dataset
- 16:00–16:15 EGU2011-6200
Adrian Champion, Kevin Hodges, and Lennart Bengtsson
 Extreme Precipitation from Extra-Tropical Storms: A Limited Area Model Climate Change Analysis
- 16:15–16:30 EGU2011-2558
Christopher Moseley, Holger Göttel, and Daniela Jacob
 Analysis of cyclone water budgets in the North Atlantic and their role for Europe
- 16:30–16:45 EGU2011-8965
Marco Reale and Piero Lionello
 Characterization of cyclones producing intense precipitation events in the Mediterranean region
- 16:45–17:00 EGU2011-9544
Nicholas Graham and Daniel Cayan
 Projections of 21st Century Winter Wave Climate in the North Pacific under the SRES A2 Scenario using a Numerical Wave Model

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

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

Hall XL | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Uwe Ulbrich

- XL64 EGU2011-111
x. I. Wang, y. Feng, v. r. Swail, g. p. Compo, j. s. Whitaker, p. d. Sardeshmukh, and r. j. Allen
 Inter-comparison of extra-tropical cyclone activity in five reanalysis datasets
- XL65 EGU2011-4962
Natalia Tilinina, Sergey Gulev, Irina Rudeva, and Peter Koltermann
 Cyclone activity in different modern reanalyses: comparative assessment
- XL66 EGU2011-1316
Jens Grieger, Gregor C. Leckebusch, Mareike Schuster, and Uwe Ulbrich
 Southern Hemisphere cyclone development and transient moisture flux under recent and anthropogenic climate conditions
- XL67 EGU2011-2083
Lan Xia, Frauke Feser, Matthias Zahn, and Hans von Storch
 Long-term Analysis of Extratropical Cyclone Activity by Tracking and Clustering Methods
- XL68 EGU2011-7636
Pauli Jokinen, Heikki Tuomenvirta, and Andrea Vajda
 Changes in severe wind gust frequencies by the 2050s in Europe
- XL69 EGU2011-8611
Madeleine-Sophie Déroche
 Extreme European Winter Storms: Sensitivities to Detection Methods and Reanalysis Datasets
- XL70 EGU2011-13861
Gregor C. Leckebusch, Daniel J. Befort, Uwe Ulbrich, Annette Ganske, Hartmut Heinrich, and Gudrun Rosenhagen
 Estimation of storm surge potential under anthropogenic climate change for the German Bight by means of high resolution storm simulations
- XL71 EGU2011-12104
Gregor C. Leckebusch, Tobias Pardowitz, Uwe Ulbrich, Markus Donat, Olaf Burghoff, Ulrich Bröcker, and Arthur Kubik
 On the use of synthetic insurance data in extra-tropical storm loss estimations with high regional resolution
- XL72 EGU2011-7600
Robert Osinski, Philip Lorenz, Tim Kruschke, Maximilian Voigt, Gregor C. Leckebusch, and Uwe Ulbrich
 Representation of Winter Storms in the ECMWF's Ensemble Prediction System

- XL73 EGU2011-8903
Tim Kruschke, Gregor C. Leckebusch, Dominik Renggli, and Uwe Ulbrich
Frequency and intensity of synoptic-scale winter storms under anthropogenic climate change
- XL74 EGU2011-9728
Katrin Nissen, Alexander Pasternack, Gregor C. Leckebusch, and Uwe Ulbrich
Regional characteristics of wind storms over Europe in an ensemble of climate change simulations
- XL75 EGU2011-10217
Katrin Nissen, Marco Reale, Gregor C. Leckebusch, Piero Lionello, Joaquim G. Pinto, Sven Ulbrich, and Uwe Ulbrich
Comparison of cyclone statistics based on two cyclone tracking algorithms - a contribution to IMILAST
- XL76 EGU2011-5559
Sven Ulbrich, Joaquim G. Pinto, Margarida L.R. Liberato, Isabel F. Trigo, and Ricardo M. Trigo
Evaluation and climatology of explosive developments in ERA Interim under consideration of multiple tracking approaches
- XL77 EGU2011-10367
Margarida L. R. Liberato, Isabel F. Trigo, Ricardo M. Trigo, Sven Ulbrich, and Joaquim G. Pinto
Storm Xynthia: Life-cycle and impacts of an extreme extra-tropical cyclone in the Euro-Atlantic Region
- XL78 EGU2011-10544
Iñigo Gómara, Belén Rodríguez-Fonseca, Carlos Yagüe, and Concepción Rodríguez-Puebla
Influence of the NAO on the properties of explosive cyclones
- XL79 EGU2011-11203
Helen Dacre, Suzanne Gray, and Lorena Garcies
Quantifying the sensitivity of North Atlantic cyclone development to atmospheric precursor fields
- XL80 EGU2011-10277
Pedro Ribera, **Paulina Ordoñez**, Laura del Rio, Javier Benavente, Maricarmen Alvarez-Castro, and Cristina Peña-Ortiz
Reconstruction of historical coastal storms in the Spanish coasts of the Gulf of Cadiz, 1929-2005
- XL81 EGU2011-1491
Paolo Boi and Marino Marrocu
Frequency, seasonal dependence and synoptic scale patterns of cyclones associated to very intense rainfall on Sardinia island.
- XL82 EGU2011-8840
Marino Marrocu, Antioco Vargiu, Gabriella Pusceddu, and Paolo Boi
Study of intense precipitation events during the last 40 years in Sardinia (Italy) by dynamical downscaling and regional climate modeling.
- XL83 EGU2011-8976
Michelle Simões Reboita, João Rafael Dias Pinto, and Rosmeri P. da Rocha
Environmental conditions associated to a subtropical cyclone development over the southwest of the Atlantic Ocean
- XL84 EGU2011-7334
Alice Favre
Cutoff Lows' frequency and large-scale climate modes in the Southern Hemisphere
- XL85 EGU2011-5748
Xiangdong Zhang and Soumik Basu
Modeling Investigation of the Recently Intensified North American Winter-Spring Storm Activities
- XL86 EGU2011-5271
Kuranoshin Kato and Kenichi Matsuo
Appearance of storm track along Mongolia to northern Japan and the seasonal temperature rise from winter to spring around the western Japan

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

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

Room: 10

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

- 08:30–08:45 EGU2011-12911
Deniz Bozkurt, Baris Onol, and Omer Lutfi Sen
Simulated intense convective precipitation over the Black Sea coasts: sensitivity to temporal modifications of SST
- 08:45–09:00 EGU2011-3103
Yves Trambly, Luc Neppel, Julie Carreau, and Kenza Najib
Non-stationary frequency analysis with climatic covariates of heavy rainfall events in the French Mediterranean region

- 09:00–09:15 EGU2011-10251
Margarida L. R. Liberato, Isabel F. Trigo, and Ricardo M. Trigo
 Variability of Extreme Precipitation Events in Western Iberia
- 09:15–09:30 EGU2011-5719
Marina Baldi, Virginia Ciardini, John David Dalu, and Tiziana De Filippis
 A climatology of hail frequency and intensity in Italy
- 09:30–09:45 EGU2011-11767
Juan Cuesta, Pierre H. Flamant, and Cyrille Flamant
 Aggravation of air quality conditions due to multi-layer aerosol load in the Paris area during the heatwave of August 2003
- 09:45–10:00 EGU2011-10820
Jan Bliefernicht, András Bárdossy, Harald Kunstman, and Patrick Laux
 Robust identification of rare atmospheric states for statistical downscaling of hydro-meteorological extremes

COFFEE BREAK

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

- 10:30–10:45 EGU2011-4462
 Rana Samuels, Maayan Harel, and **Pinhas Alpert**
 Building High Resolution Climate Change Ensembles for Forecasting Future Rainfall in the Middle East
- 10:45–11:00 EGU2011-10015
Christian Dobler
 Assessment of climate change impacts on flood hazard potential in an Alpine watershed
- 11:00–11:15 EGU2011-7649
Markus Stowasser, Ivo Bánovský, Erasmo Buonomo, Carlo Buontempo, Thomas Dubeau, Cressida Ford, Jane Toothill, and Silvio Tschudi
 Climate Change and Extreme Surface Flooding in Northern Italy
- 11:15–11:30 EGU2011-5141
Markus Donat, Tobias Pardowitz, Gregor C. Leckebusch, and Uwe Ulbrich
 Estimating the risk of losses caused by winter storms in Germany
- 11:30–11:45 EGU2011-12411
Jürgen Grieser, Christos Mitas, and Steve Jewson
 Modelling Wind Loss from Convective Events in Europe - Hazard, Vulnerability, Exposure
- 11:45–12:00 EGU2011-13853
John Tzabiras, Athanasios Loukas, and Lampros Vasiliades
 Evaluation of monthly precipitation downscaling methods accuracy for the assessment of climate change impacts on droughts

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

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

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

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

- XY174 EGU2011-195
 Boryana Markova, Viara Rafailova, Rumjana Mitzeva, and **Guergana Guerova**
 Severe thunderstorm developed on 28 June 2007 over northeast Bulgaria
- XY175 EGU2011-1389
Stephan Pfahl and Heini Wernli
 Spatial coherency of extreme weather events in Central Europe
- XY176 EGU2011-2700
Florinela Georgescu and Sabina Stefan
 Dynamic of the troposphere in cases of weather extreme events
- XY177 EGU2011-2704
 Ana C. Costa, **João A. Santos**, and Joaquim G. Pinto
 Climate change scenarios for precipitation extremes in Portugal based on COSMO-CLM ensemble simulations
- XY178 EGU2011-5173
Seth Westra
 Joint dependence between extreme rainfall and storm surge in the coastal zone

- XY179 EGU2011-6698
Kai Born, Rabea Haas, Patrick Ludwig, Adam Podlaha, and Joaquim G. Pinto
Extreme Winds: Improvement of RCM storm simulations using gust parameterizations and MOS
- XY180 EGU2011-6721
Patrick Ludwig, Kai Born, Radovan Drinka, Alexandros Georgiadis, and Joaquim G. Pinto
Diagnosis of exceptional recent European winter storms
- XY181 EGU2011-6909
Susanna Mohr and Michael Kunz
Trend analysis of convective indices relevant for hail events in Germany
- XY182 EGU2011-6910
Ingo Meirold-Mautner, Benedikt Bica, and Yong Wang
INCA-CE: A Central European initiative in nowcasting applications
- XY183 EGU2011-6933
Haiyan Zhao, Ge Gao, Peiqun Zhang, and Xiaodong Yan
The modification of Meteorological Drought Composite Index
- XY184 EGU2011-7416
Blaz Kurnik, Andrej Cegljar, and Lucka Kajfez Bogataj
Assessing droughts in Europe using Standardised Precipitation Index (SPI) and Regional Climate Models (RCMs)
- XY185 EGU2011-12632
Johannes Merklein and Oleg Panferov
3D-Modelling of the destructive effects of windstorms on spatially complex forests
- XY186 EGU2011-11550
Jose de Jesus Salas Perez, Carme Llasat, and Carlos González-Gándara
Climatology of the Nortes of the Gulf of Mexico
- XY187 EGU2011-12985
Andrés Merino, Eduardo García-Ortega, **Laura López**, and José Luis Sánchez
Pre-frontal hailstorm episodes in the Iberian Peninsula: identification, analysis and prediction.
- XY188 EGU2011-1582
Emanuele Eccel, Piero Cau, Kathrin Riemann-Campe, and Franco Biasioli
Climatology of hailstorms in an alpine area and its links with atmospheric precursors
- XY189 EGU2011-2318
francesco cioffi, Upmanu Lall, Evgeny Volodin, Christina Karamperidou, and Roberto Purini
21st Century Projections of Precipitation Extremes in the Mediterranean from a medium resolution GCM
- XY190 EGU2011-4541
Weibiao Li
Characteristics of the Precipitation Extremes over the Urban Areas of the Pearl River Delta of China
- XY191 EGU2011-7558
Thorsten Simon, Christian Ohlwein, and Andreas Hense
Downscaling of Monsoon Precipitation in Poyang Basin, China, using a Generalized Pareto Distribution
- XY192 EGU2011-10387
Nikolay Sidorenkov
Causes of anomalous hot summers and the possibility of their forecasts
- XY193 EGU2011-10697
Christos Mitas
Numerical Simulation of Extreme European Windstorms
- XY194 EGU2011-11616
Sarah Kew, Frank Selten, Geert Lenderink, and Wilco Hazeleger
Robust assessment of future changes in extreme precipitation over the Rhine basin using a GCM
- XY195 EGU2011-12289
Amilcar Soares, Dora Roque, Pedro Benevides, Pedro Nunes, Ricardo Armas, and Maria Pereira
Desertification Indicators derived from Earth Observation Data: Application to Portugal and Brazil
- XY196 EGU2011-12331
Martin Granerød and Haraldur Ólafsson
Climatology and meteorology of lightnings in Norway
- XY197 EGU2011-10835
Giuseppe Delmonaco, Domenico Fiorenza, Luca Guerrieri, Carla Iadanza, Claudio Margottini, **Daniele Spizzichino**, Alessandro Trigila, and Eutizio Vittori
Geological risk assessment, mitigation and IT services and tools management: the BRISEIDE Project approach
- XY198 EGU2011-13809
Zhou Haiguang
Mesoscale Structure of the Snow Storm in Zhejiang on 29 January 2008 by Dual-radar
- XY199 EGU2011-7439
Olga Petrucci, Maurizio Polemio, and A.Aurora Pasqua
Damaging Hydrogeological Events in Calabria (Italy): new results of an ongoing historical research

XY200 EGU2011-11928

Alessio Capriolo, Francesca Giordano, Rosa Anna Mascolo, and Daniele Spizzichino
Climate change and disaster risk reduction through adaptation plans and policies: the ACT (Adapting to Climate change in Time) project approach

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

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

Room: 19

Chairperson: n.n.

15:30–15:45 EGU2011-571

A Babatunde Rabi

African Geospace Society: Example of Continental-Wide Collaboration in Africa

15:45–16:00 EGU2011-4992

Monique Petitdidier, Charles Barton, Boubakar Barry, Victor Chukwuma, and Les Cottrell

eGY-Africa - better Internet connectivity to reduce the digital divide

16:00–16:15 EGU2011-13510

Tom Yoksas, Raj Pandya, Abudulai Adams-Forgor, Patricia Akweongo, Vanja Dukic, Mary Hayden, Tom

Hopson, Benjamin Lamptey, Roberto Mera, Sylwia Trazka and the UCAR Africa Initiative Team

The UCAR Africa Initiative - Overview and Update

16:15–16:30 EGU2011-2181

Stefano Nativi, Steffen Fritz, Russ Lefevre, Paolo Mazzetti, and Stuart Marsh

EGIDA: Coordinating Earth and Environmental cross-disciplinary projects to promote GEOSS

16:30–16:45 EGU2011-6514

Joan Maso

GeoViQua: Making quality easy for the Global Earth Observation System of System

16:45–17:00 EGU2011-13502

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

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

BG5.1 – Integration of Environmental, Socio-Economic and Climatic Change Studies in Northern Eurasia (co-listed) –

Posters

Convener: Pavel Groisman | Co-Conveners: Amber Soja, Alexey V. Eliseev, Chaba Mátyás

Poster Area BG | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

BG89 EGU2011-12559

Pavel Groisman, Vladimir Kattsov, and Richard Lawford

Northern Eurasia Earth Science Partnership Initiative (NEESPI) in 2010: An Overview of the Current Status

BG90 EGU2011-12855

David McCabe, **Pavel Groisman** and the "Open Burning and the Arctic" conference (St. Petersburg, Russia,

Nov. 2010) Source Apportionment Team

Open Burning and the Arctic: Current Knowledge and Priorities for Future Research

BG91 EGU2011-2233

Irena Borzenkova, Pavel Groisman, Anna Mescherskaya, Olga Bulygina, and Vyacheslav Razuvaev

Extraordinary Heat Wave over European Russia in Summer 2010: What do the Data say?

BG92 EGU2011-960

Margarita Syromyatina, Igor Moskalenko, and Kirill Chistyakov

Space-time features of climate changes in the Altai Mountains and alpine landscapes response

BG93 EGU2011-1586

Alexey V. Eliseev, Maxim M. Arzhanov, and Igor I. Mokhov

Bayesian climate projection for the northern subpolar land based on ensemble of global climate models forced by SRES A1B scenario

BG94 EGU2011-170

Julia Palamarchuk and Sergiy Ivanov

Regional and local variability of precipitation in Europe

BG95 EGU2011-1601

Alexander V. Chernokulsky, Mirseid G. Akperov, Olga N. Bulygina, and Igor I. Mokhov

Changes in cloudiness and cyclonic/anticyclonic activity over Russia during last decades from observations and reanalyses data

- BG96 EGU2011-4794
Yury Gurfinkel
Solar activity and cardiovascular pathology
- BG97 EGU2011-11524
Dmitry Schepaschenko, Anatoly Shvidenko, and Lyudmila Mukhortova
Organic carbon in Russian soils: A specified spatially explicit assessment
- BG98 EGU2011-1898
Leonid L. Golubyatnikov
Model estimation of carbon flux from the soil: Russia case study
- BG99 EGU2011-2796
Galina Ivanova, Susan Conard, Anna Bogorodskaja, Valery Ivanov, Natalia Kovaleva, Eugenia Krasnoshekova, Elena Kukavskaya, Pavel Tarasov, and Sergey Zhila
Estimating and Monitoring Effects of Fire Severity on Ecosystem Components of Siberian Scots pine forests
- BG100 EGU2011-13171
Amber Soja, David Westberg, Paul Stackhouse, Jr, Douglas McRae, Ji-Zhong Jin, Anatoly Sukhinin, and Nadezda Tchebakova
Analysis of the Ability of Large-scale Reanalysis Data to Define Siberian Fire Danger in Preparation for Future Fire Weather
- BG101 EGU2011-5161
Brian Stocks and Donald Cahoon Jr.
Reconstructing Post-1979 Forest Fire Activity and Area Burned in Russia: NOAA AVHRR Analysis
- BG102 EGU2011-10479
Nadja Tchebakova, Almuth Arneth, Luca Beilelli, Chiara Corradi, Julia Kurbatova, Elena Parfenova, Natalia Vygodskaya, Ernst-Detlef Schulze, and Riccardo Valentini
Energy and water exchange in various ecosystems in central Siberia (from eddy covariance measurements)
- BG103 EGU2011-6931
Mihaela Laurenta Alexandrov, **Razvan Doru Mateescu**, Daniel Pertenatu, and Alina Spinu
The Romanian littoral - coastal geomorphologic changes during the last half of Century (1961-2011); its impact on the coastal development and solutions for protection and rehabilitation
- BG104 EGU2011-11542
Csaba Mátyás
Situation and Needs Regarding Forests and Climate Change Adaptation in Eastern Europe and Central Asia
- BG105 EGU2011-13934
Éva Konkoly-Gyuró, Csaba Mátyás, Géza Kiraly, **Pál Balázs**, and Áron Drüsler
Drivers and effects of long-term land use changes on climate, environment and socioeconomy in Central Europe
- BG106 EGU2011-6740
Maria Artamonova, Alexander Babyakin, **Natalia Efimenko**, Nina Povolotskaya, Igor Polozkov, David Topuriya, Elena Chalaya, Georgii Golitsyn, and Irina Senik
New approaches to the assessment of pathogenicity of weather conditions and aerosol pollution of the atmosphere for resorts
- BG107 EGU2011-4148
Vladimir P. Shevchenko, Oleg S. Pokrovsky, Dina P. Starodymova, Liudmila S. Shirokova, Rinat M. Manassypov, and Natalia S. Zamber
Terricolous lichens as biomonitor of environmental pollution in the Northern Eurasia
- BG108 EGU2011-12179
Irina N. Sokolik, Viatcheslav Tatarskii, Xin Xi, and Igor Shkolnik
Examining interactions between climate, droughts and dust events in Central Asia
- BG109 EGU2011-9653
Boris D. Belan, Pavel N. Antokhin, Viktoriya Arshinova, Sergey B. Belan, Aleksandr V. Fofonov, Georgii A. Ivlev, Tatyana M. Rasskazchikova, and Mikhail Yu. Arshinov
Blocking effect of Ural Mountains on transboundary transport of pollutants from Europe to Northern Asia
- BG110 EGU2011-6067
Mikhail Yu. Arshinov, Denis V. Simonenkov, Boris D. Belan, and Gennadii N. Tolmachev
Spatio-temporal variations of chemical composition of atmospheric aerosols over background region of southern part of Western Siberia
- BG111 EGU2011-5935
Mikhail Yu. Arshinov, Denis V. Simonenkov, Boris D. Belan, Gennadii N Tolmachev, Tatyana M Rasskazchikova, Tatyana K Sklyadneva, and Nina V. Uzhegova
Chemical composition of background aerosols sampled in Siberia

OS5.2 – Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-listed) – Posters
Convener: Alexander Babanin | Co-Conveners: Miguel Onorato, Fangli Qiao

Halls X/Y | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Alex Babanin, Miguel Onorato, Fangli Qiao

- XY450 EGU2011-5374
Alexander Babanin and Dmitry Chalikov
Numerical investigation of turbulence generation in non-breaking potential waves
- XY451 EGU2011-9087
Jonas Takeo Carvalho and Valdir Innocentini
Wind wave climate along Brazilian coast using a spectral partitioning algorithm
- XY452 EGU2011-4410
Dejun Dai, Fangli Qiao, Wojciech Sulisz, Lei Han, and Alexander Babanin
An Experiment on the Non-Breaking Surface-Wave-Induced Vertical Mixing
- XY453 EGU2011-4389
Vladimir Dulov and Maria Kosnik
A Field Study of 2D-Wavenumber Spectra of Short Wind Waves
- XY454 EGU2011-1520
Alina Galchenko, Alexander Babanin, and Dmitry Chalikov
Influence of wind forcing on evolution and breaking of nonlinear wave groups.
- XY455 EGU2011-7390
Georgia Kalantzi, **Christine Gommenginger**, and Meric Srokosz
Spectral wave dissipation, operational wave models and observations: is there a way of improving wave forecasts?
- XY456 EGU2011-7116
Charles-Antoine Guérin and Guillemette Caulliez
Statistical properties of short wind waves: a high resolution laboratory study
- XY457 EGU2011-2837
Mark Hemer, Kathleen McInnes, and Roshanka Ranasinghe
Projected future wave climate along Australia's eastern margin
- XY458 EGU2011-12478
Rajesh Kumar, Anna Rutgersson, and Prasad Kumar
Impact of rain in modifying wave height in a coupled wave - climate model
- XY459 EGU2011-10268
Alexey Mironov
Theoretical description of breaking crests distributions measured in field conditions
- XY460 EGU2011-10250
Alexey Mironov, Charles-Antoine Guerin, Danièle Hauser, Maria Kosnik, and Vladimir Dulov
Statistical properties of short wind-waves obtained from photo-stereo observations of sea surface.
- XY461 EGU2011-6352
Miguel Onorato and Francesco Zonta
Direct numerical simulation of the boundary layer induced by surface gravity waves
- XY462 EGU2011-5158
Ruslan Puscasu, Alexander Babanin, and Michael Stiassnie
Numerical investigation of a novel wave-action transfer model for near-resonant water waves
- XY463 EGU2011-4145
Fangli Qiao, Zhenya Song, Changshui Xia, and Dejun Dai
The improvement of ocean and climate models through surface wave: From mean state to long-term variations
- XY464 EGU2011-12871
Ivan Savelyev and Robert Handler
Infrared imaging of near-surface eddies generated by steep and by breaking surface waves.
- XY465 EGU2011-6275
Mathieu Dutour Sikirić, Aron Roland, Ivica Janeković, Igor Tomažič, and Milivoj Kuzmić
Two-way coupling of ROMS and WWM models
- XY466 EGU2011-4629
Zhenya Song and Fangli Qiao
The establishment of the atmosphere-wave-ocean circulation coupled models-The improvement of CGCMs's simulations by the wave-induced vertical mixing
- XY467 EGU2011-2099
Chia-Huan Ting, Alexander Babanin, and Dmitry Chalikov
Dependence of Drag Coefficient on the Directional Spreading of Ocean Waves
- XY468 EGU2011-5399
Alessandro Toffoli, Alexander Babanin, and Jason McConochie
Field observations of the mixed layer depth in the Indian Ocean: effect of wave-induced turbulence

- XY469 EGU2011-8695
Oleg Druzhinin and **Yuliya Troitskaya**
Investigation of statistical parameters of turbulent air flow over waded water surface by direct numerical simulation
- XY470 EGU2011-4501
Wu-ting Tsai and Li-ping Hung
Characteristics of interfacial transport in a wind-driven gravity-capillary surface wave
- XY471 EGU2011-12295
Kimmo K Kahma, **Laura Tuomi**, and Heidi Pettersson
Wave statistics in seasonally ice-covered seas
- XY472 EGU2011-2794
Anatoli Vakhguel and Alexander Babanin
Influence of water droplet size variations on propagation of the pressure wave above water surface
- XY473 EGU2011-5966
Soeren H. Ahmerkamp, **Jörg-Olaf Wolff**, and Stephen G. Monismith
On wave motions at the steep slope of a coral reef
- XY474 EGU2011-6958
Changshui Xia and Fangli Qiao
The Establishment of the Wave-circulation Coupled Model and Its Application

