

EGU General Assembly 2012
Programme Group Programme
AS – Atmospheric Sciences

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Monday, 23 April

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

Convener: S. C. Michaelides | Co-Conveners: A. Hou, V. Levizzani, K. Nakamura

Room: 14

Chairperson: S. Michaelides, G. Huffman, K. Nakagawa

- 08:30–08:45 EGU2012-11862
M. Colli, P.W. Chan, L.G. Lanza, and P. La Barbera
 A laboratory assessment of the measurement accuracy of weighing type rainfall intensity gauges
- 08:45–09:00 EGU2012-13991
M. Thurai, C.R. Williams, and V.N. Bringi
 Examining the correlations between drop size distribution parameters using data from two side-by-side 2D-video disdrometers
- 09:00–09:15 EGU2012-12543
R. Steinacker and D. Mayer
 An Objective Method to derive the variable height-dependence of precipitation
- 09:15–09:30 EGU2012-696
N. Roberto, L. Baldini, E. Gorgucci, L. Facheris, and V. Chandrasekar
 COSMO-SkyMed measurements in precipitation over the sea: analysis of Louisiana summer thunderstorms by simultaneous weather radar observations
- 09:30–09:45 EGU2012-11905
S. Thorndahl, J.A. Smith, and W.F. Krajewski
 Hydrometeorological and statistical analyses of heavy rainfall in Midwestern USA
- 09:45–10:00 EGU2012-6925
J.-D. Jou
 Precipitation Characteristics and Associated Environment Regimes during SoWMEX/TiMREX

COFFEE BREAK

Chairperson: V. Levizzani, C. Klepp, M. Kachi

- 10:30–10:45 EGU2012-5442
M. Ziese, U. Schneider, A. Meyer-Christoffer, P. Finger, K. Lehner, E. Rustemeier, A. Becker, and B. Rudolf
 Updated Gridded Analysis Products provided by the Global Precipitation Climatology Centre (GPCC), its Quality Control, and Interpolation Schemes
- 10:45–11:00 EGU2012-3459
C. Kidd and A. Hou
 Combined satellite-surface precipitation products: assessment of regional and temporal characteristics and relationships.
- 11:00–11:15 EGU2012-11123
 A. Farnsworth, **C. Williams**, E. Black, and D. Kniveton
 Understanding the large scale driving mechanisms of rainfall variability over central Africa
- 11:15–11:30 EGU2012-1226
L. Machado, D. Vila, C. Morales, M. Silva Dias, and G. Fisch
 The CHUVA Project: First results and implications to satellite precipitation estimation
- 11:30–11:45 EGU2012-1947
K. Nakamura, F. A. Furuzawa, M. Nishikawa, F. Shiratsu, and D. Shrestha
 Precipitation Characteristics around Nepal and Bangladesh revealed by TRMM data
- 11:45–12:00 EGU2012-6115
 P. Hazenberg, P.J.J.F. Torfs, H. Leijnse, and **R. Uijlenhoet**
 Rain cell-based identification of the vertical profile of reflectivity as observed by weather radar and its use for precipitation uncertainty estimation

LUNCH BREAK

Chairperson: K. Nakamura, C. Kidd, V. Chandrasekar

- 13:30–13:45 EGU2012-9195
J. Van Baelen, F. Tridon, G. Mioche, and Y. Pointin
 Rain heterogeneity studies and specific Z-R relationships determination with x-band and k-band radars to improve rain rate retrieval over urban basins
- 13:45–14:00 EGU2012-5261
P. Chambon, I. Jobard, M. Capderou, and R. Roca
 Sensitivity of accumulated rainfall and errors estimates to the configuration of microwave imagers constellation for the tropical regions
- 14:00–14:15 EGU2012-12446
S. J. Munchak, G. Skofronick-Jackson, and B. T. Johnson
 Limits of Precipitation Detection from Microwave Radiometers and Sounders
- 14:15–14:30 EGU2012-12339
M. Belo-Pereira, E. Dutra, and P. Viterbo
 Validation of ECMWF re-analyses using the new PT02 gridded precipitation datasets
- 14:30–14:45 EGU2012-10378
M. Lockhoff, O. Zolina, C. Simmer, and J. Schulz
 Evaluation of satellite-retrieved extreme precipitation using gauge observations
- Chairperson: A. Hou, C. Morales, E. Habib
- 15:30–15:45 EGU2012-3281
Y. Hyakusoku, T. Miura, H. Kai, T. Ishikiri, K. Furukawa, M. Kojima, H. Hanado, K. Nakagawa, T. Iguchi, and M. Okumura
 Results of proto-flight test of the Dual-frequency Precipitation Radar for the Global Precipitation Measurement
- 15:45–16:00 EGU2012-2198
K. Nakagawa, M. Nishikawa, K. Nakamura, K. Komachi, H. Hanado, S. Kawamura, S. Sugitani, H. Minda, S. Shimizu, and R. Oki
 Dual Ka-band radar field campaign for GPM/DPR algorithm development
- 16:00–16:15 EGU2012-6232
E. F. Stocker
 Synthetic Data and Data Formats for the GPM GMI Radiometer
- 16:15–16:30 EGU2012-6921
G.J. Huffman, D.T. Bolvin, D. Braithwaite, K. Hsu, R. Joyce, C. Kidd, S. Sorooshian, P. Xie, and S.-H. Yoo
 Developing the Integrated Multi-Satellite Retrievals for GPM (IMERG)
- 16:30–16:45 EGU2012-7029
M. Kachi, T. Kubota, N. Yoshida, S. Kida, R. Oki, T. Iguchi, and K. Nakamura
 Current Status of Japan's Activity for GPM/DPR and Global Rainfall Map algorithm development
- 16:45–17:00 EGU2012-13483
 m. Le and **V. Chandrasekar**
 Principle of GPM dual frequency precipitation radar retrieval
- 17:00–17:15 EGU2012-11965
 B. Sarrand, **F. Dulac**, M. Baldi, Z. Bargaoui, K. Cindri?, V. Ducrocq, M. Labiadh, J. Schiavone, L. de Silvestri, S. Somot, and A. Tovar-Sánchez
 Precipitation in the Mediterranean basin as seen from the 2000-2010 TRMM-3B42-v6 database

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

Convener: S. C. Michaelides | Co-Conveners: A. Hou, V. Levizzani, K. Nakamura

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P.T. Nastos, L. Facheris, A. Yatagai

- XY1 EGU2012-2241
K. Skripnikova and D. Rezacova
 The use of radar-based hail detection methods in central Europe
- XY2 EGU2012-3426
C. Morales, L.A. Machado, C.F Angelis, M.A.F. Silva Dias, G. Fisch, I.C Carvalho, T. Biscaro, J. Sakuragi, J.R. Neves, E.M. Anselmo, and M. Lacerda
 Precipitation properties observed during CHUVA Field Campaign
- XY3 EGU2012-4204
F. Rüttrich, B. Thies, J. Bendix, and C. Reudenbach
 Satellite observation of rainfall characteristics on the Tibetan Plateau: Global products and a regional approach

- XY4 EGU2012-5587
P. Marcacci, P. Bonelli, M. Lacavalla, L. Vaghi, M. Molari, A.E. Musolino, L. La Rocca, and E. Bertolotti
A Radar and Gauge hourly precipitation database for calibration and statistical purposes over Lombardy Region - Italy
- XY5 EGU2012-6108
A. M. Ruiz-Leo, C. Viñas, and **G. Maqueda**
Rainfall Characterization in Different Areas in Spain by the Stratiform Component
- XY6 EGU2012-6214
E. F. Stocker and O. Kelley
TRMM Version 7 Level 3 Gridded Monthly Accumulations of GPROF Precipitation Retrievals
- XY7 EGU2012-6332
R. Castillo Rodriguez, R. Nieto, L. Gimeno, and A. Drumond
Characterization and variability of the main oceanic sources of moisture
- XY8 EGU2012-6450
P.T. Nastos, A.G. Paliatsos, I.K. Larissi, and K.P. Moustris
Development and application of Artificial Neural Networks in forecasting the maximum daily precipitation at Athens, Greece
- XY9 EGU2012-6604
P.T. Nastos, I.T. Matsangouras, and T.G. Chronis
Spatio-temporal activity of lightnings over Greece
- XY10 EGU2012-6995
A. Yatagai, N. Yasutomi, A. Hamada, A. Kitoh, K. Kamiguchi, and O. Arakawa
APHRODITE: Constructing a Long-term Daily Gridded Precipitation Dataset for Asia Based on a Dense Network of Rain Gauges
- XY11 EGU2012-7866
C. Klepp and S. Bakan
Precipitation Ground Validation over the Oceans
- XY12 EGU2012-7922
G. Mioche, J. Van Baëlen, and E. Buisson
The operational platform XTREM for rainfall measurement and monitoring
- XY13 EGU2012-8292
M. Santos and M. Fragoso
Seasonal trends in extreme daily precipitation indices in Northern of Portugal
- XY14 EGU2012-9060
A. Papadopoulos and P. Katsafados
Evaluation of two Operational Weather Forecasting Systems for the Mediterranean Region
- XY15 EGU2012-9266
P. Zacharov, D. ?ezá?ová, and Z. Sokol
COSMO-CZ-SREPS - the first evaluation
- XY16 EGU2012-10985
S. Laviola, A. Moscatello, M.M. Miglietta, E. Cattani, and V. Levizzani
A Satellite and Numerical Model Combined Approach to Study Extreme Rain Events over the Mediterranean Basin
- XY17 EGU2012-11273
A. Merino, C. García, L. López, E. García-Ortega, J.L. Sánchez, J.L. Marcos, and A.M. Guerrero-Higueras
Trends in hailstorm frequency in Castile-León (Spain)
- XY18 EGU2012-11363
A. Merino, L. Campos, L. López, E. García-Ortega, J.L. Sánchez, J.L. Marcos, and A.M. Guerrero-Higueras
Snow in Castile-León: trends and variability
- XY19 EGU2012-11433
A. Merino, A.M. Guerrero-Higueras, J.P. Ortiz de Galisteo, L. López, E. García-Ortega, D.A. Nafria, and J.L. Sánchez
Integrated Meteorological Observation Network in Castile-León (Spain)
- XY20 EGU2012-11513
E. Gascón, J.L. Sánchez, R. Posada, E. García-Ortega, J.L. Marcos, and L. López
Flash blizzards: two cases in the mountains of Madrid
- XY21 EGU2012-11517
E Habib, R. Kuligowski, N. Sazib, M. Elshamy, D. Amin, and M. Ahmed
Rainfall Estimation over the Nile Basin using Multi-Spectral, Multi- Instrument Satellite Techniques
- XY22 EGU2012-11585
J.L. Marcos, J.L. Sánchez, R. Posada, E. Gascón, S. Fernández, L. Hermida, E. García-Ortega, and L. López
Study on frozen nuclei in the winter season in the northern mountains of Madrid (Spain)
- XY23 EGU2012-12261
M. Itkin and A. Loew
Sampling uncertainty in satellite rainfall estimates

- XY24 EGU2012-12470
V.G. Anantharaj, M. Mahrooghy, W.A. Petersen, K. Hsu, and N.H. Younan
Augmenting the PERSIANN-CCS with lightning information
- XY25 EGU2012-12508
A. M. Tompkins and A. A. Adebisi
Using CloudSat cloud retrievals to assess differences between satellite rainfall products over Africa
- XY26 EGU2012-12590
T.G. Tabalchuk, S.K. Barodka, **A.M. Krasouski**, A.G. Svetashev, and L.N. Turishev
Ice fraction impact on modeling of the atmospheric super convection cases
- XY27 EGU2012-13622
A. Hamada and Y. N. Takayabu
A feasibility study on precipitation regime classification by meteorological states
- XY28 EGU2012-13631
F. Porcu, M. Petracca, and L. Milani
On the use of raingauges data to validate satellite precipitation products
- XY29 EGU2012-13737
L S Chiu, S. Gao, D-B Shin, Y-J Cho, R F Adler, G Huffman, D. Bolvin, and E Nelkin
Monthly oceanic rainfall based on METH techniques: DMSP SSM/I V6 and SSMIS continuity
- XY30 EGU2012-13753
T. Inoue
Rainfall characteristics over continent studied from cloud system resolving model and TRMM/PR and TMI
- XY31 EGU2012-11936
P. Leviakangas and the EWENT WP1 Team
Extreme weather impacts on European networks of transport
- XY32 EGU2012-12279
A. Vajda, H. Tuomenvirta, P. Jokinen, A. Luomaranta, L. Makkonen, M. Tikanmäki, P. Groenemeijer, P. Saarikivi, **S. Michaelides**, M. Papadakis, F. Tymvios, and S. Athanasatos
Probabilities of adverse weather affecting transport in Europe: climatology and scenarios up to the 2050s
- XY33 EGU2012-13817
D.D. Alexakis, D.G. Hadjimitsis, A. Agapiou, A. Retalis, K. Themistocleous, **S. Michaelides**, and S. Pashiardis
Development of methodology for the optimization of classification accuracy of Landsat TM/ETM+ imagery for supporting fast flood hydrological analysis
- XY34 EGU2012-13819
K. Themistocleous, D.G. Hadjimitsis, A. Retalis, N. Chrysoulakis, **S. Michaelides**, and A. Nisantzi
Aerosol optical thickness retrieval and GIS distribution analysis using the fast atmospheric correction method: a case study in Cyprus
- XY35 EGU2012-13824
A. Agapiou, V. Lysandrou, D.G. Hadjimitsis, D.D. Alexakis, K. Themistocleous, and **S. Michaelides**
Long term monitoring of open-air monuments under threat: the case study of the "Tombs of the Kings" in Cyprus
- XY36 EGU2012-13940
M. Erpicum, X. Fettweis, N. Jorion, X. Pirard, J. Van Campenhout, and A. Sougne
Laser disdrometer tools for local and climatological characterization of hydrometeors
- XY37 EGU2012-3031
L. Facheris, F. Cuccoli, and L. Baldini
Performance evaluation of the retrieval of a two hours rainfall event through microwave tomography applied to a network of radio-base stations
- XY38 EGU2012-1578
V. Kvicera and M. Grabner
9-year distributions of rain intensities measured in Prague and their utilization in telecommunications
- XY39 EGU2012-964
T. Russo, D. Winslow, and A. Fisher
Extreme precipitation events increasing in the San Francisco Bay Area, CA, USA between 1890 and 2010
- XY40 EGU2012-1024
E. T. H. Har, D. I. F. Grimes, C. J. R. Williams, and M. E. Demory
African rainfall variability: Sensitivity of rainfall, as simulated by a high resolution GCM, to varying orography
- XY41 EGU2012-1409
K. Kato, M. Kurata, and K. Otani
Long-term variation of the Baiu precipitation in the northwestern Japan during the 20th century (With attention to the appearance of the heavy rainfall days)
- XY42 EGU2012-1445
N. Umlauf, A. Zeileis, **G.J. Mayr**, and J.W. Messner
Weekend - and the weather is bad again! A spatio-temporal analysis of precipitation in Austria
- XY43 EGU2012-1716
N.-C. Yeh, J.-L. Wang, W.-J. Chen, J.-C. Hu, M.-D. Tsai, and G.-R. Liu
Estimation of Typhoon Rainfall in Northwest Pacific Using TRMM/TMI Data

- XY44 EGU2012-3180
J.-J. Wang, R. F. Adler, G. J. Huffman, D. T. Bolvin, and G. Gu
The Updated TRMM Composite Climatology of Tropical Rainfall with Version 7 Data
- XY45 EGU2012-5302
E. Saez de Cámara, G. Gangoiti, L. Alonso, and J. Iza
Trends in characteristics of daily rainfall in Northern Iberia: Is the NAO signal behind the observed variability?
- XY46 EGU2012-9219
J. Norris, G. Vaughan, and D.M. Schultz
Climatology and Real-Data Simulations of Snow Bands over the English Channel and Irish Sea during Cold-Air Outbreaks
- XY47 EGU2012-11283
T. Fiolleau, R. Roca, D. Vila, L.A. Machado, and C.F. Angelis
A new methodology for the detection and tracking of mesoscale convective systems in the tropics using geostationary infrared data
- XY48 EGU2012-11818
C. Chwala, H. Kunstmann, W. Qiu, S. Hipp, U. Siart, J. Seltmann, and J Fritz
Continuous rainfall measurements using commercial backhaul links in the alpine and pre-alpine region of Southern Germany
- XY49 EGU2012-11839
B. Baker, R. Rasmussen, J. Kochendorfer, T. Meyers, R. Nitu, J. Paul, C. Smith, and D. Yang
How Well Are We Measuring Snow? The NOAA/FAA/NCAR Winter Precipitation Test Bed

AS1.10 – The global monsoon system: variability and dynamics – Orals

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

Room: 10

Chairperson: n.n.

- 15:30–15:45 EGU2012-3078
Y. Ming, M. Bollasina, and V. Ramaswamy
Anthropogenic aerosols and the weakening of the South Asian summer monsoon
- 15:45–16:00 EGU2012-5187
D. Folini, M. Frischknecht, and M. Wild
Recent changes in surface solar radiation and precipitation in India: sensitivity studies with ECHAM5-HAM
- 16:00–16:15 EGU2012-1999
J. Zhu, H. Liao, J. Li, and J. Feng
Impacts of interannual variation of the East Asian winter monsoon on aerosol concentrations over eastern China
- 16:15–16:30 EGU2012-2549
Y. Qian, M. Flanner, R. Leung, and W. Wang
Sensitivity studies on the impacts of Tibetan Plateau snowpack pollution on the Asian hydrological cycle and monsoon climate
- 16:30–16:45 EGU2012-3752
P. Knippertz, A. H. Fink, R. Schuster, J. Trentmann, J. M. Schrage, and C. Yorke
Ultra-Low Clouds over the Southern West African Monsoon Region
- 16:45–17:00 EGU2012-8256
A G Turner, B M Harris, and E J Highwood
Monsoon collapse following tropical super-volcanic eruptions

AS1.10 – The global monsoon system: variability and dynamics – Posters

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Andrew Turner, Yun Qian and Jianping Li

- XY50 EGU2012-69
C. Lin, K. Yang, and J. Qin
Observed surface and upper-air wind speed changes over China since 1960
- XY51 EGU2012-1360
R. Mahmood and S. Li
Asian Black Carbon Influence on East Asian Summer Monsoons
- XY52 EGU2012-1398
X. Kuang
Regional Differences in the Seasonal Variation of the upper-tropospheric Jet

- XY53 EGU2012-1542
L. Yao-dong, S. Xiao-kang, Z. Shao-hong, and H. Liang
A Study on the Change of Precipitation Characteristics Before and After East Asian Summer Monsoon Onset
- XY54 EGU2012-1748
F. Zheng and J. Li
Impact of Preceding Boreal Autumn Antarctic Ozone on Spring Precipitation over South China
- XY55 EGU2012-3833
Z. Liantong
Interdecadal Change in SST Anomalies Associated with Winter Rainfall over South China
- XY56 EGU2012-3894
H. Hendon, **E. Lim**, and G. Liu
The role of air-sea interaction for prediction of Australian summer monsoon rainfall
- XY57 EGU2012-8994
Y. Song, Z. Li, and Y. Guan
Study on Precipitation Anomalies of North of China in April and Its relationship to Sea Surface Temperature Evolvement
- XY58 EGU2012-8998
A G Turner and G Martin
The role of peninsular India in the South Asian monsoon
- XY59 EGU2012-10600
S. Shen and G. Leptoukh
Analysis of Regional Scale Vegetation Variations and the Asian Monsoon Climate
- XY60 EGU2012-10717
D. Rizou, H.A. Flocas, A. Bartzokas, and C.G. Helmis
The influence of Indian summer monsoon on the climatic regime of Eastern Mediterranean
- XY61 EGU2012-11886
MA. Reeve, Md. Abu Syed, PR. Hossain, G. Maainuddi, and N. Mamnun
Community level perceptions of the monsoon onset, withdrawal and climatic trends in Bangladesh
- XY62 EGU2012-13177
MA. Reeve and P-S. Chu
Monsoon definition discrepancies in Bangladesh
- XY63 EGU2012-13680
M.E. Silva and E.R.L. Silva
Climatic variability between SST and river discharge at Amazon region
- XY64 EGU2012-13950
H Yang, C Y Li, and J Pan
Cause and Anomalous Characteristics of the South China Sea Monsoon Trough Producing Heavy Rainfall in South China
- XY65 EGU2012-6768
A. Duan and M. Wang
Persistent Weakening Trend in the Spring Sensible Heat Source over the Tibetan Plateau and its Impact on the Asian Summer Monsoon
- XY66 EGU2012-7128
Y Luo, H Wang, R Zhang, W Qian, and Z Luo
Comparison of Rainfall Characteristics and Convective Properties of Monsoon Precipitation Systems over South China and Yangtze-and-Huai River Basin
- XY67 EGU2012-459
W. Yuan, R. Yu, M. Zhang, H. Chen, and J. Li
Subseasonal characteristics of diurnal variation in summer monsoon rainfall over central eastern China
- XY68 EGU2012-11200
J. Chen
Bimodal Variability of East Asian Summer Monsoon Viewed as Atmospheric Hydrological Cycle
- XY69 EGU2012-2301
T. Spengler and R.K. Smith
The dynamics of heat lows in a uniform flow
- XY70 EGU2012-8485
A. Hannachi
Isomap nonlinearity analysis and bimodality of the Asian summer monsoon
- XY71 EGU2012-3806
J. W. Kim
Changes in East Asian Winter Monsoon associated with the combined effect of ENSO and PDO
- XY72 EGU2012-3864
Z. Lin, R. Lu, and W. Zhou
Change in early-summer meridional teleconnection over the western North Pacific and East Asia around the late 1970s

- XY73 EGU2012-2590
H. Liu
Low-level Jets over Southeast China: Rainy Season Climatology During Summer 2003
- XY74 EGU2012-2383
W. Chen
Impacts of the duration of El Niño decaying phases on the western North Pacific anticyclone anomalies
- XY75 EGU2012-431
C. Wenhaji Ndomeni, C. Cagnazzo, S. Gualdi, S. Materia, A. Borrelli, and A. Navarra
Analysis of the Representation of the West-African Climate in a set of CMCC Climate Model Simulations
- XY76 EGU2012-1937
J. Feng and J. P. Li
Influence of El Niño Modoki on Spring Rainfall
- XY77 EGU2012-7811
S.-Y. Lee and **T.-Y. Koh**
Teleconnection between Australian winter temperature and Indian summer monsoon rainfall

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

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

Room: 7

Chairperson: G.C. Leckebusch

- 10:30–10:45 EGU2012-7909
U. Neu and the IMILAST Team
Intercomparison of mid latitude storm diagnostics (IMILAST) - project update
- 10:45–11:00 EGU2012-10246
O. Krueger, F. Feser, F. Schenk, and R. Weisse
Inconsistencies between long-term trends in storminess derived from the 20CR reanalysis and observations
- 11:00–11:15 EGU2012-11820
R. Osinski, P. Lorenz, T. Kruschke, M. Voigt, G. C. Leckebusch, U. Ulbrich, T. Hoffherr, and E. Faust
Properties of European Winter Storms in the ECMWF Ensemble Prediction System
- 11:15–11:30 EGU2012-8921
J. Hanley and R. Caballero
The role of large-scale atmospheric flow and Rossby wave breaking in the evolution of extreme wind storms over Europe
- 11:30–11:45 EGU2012-5386
T.M. Trzeciak, P. Knippertz, and J.S.R. Owen
Assessing model uncertainties in climate projections of severe, mid-latitude windstorms using seamless approach
- 11:45–12:00 EGU2012-5127
M.-S. Déroche, M. Choux, F. Codron, and P. Yiou
Extreme European Winter Storm: Detection And Characterization Of Events Impacting The Insurance Industry

AS1.14 – Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts –

Posters

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: U. Ulbrich and J.G. Pinto

- XY78 EGU2012-13193
F. Schenk and E. Zorita
Long-term trends in Northern European Storminess since 1850
- XY79 EGU2012-1768
C. Welker and O. Martius
Variability of cyclones over the North Atlantic and Europe since 1871
- XY80 EGU2012-2655
T. Spengler and A.P. Ballinger
Arctic Cyclone Climatology: Present and Future
- XY81 EGU2012-3241
Y. Kaspi and T. Schneider
The role of stationary eddies in shaping mid-latitude storm track dynamics.

- XY82 EGU2012-3446
K. M. Grise and S.-W. Son
Interannual and Intraseasonal Variability of North American Storm Tracks
- XY83 EGU2012-4568
J.S.R Owen, P. Knippertz, and T.M. Trzeciak
Forecast quality and predictability of severe extra-tropical cyclones in operational forecasts
- XY84 EGU2012-5230
S. Fu
The Impacts of Eastward displacement of Convective Systems Over Tibetan Plateau on the Formation of Southwest Vortex
- XY85 EGU2012-6588
M. Reale and **P. Lionello**
Association between cyclones and severe precipitation in the Mediterranean region as reproduced by different tracking algorithms - a contribution to the IMILAST project
- XY86 EGU2012-9036
J. G. Pinto and the IMILAST Team
Explosive cyclone developments in era-interim under consideration of multiple tracking approaches
- XY87 EGU2012-12837
S.F. Kew, M.A. Sprenger and the IMILAST Team
Trends in Northern Hemispheric Cyclone Diagnostics
- XY88 EGU2012-4258
L. Xia, F. Feser, M. Zahn, and H. von Storch
A Study of Quasi-millennial Extratropical Cyclone Activity Using Tracking and Clustering Methods
- XY89 EGU2012-5257
S. Pfahl and H. Wernli
Quantifying the relevance of cyclones for precipitation extremes
- XY90 EGU2012-8222
S. L. Gray and H. F. Dacre
Quantifying the sensitivity of North Atlantic cyclone development to atmospheric precursor fields
- XY91 EGU2012-7040
K.M. Nissen, U. Ulbrich, **G.C. Leckebusch**, and N. Becker
Changes in Vb cyclone frequency and rainfall under anthropogenic climate change
- XY92 EGU2012-12234
G.C. Leckebusch, X.L. Wang, S.F. Kew, J. Grieger, M. Schuster, U. Ulbrich, and S. Gulev and the IMILAST team
Trends and interannual variability of extra-tropical cyclones derived from different diagnostic methods
- XY93 EGU2012-8776
A. Comellas, **A. Parodi**, Z. Fuchs, and L. Molini
Saturation fraction and gross moist stability in severely precipitating systems in the midlatitude Mediterranean environment
- XY94 EGU2012-6837
A. Troccoli, F. Zambon, K. Hodges, and M. Marani
Storm surge frequency reduction in Venice under climate change

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

Convener: A. Ibrom | Co-Conveners: T. Foken

Room: 8

Chairperson: Andreas Ibrom

- 08:30–08:45 EGU2012-12309
D. Asaf, K. Stimler, and D. Yakir
Recent advances in developing COS as a tracer of Biosphere-atmosphere exchange of CO₂
- 08:45–09:00 EGU2012-10990
R. Baghi, E. Ceschia, C. Delon, P. Durand, C. Jambert, C. Jarnot, P. Keravec, J.M. Martin, and D. Serça
Validation of a new disjunct sampler design through field comparison of conventional and disjunct eddy covariance fluxes
- 09:00–09:15 EGU2012-10013
P. Schreiber, C. Wille, G. Burba, and L. Kutzbach
Using an open-path gas analyser to measure year-round CO₂ fluxes at an extremely remote permafrost ecosystem (Lena River Delta, Northern Siberia, Russia) - the correction of the instrument surface heating
- 09:15–09:30 EGU2012-12150
L. Voß, P. Hoor, E. Falge, M.O. Andreae, and F.X. Meixner
Ozone fluxes over a spruce forest and a clear-cut: first results from the EGER II project

- 09:30–09:45 EGU2012-2119
F. Eder, A Serafimovich, and T. Foken
 Influence of a clear cut on properties and vertical coupling of coherent structures
- 09:45–10:00 EGU2012-5533
 U. Dicken, S. Cohen, and **J. Tanny**
 Eddy covariance measurements in screenhouses: turbulence characteristics and flux gradients

COFFEE BREAK

Chairperson: Thomas Foken

- 10:30–10:45 EGU2012-8929
T. Hayashi and T. Awasaki
 Turbulent transport process in atmospheric surface layer
- 10:45–11:00 EGU2012-1336
R. Leuning, E. van Gorsel, and W Massman
 The surface energy imbalance problem
- 11:00–11:15 EGU2012-367
M. Grudzielanek, A. Pflitsch, and J. Cermak
 Thermal imaging for cold air flow visualisation and analysis
- 11:15–11:30 EGU2012-10162
C. Kiemle, M. Wirth, S. Rahm, and U. Corsmeier
 Latent heat fluxes and TKE dissipation rates over complex terrain from airborne lidar observations
- 11:30–11:45 EGU2012-2392
A. Manrique Suñén, A. Nordbo, G. Balsamo, A. Beljaars, and I. Mammarella
 Land surface model over forest and lake surfaces in a boreal site - Evaluation of the tiling method
- 11:45–12:00 EGU2012-9849
N. Cherin, Y. Roustan, C. Seigneur, and L Musson Genon
 Dry deposition modelling of air pollutants over urban areas

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

Convener: A. Ibrom | Co-Conveners: T. Foken

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Andreas Ibrom

- XY95 EGU2012-14471
S. Laufs, M. Cazaunau, P. Stella, B. Loubet, R. Kurtenbach, P. Cellier, W. Mellouki, and J. Kleffmann
 Fluxes of Nitrous Acid (HONO) above an Agricultural Field Side near Paris
- XY96 EGU2012-12894
M. Kuhnert, J. Yeluripati, W.J. Parton, and P. Smith
 Emissions of nitrogen-oxides from forests in Europe
- XY97 EGU2012-735
K. Hansen, C. Geels, O. Hertel, C. A. Skjøth, B. Jensen, L. L. Soerensen, and E. Boegh
 Evaluating ammonia deposition rates for deciduous forest using measurements and modelling
- XY98 EGU2012-12061
G. Song, L. Voß, E. Falge, J.-C. Mayer, A. Moravek, I. Trebs, M. Bruse, Z. Zhu, M.O. Andreae, and F.X. Meixner
 Eddy covariance flux measurements of ozone: Three stations side-by-side
- XY99 EGU2012-776
F. Mandija and M. Rakaj
 Influence of vegetation on radon exhalation rate on forests areas
- XY100 EGU2012-10830
R. Baghi, D. Helmig, A. Guenther, T. Duhl, and R. Daly
 Contribution of flowering trees to urban atmospheric biogenic volatile organic compound emissions
- XY101 EGU2012-553
G. Burba, T. Nakai, A. Schmidt, R. Scott, J. Kathilankal, G. Fratini, C. Hanson, B. Law, D. McDermitt, and R. Eckles
 Measuring Fluxes with Better Certainty without a Need for Density Corrections or Pressure Term
- XY102 EGU2012-5727
B.R.K. Runkle, C. Wille, T. Sachs, and L. Kutzbach
 Attenuation correction of water vapor fluxes from closed-path eddy-covariance systems

- XY103 EGU2012-5897
S. Sabbatini, G. Fratini, N. Arriga, D. Papale and the Sites Pls and Collaborators Team
 Uncertainties in Eddy Covariance fluxes due to post-field data processing: a multi-site, full factorial analysis
- XY104 EGU2012-9768
A. Ibrom and K. Pilegaard
 Empirical CO₂ and H₂O flux uncertainty estimation through comparison of measurements from two heights
- XY105 EGU2012-2259
B. Samain, W. Defloor, and V.R.N Pauwels
 Continuous series of catchment-averaged sensible heat flux from a Large Aperture Scintillometer: efficient estimation of stability conditions and importance of fluxes under stable conditions.
- XY106 EGU2012-2893
J. Hübner, J. Olesch, H. Falke, F. X. Meixner, and T. Foken
 Investigation of exchange processes at a forest edge - clearing interface with a horizontal mobile measuring system
- XY107 EGU2012-11555
R. Queck, C. Bernhofer, A. Bienert, and H.-G. Maas
 Measurements of turbulence and vegetation structure across a forest clearing
- XY108 EGU2012-5400
D. Masseroni, C. Corbari, A. Ceppi, G. Milleo, and M. Mancini
 Comparison between theoretical footprint models and experimental measurements of intra-field spatial variability scalar fluxes over different sites
- XY109 EGU2012-8117
M. Masbou, C. Simmer, S. Kollet, K. Boessenkool, S. Crewell, B. Diekkrüger, K. Huber, N. Klitzsch, C. Koyama, and H. Vereecken
 Transregional Collaborative Research Centre 32: Patterns in Soil-Vegetation-Atmosphere-Systems
- XY110 EGU2012-8863
I. Stiperski, M.W. Rotach, and A. Gohm
 Boundary Layer Measurements in Complex Terrain: Innsbruck-Box
- XY111 EGU2012-8006
K. Brust, M. Hehn, and C. Bernhofer
 Comparative analysis of matter and energy fluxes determined by Bowen Ratio and Eddy Covariance techniques at a crop site in eastern Germany
- XY112 EGU2012-8915
Z. Nagy, G. Szasz, T. Weidinger, Gy. Baranka, N. Kovacs, and A. Decsi
 Long term micrometeorological and energy budget measurements in Agrometeorological Observatory in Debrecen
- XY113 EGU2012-5582
J.-P. Schulz and G. Vogel
 The influence of thermal soil and vegetation characteristics on the ground heat flux and temperature
- XY114 EGU2012-11990
Y.-S. Park, T. Kwon, M. Kim, K. Kahng, G.-H. Kim, and Y.-J. Choi
 Estimation of horizontal advection of heat and moisture near a river
- XY115 EGU2012-7121
C.-I. Hsieh, T.-J. Chang, S.-M. Zheng, and Y.-L. Wang
 Spatial and temporal variations of CO₂ within and above the urban canyon of Taipei city, Taiwan
- XY116 EGU2012-2488
L. Smallman, JB. Moncrieff, and M. Williams
 Investigation of atmospheric profiles of CO₂ & H₂O using a novel coupled model - WRF-SPA
- XY117 EGU2012-4872
M. Kim, Y.-S. Park, T. Kwon, K. Kahng, G.-H. Kim, and Y.-J. Choi
 Observational analysis of the impact on local thermal environment by the development of a river in South Korea
- XY118 EGU2012-12378
G. Miguez-Macho and Y. Fan
 Groundwater and the Amazon dry-season evapotranspiration
- XY119 EGU2012-13277
L. Garcia-Carreras and D.J. Parker
 Impacts of deforestation on locally-generated rainfall
- XY120 EGU2012-7576
B.P. Guillod, B. Orlowsky, S.I. Seneviratne, M. Reichstein, P. Ciais, A.J. Teuling, N. Buchmann, and K.L. Findell
 Observation-based investigation of land-precipitation coupling

- XY121 EGU2012-9716
a. martinez and g. miguez-macho
 Studying the hydrological cycle in the Iberian Peninsula using the LEAFHYDRO LSM: Influence of groundwater dynamics on soil moisture and land-atmosphere coupling. Impacts of artificial water extraction in the regional water cycle, including land-surface f
- XY122 EGU2012-12081
Y.-J. Choi, M.-W. Kim, Y.-S. Park, T. Kwon, K. Kahng, M. Kim, and G.-H. Kim
 Numerical study of the impact on local weather due to development of a river in South Korea

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

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

Room: 8

Chairperson: A. Petrosyan

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

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

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Petrosyan

- XY123 EGU2012-1862
G. Buffett, E.A. Vsemirnova, and D Klaeschen
 Stochastic Heterogeneity Mapping to quantify turbulence in horizon layers of thermohaline staircases in the Mediterranean Outflow Water
- XY124 EGU2012-2563
S. Chambers, A.G. Williams, A. Griffiths, J. Crawford, and W. Zahorowski
 Radon-222, a proxy for vertical mixing of emissions in the urban nocturnal boundary layer
- XY125 EGU2012-2564
 A. Griffiths, **S. Chambers**, S. Parkes, A.G. Williams, and M. McCabe
 Improving lidar-based mixing height measurements with radon-222
- XY126 EGU2012-3902
Y.K. Ho and C.H. Liu
 Wind Tunnel Measurements of Turbulent Boundary Layer over Hypothetical Urban Roughness Elements
- XY127 EGU2012-7195
T. He, S. Stanic, K. Bergant, and F. Gao
 Observations of tropospheric structure over the complex terrain of SW Slovenia with scanning lidars and radiosonde
- XY128 EGU2012-8330
M. Balmez and F. Georgescu
 Study of the Low- Level jet characteristics in winter season between 1959 and 1982 for Bucharest's airports

- XY129 EGU2012-9004
V. M. Gryanik, C. Lüpkes, and J. Hartmann
Effective geometry based parametrization of the neutral drag coefficients for different sea ice morphology regimes
- XY130 EGU2012-9061
C. Messenger and V. Faure
Forecast atmospheric surface fields versus in-situ and remote observations from Agulhas region to 57°S in 2008
- XY131 EGU2012-10703
W.C. Cheng and F. Porté-Agel
Evaluation of subgrid-scale models in large eddy simulation of flow past a two-dimensional block
- XY132 EGU2012-11175
M.A. Gusakova and L.N. Karlin
Modeling of global surface air temperature
- XY133 EGU2012-12672
P. Dimitriadis and P. Papanicolou
Statistical analysis of turbulent positively buoyant jets
- XY134 EGU2012-12716
P. Dimitriadis, M. Liveri-Dalaveri, A. Kaldis, C. Kotsalos, G. Papacharalampous, and P. Papanicolaou
Zone of flow establishment in turbulent jets
- XY135 EGU2012-11326
M. Abkar and F. Porté-Agel
The influence of a very large wind farm on turbulent transport in the atmospheric boundary layer
- XY136 EGU2012-13192
L. Garcia-Carreras, D.J. Parker, J.H. Marsham, P. Rosenberg, F. Marengo, and J. McQuaid
The vertical structure of the Saharan boundary layer: Observations and modelling
- XY137 EGU2012-14376
K.V. Karelsky and **A.S. Petrosyan**
Modeling of particulate plumes transportation in boundary layers with obstacles
- XY138 EGU2012-87
D. Bourras, C. Caudoux, L. Baggio, E. Luiset, P. Gilbert, J.P. Pineau, J.J. Correia, N. Geyskens, A. Cléménçon, H. Branger, L. Mortier, G. Reverdin, L. Marié, A. Weill, M. Berthet, and A. Mironov
OCARINA : a new platform dedicated to measurements of Air-Sea fluxes
- XY139 EGU2012-1847
B. Maronga, D. van Dinter, A. Moene, and S. Raasch
Derivation of turbulent structure parameters from large-eddy simulations and comparison with large-aperture scintillometer data and aircraft observations.
- XY140 EGU2012-1949
Mr. Chan and Dr. Liu
Large-eddy simulation of flows over idealized urban areas in thermal stratification
- XY141 EGU2012-3888
K. K. Leung and C. H. Liu
On the Aerodynamic Characteristics over Idealized Two-Dimensional Urban Street Canyon Models
- XY142 EGU2012-7859
C. Garbe and J. Schnieders
Structure of Small-Scale Turbulences at the Free Air-Water Interface
- XY143 EGU2012-12106
A. Segalini, E. Deusebio, J. H. M. Fransson, and P. H. Alfredsson
Analysis of coherent structures in canopy flows

AS2.3 – Boundary Layers in High Latitudes: Physical and Chemical Processes Including Atmosphere-Ice Chemical Interactions (AICI) – Orals

Convener: WD Neff | Co-Conveners: G Heinemann, A. Jones, S. Argentini, P. Anderson, T. Bartels-Rausch, V. F. McNeill

Room: 8

Chairperson: P.S. Anderson

- 15:30–15:45 EGU2012-5174
H. Barral, C. Genthon, D. Six, H. Gallée, and C. Brun
The atmospheric boundary layer at Dome C on the Antarctic plateau
- 15:45–16:00 EGU2012-4783
M. Kerbrat, M. Legrand, S. Preunkert, H. Gallée, and J. Kleffman
Nitrous Acid at Concordia (Inland Site) and Dumont d'Urville (Costal Site), East Antarctica
- 16:00–16:15 EGU2012-6343
P. Klán, D. Heger, D. Ray, J. Krausko, L. Lisitsyn, and V. Ned?la
Heterogeneous Chemistry on the Ice Surfaces

- 16:15–16:30 EGU2012-10707
D. Fibiger, M. Hastings, J. Dibb, C. Corr, and L.G. Huey
 Utilizing isotopes of nitrate to characterize air-ice interactions at Summit, Greenland
- 16:30–16:45 EGU2012-12025
J. Browse, K.S. Carslaw, S. Arnold, C.E. Birch, and C. Leck
 Scavenging processes control CCN in a sea-ice free Arctic
- 16:45–17:00 EGU2012-12775
K. Toyota, A. P. Dastoor, R. M. Staebler, and J. C. McConnell
 Air-snowpack exchange of bromine, ozone and mercury in the springtime Arctic simulated by the 1-D model PHANTAS

AS2.3 – Boundary Layers in High Latitudes: Physical and Chemical Processes Including Atmosphere-Ice Chemical Interactions (AICI) – Posters

Convener: WD Neff | Co-Conveners: G Heinemann, A. Jones, S. Argentini, P. Anderson, T. Bartels-Rausch, V. F. McNeill

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: W.D. Neff

- XY144 EGU2012-513
J B A Muller, J R Dorsey, M Flynn, M W Gallagher, C J Percival, D E Shallcross, A Archibald, H K Roscoe, R W Obbard, H M Atkinson, J D Lee, S J Moller, and L J Carpenter
 Energy and ozone fluxes over sea ice in Hudson Bay, Canada
- XY145 EGU2012-7594
 M.M. Frey, N. Brough, J.L. Thomas, **A.E. Jones**, and J. Savarino
 Atmospheric nitrogen oxides (NO and NO₂) in ambient and firn interstitial air at Dome C: implications for modeling reactive nitrogen cycling on the East Antarctic Plateau
- XY146 EGU2012-2686
A.E. Jones, E.W. Wolff, S. J.-B. Bauguitte, and N. Brough
 Features of ODEs derived from an autonomous surface ozone network in coastal Antarctica
- XY147 EGU2012-2535
A. A. Grachev, T. Uttal, P. O. G. Persson, R. S. Stone, I. A. Repina, A. Y. Artamonov, and R. Albee
 Boundary-layer measurements and surface fluxes in Arctic at the Eureka (Canada) and Tiksi (Russia) climate observatories
- XY148 EGU2012-3265
 P. O. G. Persson, R. S. Stone, **A. Grachev**, and L. Matrosova
 Processes Affecting the Annual Surface Energy Budget at High-Latitude Terrestrial Sites
- XY149 EGU2012-10823
WD Neff and DD Davis
 Examining the influence of local terrain on surface winds and boundary layer structure at the South Pole: Implications for “chemical events”
- XY150 EGU2012-12010
WD Neff and DD Davis
 The influence of synoptic weather patterns over Antarctica and their influence on boundary layer structure and chemistry at the South Pole during summer
- XY151 EGU2012-9069
I.V. Gorodetskaya, N.P.M. van Lipzig, S. Kneifel, M. Maahn, S. Crewell, and M. Van den Broeke
 Summer cloud and precipitation properties at Utsteinen, Dronning Maud Land, Antarctica, measured by ground-based remote sensing instruments
- XY152 EGU2012-4339
S. Morelli
 An upgraded version of the Eta Model applied to Antarctic case studies
- XY153 EGU2012-2945
 J. King, **A. Kirchgaessner**, P. Kuipers-Munneke, and M. van den Broeke
 Validation of the summertime surface energy budget of Larsen Ice Shelf (Antarctica) as represented in two regional atmospheric models
- XY154 EGU2012-591
J. Coggins, A. McDonald, G. Plank, M. Pannell, R. Ward, and S. Parsons
 Snow Web 2.0: The Next Generation of Antarctic Meteorological Monitoring Systems?
- XY155 EGU2012-9516
G. Jocher, F. Karner, F. Obleitner, J. Reuder, Ch. Ritter, R. Neuber, K. Dethloff, and Th. Foken
 The near-surface small-scale spatial and temporal variability of momentum, sensible and latent heat exchange in Arctic regions: a case study

- XY156 EGU2012-7962
J.L. Thomas, J. Dibb, G. Huey, J. Liao, D. Tanner, B. Lefer, **R. von Glasow**, and J. Stutz
Modeling chemistry in and above snow at Summit, Greenland: Impact of snowpack chemistry on the oxidation capacity of the boundary layer
- XY157 EGU2012-13190
D. Voisin, J. Cozic, S. Houdier, M. Barret, J.L. Jaffrezo, M.D. King, H.J. Beine, and F. Domine
Comprehensive Study of Carbonaceous Species in Arctic Snow: from Snow Type to Carbon Sources and Sinks in the Snowpack
- XY158 EGU2012-13600
T. Ulrich, M. Ammann, S. Leutwyler, and T. Bartels-Rausch
The role of grain boundaries on the uptake of H₂O₂

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

Convener: A. Baklanov | Co-Conveners: M. Gauss, L.T. Molina

Room: 10

Chairperson: Alexander Baklanov and Michael Gauss

- 08:30–09:00 EGU2012-11307
R. Friedrich, J. Theloke, H. Denier-van-der-Gon, U. Kugler, T. Kampffmeyer, J. Roos, and S. Torras
Integrated Assessment of Air Pollution Control Measures for Megacities
- 09:00–09:15 EGU2012-6180
S. Sahu, G. Beig, M. Schultz, N. Parkhi, and O. Stein
Emissions Inventory of Anthropogenic PM_{2.5} and PM₁₀ in Mega city, Delhi, India for Air Quality Forecasting during CWG- 2010
- 09:15–09:30 EGU2012-7616
R. Timmermans, H. Denier van der Gon, A. Segers, C. Honore, O. Perrussel, P. Builtjes, and **M. Schaap**
Evaluation of bottom-up and downscaled emission inventories for Paris and consequences for estimating urban air pollution increments
- 09:30–09:45 EGU2012-12833
P. Suppan, S. Schrader, R. Shen, H. Ling, K. Schäfer, S. Norra, B. Vogel, and Y. Wang
Source apportionment and air quality impact assessment studies in Beijing/China
- 09:45–10:00 EGU2012-507
A. G. Megaritis, C. Fountoukis, S. N. Pandis, and the MEGAPOLI team
Contribution of local sources to Megacities air quality

COFFEE BREAK

Chairperson: Luisa Molina and Alexander Baklanov

- 10:30–11:00 EGU2012-6599
L. Gallardo
South American mega cities: Knowledge gaps and collaboration opportunities
- 11:00–11:15 EGU2012-11551
R. von Glasow, T. Jickells, A. Baklanov, G. R. Carmichael, T. M. Church, L. Gallardo, C. Hughes, M. Kanakidou, P. S. Liss, L. Mee, R. Raine, P. Ramachandran, R. Ramesh, K. Sundseth, U. Tsunogai, M. Uematsu, and T. Zhu
Megacities in the Coastal Zone
- 11:15–11:30 EGU2012-494
S. Yang, Y. G. Li, and J. Hang
City cluster ventilation in the Pearl River Delta region based on a Lagrangian method
- 11:30–11:45 EGU2012-8846
M. Gauss and the CityZen Team
Environmental Impact of Megacities - Results from CityZen
- 11:45–12:00 EGU2012-11411
A. Baklanov, M. Lawrence, S. Pandis, R. Sokhi, A. Mahura and the MEGAPOLI Team
Megacities, Air Quality and Climate Interactions: Answers on MEGAPOLI Scientific Questions

LUNCH BREAK

Chairperson: Michael Gauss and Luisa Molina

- 13:30–14:00 EGU2012-2337
A. Colette, C. Granier, Ø. Hodnebrog, A. Maurizi, A. Nyiri, H. Jakobs, M. Amann, B. Bessagnet, A. D'angiola, M. Gauss, Z. Klimont, F. Meleux, M. Memmesheimer, A. Mieville, L. Rouil, S. Rao, F. Russo, S. Schucht, F. Stordal, and F. Tampieri
 Air Quality Trends in European Pollution Hotspots: Overview of CityZen multi-model hindcasts and projections.
- 14:00–14:15 EGU2012-2060
T.M. Butler, Z.S. Stock, M.R. Russo, H.A.C. Denier van der Gon, and M.G. Lawrence
 Megacity ozone air quality under four alternative future scenarios
- 14:15–14:30 EGU2012-1907
 J. Zheng, **R. Zhang**, and L. Molina
 Measurements of Gases and Aerosols during 2010Cal-Mex
- 14:30–14:45 EGU2012-10522
N. Hao, P. Valks, I. D. Smedt, D. Loyola, M. V. Roozendaal, B. Zhou, and W. Zimmer
 Satellite observations of air quality of megacities in China
- 14:45–15:00 EGU2012-12870
J. P. Burrows, A. Richter, A. Hilboll, M. Vountas, J. Yoon, and W. von Hoyningen-Huene
 The use of satellite remote sensing of trace gases and aerosols to study megacities within CITYZEN

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

Convener: A. Baklanov | Co-Conveners: M. Gauss, L.T. Molina

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Alexander Baklanov, Luisa Molina and Michael Gauss

- XY159 EGU2012-670
H. M. Celebi, A. Deniz, A. Öztürk, Ö. Çapraz, A. Çeyic?, S. ?ncecik, H. Okutan, H. Toros, ?. Sezen, O. Yenigün, and Y. Ünal
 Identification of local air pollution sources in a significantly weak dispersion region of Istanbul: A case study for Kagithane, Golden-Horn
- XY160 EGU2012-790
F. Mandija and P. Zoga
 Air pollution assessment on city of Tirana
- XY161 EGU2012-884
Ö. Çapraz, A. Deniz, A. Öztürk, S. ?ncecik, H. Toros, and M. Co?kun
 Volatile Organic Compound Analysis in Istanbul
- XY162 EGU2012-1332
F. Tsai, T. Liu, S. Hsu, W. Chen, and J Tu
 Southeastward Dust Transport during the 16-24 March 2006 Asian Dust Event
- XY163 EGU2012-1335
C.-C. Chang and Y.-C. Lin
 Temperature threshold of biogenic isoprene emission in subtropical urban and suburban areas
- XY164 EGU2012-3950
P.-H. Tan and P.-Y. Chen
 Impact of urbanization and industrial development on holiday effect
- XY165 EGU2012-5326
R. Sarda Esteve, V. Gros, A.-C. Kalogridis, and J. Sciare
 Role of fossil fuel and wood burning emissions on Volatile Organic Compounds, Carbon monoxide and Black Carbon level and variability as determined from one-year measurements in Paris.
- XY166 EGU2012-5506
M. Lopez, M. Schmidt, M. Delmotte, V. Gros, D. Mondelain, S.J. Lehman, M. Ramonet, C. Vuillemin, and I. Xueref-Remy
 Measurement of fossil fuel carbon dioxide and other anthropogenic trace gases from MEGAPOLI intensive campaign in Paris during winter 2010.
- XY167 EGU2012-6652
L. G. Ruiz Suarez, R. Torres Jardón, J.A. Torres Jaramillo, H. Barrera, T. Castro, B. E. Mar Morales, J. A. García Reynoso, and L. T. Molina
 Air Quality in the Puebla-Tlaxcala Airshed in Mexico during April 2009
- XY168 EGU2012-8114
A Santurtun, MT Zarrabeitia, and J.C. González-Hidalgo
 Variation in tropospheric Ozone (O3) maximum daily value in a North-South gradient in the Iberian Peninsula
- XY169 EGU2012-7038
D. Kunkel, M.G. Lawrence, H. Tost, A. Kerkweg, P. Jöckel, and S. Borrmann
 Urban emission hot-spots as sources for remote aerosol deposition

- XY170 EGU2012-7461
G. Siour, A. Colette, I. Coll, and B. Bessagnet
Evaluation of the multi-annual and seasonal import/export budgets of two European megacities
- XY171 EGU2012-8676
A. Andersson, S. Tiwari, M. Kruså, E.N. Kirillova, D.S. Bisht, A.K. Srivastava, and Ö. Gustafsson
Year-Round Attribution of Geographical and Emission-Type Sources of Aerosols and Gases in Delhi, India
- XY172 EGU2012-8912
J. Yoon, M. Vountas, W. von Hoyningen-Huene, D. Y. Chang, and J. P. Burrows
Trend Analysis of global AOT based on various Polar Orbiting Satellite Observations: MODIS (Terra), MISR (Terra), SeaWiFS (OrbView-2), and MODIS (Aqua)
- XY173 EGU2012-10286
S. Beirle, K.F. Boersma, U. Platt, M. Lawrence, and T. Wagner
Megacity NO_x emissions and lifetimes probed from space
- XY174 EGU2012-10933
H. Bozem, F. Berkes, R. Weigel, J. Wendling, J. Krause, B. Moellinger, and P. Hoor
The influence of Frankfurt am Main on the composition of the lower troposphere at Taunus Observatory during PARADE 2011
- XY175 EGU2012-11318
B. Heese, D. Althausen, M. Bauditz, R. Deng, R. Bao, and Z. Li
Aerosol profiles determined with lidar and sun-photometer over the Pearl River Delta, China.
- XY176 EGU2012-12553
RJ Sheesley, TE Barrett, and A Andersson
Urban impacts on regional carbonaceous aerosols: investigation of seasonal urban outflow impacts using trajectory analysis, OCEC and absorption parameters
- XY177 EGU2012-12588
M.-L. Siggaard-Andersen, A. Zaakey, R. Nuterman, and J. Brandt
Assessment of ozone damage to crop and forest in Europe caused by Danish emissions
- XY178 EGU2012-13642
T. Halenka, P. Huszar, and M. Belda
Air-Quality and Climate Coupling in High Resolution for Urban Heat Island Study
- XY179 EGU2012-1320
H.M. El-Askary, A.K. Prasad, H.M. Marey, M.E. El-Raey, G.R. Asrar, and M Kafatos
Studying and analyzing the formation and dynamics of the black cloud over Cairo, Egypt, using a multi sensor approach
- XY180 EGU2012-1504
I. Esau
A case of extreme air quality hazard in Bergen: Observations and simulations
- XY181 EGU2012-1928
YW Wang, YH Yang, and N Zhao
Effect of air pollution on sunshine hours in China
- XY182 EGU2012-2875
N. Pankratova, A. Skorokhod, and K. Moiseenko
Air quality in Moscow megacity: basic level and extreme cases
- XY183 EGU2012-3780
M. Vieira da Silva Filho, A. Fornaro, J. Pedrotti, D. Ito, Y. Prado, and L.H.G. Coelho
Ammonia determination in a roadway tunnel of the metropolitan area of Sao Paulo, Brazil
- XY184 EGU2012-4479
T. Agacayak, T. Kindap, A. Unal, M. Mallet, L. Pozzoli, M. Karaca, and F. Solmon
IMPACT OF DUST ON AIR QUALITY AND RADIATIVE FORCING : AN EPISODIC STUDY FOR THE MEGACITY ISTANBUL USING RegCM4.1
- XY185 EGU2012-5319
S.-L. von der Weiden-Reinmüller, F. Drewnick, Q. Zhang, F. Meleux, M. Beekmann, and S. Borrmann
Investigation of characteristics and transformation processes of megacity emission plumes using a mobile laboratory in the Paris metropolitan area
- XY186 EGU2012-5746
J. Totems, P. Royer, P. Chazette, M. Haeffelin, and C. Pietras
Discrimination of aerosol species by correlated lidar and sunphotometer measurements in the Paris megacity suburban area
- XY187 EGU2012-6288
M. Horbanski, K.L. Chan, D. Pöhler, M.O. Wenig, and U. Platt
Determination of the NO₂ concentration and its distribution with different DOAS techniques - a study in the metropolitan area of Hong Kong
- XY188 EGU2012-7224
A. Maurizi, **F. Tampieri**, and F. Russo
The import-export balance of pollutants for the Po Valley hot spot

- XY189 EGU2012-7658
P. Durka, J.W. Kaminski, and **J. Struzewska**
Role of local circulation in the evolution of severe PM10 episode in Krakow area in winter 2010
- XY190 EGU2012-8781
J.P. Beukes, **V. Vakkari**, P.G. Van Zyl, A.D. Venter, M. Josipovic, P. Tiitta, K. Jaars, J.J. Pienaar, M. Kulmala, D. Worsnop, and L. Laakso
Characterisation of plumes from the Johannesburg-Pretoria megacity within the regional South African context
- XY191 EGU2012-9194
Ö. Gustafsson, B. Chen, A. Andersson, M. Lee, E. Kirillova, Q. Xiao, M. Kruså, M. Shi, K. He, and K. De
14C-based source forensics of black carbon aerosols from China megacities
- XY192 EGU2012-9429
D. Kilic, S. Baltacıbası, A. Unal, and T. Kindap
A Decadal Spatial and Temporal Analysis of PM10 in Istanbul: 1998-2008
- XY193 EGU2012-10609
L. Pozzoli, A. Unal, T. Kindap, and U. Im
Regional air quality simulations to evaluate three anthropogenic emission inventories over the Eastern Mediterranean
- XY194 EGU2012-9586
S. Eckhardt, A. Stohl, M. Cassiani, H.-E. Scheel, and J. P. Cammas
The impact of Eastern U.S. megapolis emissions on carbon monoxide and ozone concentrations over Europe

NH7.3/AS4.3/BG2.25/ESSI1.8/NP4.6/SSS5.24 – Spatial and temporal patterns of wildfires: models, theory, and reality (co-organized) – Orals

Convener: M.G. Pereira | Co-Conveners: R. Trigo, A. Camia, M. Penning de Vries, Dr Clarisse, L Boschetti

Room: D

Chairperson: n.n.

- 08:30–08:45 EGU2012-1162
C. D. Vega Orozco, M. Kanevski, J. Golay, M. Tonini, and M. Conedera
Multifractal analysis of forest fires in complex regions
- 08:45–09:00 EGU2012-2092
M. Kanevski, A. Champendal, C. Vega Orozco, M. Tonini, and M. Conedera
A new concept of wildland-urban interface based on city clustering algorithm
- 09:00–09:15 EGU2012-6519
T. Penman, **R. Bradstock**, G. Caccamo, and O. Price
Developing a probabilistic fire risk model and its application to fire danger systems
- 09:15–09:30 EGU2012-11497
D. Oom, I. Bistinas, A. C. L. Sa, and J.M.C. Pereira
Continental spatial non-stationarity of fire-human relationship using GWR
- 09:30–09:45 EGU2012-13822
M. Long, A. Ganteaume, M. Jappiot, G. Andrienko, and N. Andrienko
Analysis of fire causes spatial and temporal distribution in France
- 09:45–10:00 EGU2012-12008
Y. Zhang, D. Obrist, B. Zielinska, and A. Gerler
Emissions of carbon species, organic polar compounds, potassium, and mercury from prescribed burning activities

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-3335
A. Bastos, C. M. Gouveia, R. M. Trigo, and C. C. DaCamara
Vegetation recovery assessment following large wildfires in the Mediterranean Basin
- 10:45–11:00 EGU2012-13785
T. Brown, C. Kolden, and J. Abatzoglou
Assessing fuels treatments in the context of climate change
- 11:00–11:15 EGU2012-12648
T. Calheiros, M.G. Pereira, T.J. Calado, C.C. Dacamara, and J.G. Pinto
Potential effects of regional climate change on rural fires over Europe

- 11:15–11:30 EGU2012-3852
R. Bradstock, M. Boer, T. Penman, and O. Price
 Divergent responses of fire to recent climate change: evidence from bio-regional patterns across south-eastern Australia
- 11:30–11:45 EGU2012-1967
D. Cane, C. Wastl, S. Barbarino, L. Renier, C. Schunk, and A. Menzel
 Evaluation of fire potential in the climatic scenario: an Alpine area perspective
- 11:45–12:00 EGU2012-7340
A. Shvidenko and D. Schepaschenko
 Wildfire in Northern Eurasia and climate change
- Chairperson: n.n.
- 15:30–15:45 EGU2012-3173
I. Csiszar, W. Schroeder, L. Giglio, E. Ellicott, and C.O. Justice
 A comparison of remote sensing of active fires from MODIS and VIIRS
- 15:45–16:00 EGU2012-11107
G. Ruecker, E. Lorenz, A.A. Hoffmann, D. Oertel, and J. Tiemann
 A mission concept for a dedicated Fire Monitoring Constellation of small satellites based on the BIRD heritage
- 16:00–16:15 EGU2012-12485
C. C. DaCamara, R. Libonati, A. Barros, G. Gaspar, and T. J. Calado
 Using MODIS imagery to assign dates to maps of burn scars in Portugal
- 16:15–16:30 EGU2012-8366
r. Paugam, m. Wooster, s. Freitas, s. Gonzi, and p. Palmer
 Parameterization of Fire Injection Height in Large Scale Transport Model
- 16:30–16:45 EGU2012-9558
E. Athanasopoulou, C. Giannakopoulos, H. Vogel, D. Rieger, C. Knote, M. Hatzaki, B. Vogel, and A. Karali
 Fire risk and air pollution assessment during the 2007 wildfire events in Greece using the COSMO-ART atmospheric model
- 16:45–17:00 EGU2012-10521
J.W. Kaiser, A. Benedetti, R. Detmers, A. Heil, J.-J. Morcrette, M.G. Schultz, G.R. van der Werf, M.J. Wooster, and W. Xu
 Assimilation of FRP Observations for Global Fire Emission Estimation in MACC-II

NH7.3/AS4.3/BG2.25/ESSI1.8/NP4.6/SSS5.24 – Spatial and temporal patterns of wildfires: models, theory, and reality (co-organized) – Posters

Convener: M.G. Pereira | Co-Conveners: R. Trigo, A. Camia, M. Penning de Vries, Dr Clarisse, L Boschetti

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY281 EGU2012-14135
 N.J. Gonçalves, **M.G. Pereira**, P. Fernandes, C. Loureiro, C.C. DaCamara, and M.T. Calado
 Landscape-structure metrics influence on fire size distribution in Portugal
- XY282 EGU2012-12208
 R. Costa, **M.G. Pereira**, L. Caramelo, C. Vega Orozco, and M. Kanevski
 Spatio-temporal clustering of wildfires in Portugal
- XY283 EGU2012-779
E. Íñiguez-Remón, D. Badía-Villas, and P. Ibarra-Benlloch
 Spatial and temporal changes in land cover and its relation to the wildfire risk in Montes de Zuera (NE-Spain)
- XY284 EGU2012-12737
Panagiota Papakosta, Florian Klein, Simon König, Stefan Peters, and Daniel Straub
 Linking spatio-temporal data to the Fire Weather Index to estimate the probability of wildfire in the Mediterranean
- XY285 EGU2012-11226
B. Arca, G. Pellizzaro, A. Canu, G.V. Pintus, R. Ferrara, and P. Duce
 An analysis on Wildland Urban Interface in North Sardinia
- XY286 EGU2012-9852
C.M. Gouveia, A. Bastos, R.M. Trigo, and C. DaCamara
 Drought impact on vegetation in pre and post fire events in Iberian Peninsula
- XY287 EGU2012-12172
V. Bacciu, G. Pellizzaro, P. Santoni, B. Arca, A. Ventura, M. Salis, T. Barboni, V. Leroy, D. Cancellieri, E. Leoni, L. Ferrat, Y. Perez, P. Duce, and D. Spano
 Fuel type characterization and potential fire behavior estimation in Sardinia and Corsica islands

- XY288 EGU2012-2419
D. Cane, A. Arpaci, M. Conedera, E. Valesse, S. Barbarino, H. Vacik, and G.B. Pezzatti
Suitability of different Fire Weather Indices for alpine conditions: an extensive evaluation with high resolution data
- XY289 EGU2012-8422
C. Schunk, C. Wastl, M. Leuchner, C. Schuster, and A. Menzel
Forest fire danger indices under extreme meteorological conditions in a complex topography - the situation in the Bavarian Alps in autumn 2011
- XY290 EGU2012-13793
K. Koster, J. Pumpanen, and F. Berninger
Recovery of soil carbon and nitrogen pools following forest fires in eastern Lapland, Finland.
- XY291 EGU2012-10307
A. Ganteaume, M. Jappiot, and C. Lampin
Assessing and ranking the flammability of some ornamental plant species to select firewise plants for landscaping in WUI (SE France).
- XY292 EGU2012-597
E. Shvetsov
The Correlation Analysis of Fire Energy Release and Weather Conditions
- XY293 EGU2012-13648
M. Amraoui, C.C. DaCamara, and S.L. Ermida
An algorithm to detect fire activity using Meteosat: fine tuning and quality assesment
- XY294 EGU2012-3196
I. Csizsar, C.O. Justice, E. Prins, W. Schroeder, C. Schmidt, and L. Giglio
Fire Monitoring from the New Generation of US Polar and Geostationary Satellites
- XY295 EGU2012-11870
G. Mazzeo, C. Filizzola, I. Coviello, F. Marchese, R. Corrado, T. Lacava, R. Paciello, N. Pergola, and V. Tramutoli
Performance assessment of a Robust Satellite Techniques (RST-FIRES) for forest fire detection and monitoring
- XY296 EGU2012-1704
S. Veraverbeke and S. Hook
Evaluating spectral indices and spectral mixture analysis for assessing fire severity and adjusting burning efficiency using Landsat data
- XY297 EGU2012-1705
S. Veraverbeke, S. Hook, and G. Hulley
A single date SWIR-MIR index (SMI) for rapid fire severity assessments
- XY298 EGU2012-10622
T. Thonat, C. Crevoisier, A. Chédin, R. Armante, L. Crépeau, and N. A. Scott
Study of biomass burning emissions with Aqua/AIRS and MetOp-A/IASI
- XY299 EGU2012-7916
C. Kontoes, I. Papoutsis, D. Michail, Th. Herekakis, M. Koubarakis, K. Kyzirakos, M. Karpathiotakis, C. Nikolaou, M. Sioutis, G. Garbis, S. Vassos, **I. Keramitsoglou**, M. Kersten, S. Manegold, and H. Pirk
Wildfire monitoring via the integration of remote sensing with innovative information technologies
- XY300 EGU2012-8868
I. Berdufi, O. Jaupaj, M. Marku, M. Deda, E. Fiori, M. D'Andrea, G. Biondi, P. Fioruci, M. Massabò, P. Zorba, and M. Gjonaj
Bulletin of Forest Fire risk in Albania- The experience of the Albania National Centre for forecast and Monitoring of Natural Risks
- XY301 EGU2012-525
V. Rakitin, A. Safronov, L. Yurganov, E. Fokeeva, E. Grechko, and A. Dzhola
CO atmospheric pollution of Moscow area during wild fires in summer 2010, estimates of emissions and their uncertainties
- XY302 EGU2012-1254
N. Ursino and M.C. Rulli
Hydrological minimal model for fire regime assessment in Mediterranean ecosystem
- XY303 EGU2012-7298
O. Stein, J.W. Kaiser, A. Heil, and M.G. Schultz
Model sensitivity to global fire emissions: GFED versus GFAS
- XY304 EGU2012-7945
M.J.M. Penning de Vries, O.N.E. Tuinder, T. Wagner, and M. Fromm
Calculation of smoke plume mass from passive UV satellite measurements by GOME-2 polarization measurement devices
- XY305 EGU2012-10052
M. Salis, B. Arca, A. Ager, C. Fois, V. Bacciu, P. Duce, and D. Spano
Extreme Wildfire Spread and Behaviour: Case Studies from North Sardinia, Italy

- XY306 EGU2012-6855
C.I. Mason, G.J. Sheridan, H.G. Smith, O. Jones, D. Chong, and K. Tolhurst
 FIRESTORM: Modelling the water quality risk of wildfire.
- XY307 EGU2012-13343
M. D'Andrea, P. Fiorucci, G. Biondi, and D. Negro
 PROPAGATOR: a synchronous stochastic wildfire propagation model with distributed computation engine
- XY308 EGU2012-11419
J. Mandel, A. K. Kochanski, V. Y. Kondratenko, and J. D. Beezley
 Coupled atmosphere-fire modeling with data assimilation for 2007 Santa Ana fires
- XY309 EGU2012-4307
V. Khan
 Long-range forecasting of forest fire danger index based on PLAV model outputs

NH1.4/AS4.14 – Lightning: physics, detection and atmospheric effects (co-organized) – Orals

Convener: Y. Yair | Co-Conveners: S. Soula, H. D. Betz, Y. Takahashi, C. Price

Room: 1

Chairperson: Yoav Yair and Yukihiro Takahashi

- 08:30–08:45 EGU2012-4091
Y. Hobara, S. Watahiki, M. Hayakawa, R. Holzworth, and M. Parrot
 Global lightning characteristics deduced from ELF/VLF electromagnetic emissions observed by the DEMETER spacecraft
- 08:45–09:00 EGU2012-12917
M. L. Hutchins, R. H. Holzworth, C. J. Rodger, S. Heckman, and J. B. Brundell
 WWLLN Absolute Detection Efficiencies and the Global Lightning Source Function
- 09:00–09:15 EGU2012-3429
C. Morales, R.I. Albrecht, S. Goodman, H. Hoeller, J. Bailey, R. Blakeslee, S. Rudlosky, J. Hall, E.M. Anselmo, J.R. Neves, and M. Lacerda
 Understanding the different lightning detection technologies: A contribution from CHUVA-GLM field campaign
- 09:15–09:30 EGU2012-6169
H. Höller, H.-D. Betz, K. Schmidt, and S. Diebel
 Severe Weather Identification based on LINET Lightning Data
- 09:30–09:45 EGU2012-13711
C. Liu, E. Novakovskaia, and S. Heckman
 Relations Between Total Lightning Flash Rate and Radar Reflectivity in Convective Storms
- 09:45–10:00 EGU2012-10591
 M. Formenton, D. Casella, S. Dietrich, **A. Mugnai**, G. Panegrossi, P. Sanò, H.-D. Betz, C. Price, and Y. Yair
 Using a cloud electrification model to study charge separation processes and their relationships with cloud microphysical structure

COFFEE BREAK

Chairperson: Yukihiro Takahashi and Yoav Yair

- 10:30–10:45 EGU2012-1285
T. Farges, C. Millet, and R. S. Matoza
 Infrasonic sound from lightning measured in Ivory Coast
- 10:45–11:00 EGU2012-6541
O A van der Velde, J. Montanyà, D. Romero, N. Pineda, and S. Soula
 Ebro Lightning Mapping Array: sprite-producing lightning and ground-to-cloud-to-ground flashes
- 11:00–11:15 EGU2012-13413
 Y. Sanmiya, N. Kobayashi, T. Kudo, **Y. Takahashi**, M. Sato, Y. Shima, T. Yamada, NHK Cosmic Shore Project, H. C. Stenbaek-Nielsen, M. G. McHarg, T. Kanmae, R. Haaland, Y. Yair, W. A. Lyons, and S. A. Cummer
 Development of sprite streamers and preceding halos and elves
- 11:15–11:30 EGU2012-2515
T.-Y. Huang, C. L. Kuo, C. Y. Chiang, A. B. Chen, H. T. Su, and R. R. Hsu
 Lightning-Induced Transient Emissions in the mesospheric airglow layers - ISUAL Observations and Modeling

- 11:30–11:45 EGU2012-10867
T. Neubert, O. Chanrion, E. Arnone, F. Zanotti, S. Cummer, J. Li, M. Füllekrug, and O. van der Velde
 The Giant Jet
- 11:45–12:00 EGU2012-7406
T. Gjesteland, N. Østgaard, A. B. Collier, B. E. Carlson, C. Eyles, and D. M. Smith
 Many new RHESSI TGFs

NH1.4/AS4.14 – Lightning: physics, detection and atmospheric effects (co-organized) – Posters

Convener: Y. Yair | Co-Conveners: S. Soula, H. D. Betz, Y. Takahashi, C. Price

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Serge Soula and Yoav Yair

- XY195 EGU2012-1262
Y. Yair, K. Mezuman, B. Ziv, M. Priente, M. Glickman, Y. Takahashi, and T. Inoue
 Predicting global thunderstorm activity for sprite observations from the International Space Station
- XY196 EGU2012-1270
G. Elhalel, Y. Yair, C. Price, S. Halatzi, Y. Reuveni, and D. Shtibelman
 Diurnal variation of the global fair weather current from measurements at a Negev desert station in Israel
- XY197 EGU2012-1685
 J. A. Santos, J. Sousa, M.A. Reis, S.M. Leite, S. Correia, **H. Fraga**, and M. Fragoso
 Large-scale forcing on lightning in Portugal
- XY198 EGU2012-1778
S. Shalev, H. Saaroni, B. Ziv, and Y. Yair
 Lightning multiplicity characteristics in Eastern Mediterranean thunderstorms
- XY199 EGU2012-4249
M. Iwamoto, Y. Hobara, K. Ohta, T. Minatohara, T. Otsuyama, and M. Hayakawa
 Subionospheric VLF perturbations of red sprites: 3D FDTD modeling and experimental results
- XY200 EGU2012-6265
A. Mezentsev and M Fullekrug
 On 3D detection of lightning discharges and associated events with a small scale interferometric network of radio receivers
- XY201 EGU2012-6549
Z. Kawasaki
 Estimation of charge distributions related with individual lightning discharges
- XY202 EGU2012-8213
R. S. Hansen, N. Østgaard, T. Gjesteland, and B. Carlson
 Fluence of photons from Terrestrial Gamma ray flashes in aircraft and balloon altitudes - dependence of initial parameters in simulations
- XY203 EGU2012-9978
S. Soula, H. Bresson, Z. Yu, O. van der Velve, J. Montanya, M. Fullekrug, and J.-F. Georgis
 Characteristics of the CG lightning flashes producing sprites and elves above a same storm
- XY204 EGU2012-9283
J. Bór, J. Tóth, K. Yamashita, Y. Hobara, G. Sători, M. Hayakawa, and H.D. Betz
 Relation between the height and size of sprites and the parameters of the triggering lightning flash - preliminary results
- XY205 EGU2012-10375
D. Cinar, O. Chanrion, and T. Neubert
 X-and gamma- emissions in the upper atmosphere related with thunderstorms
- XY206 EGU2012-13291
C. Abril and L.F. Cristancho
 Simulation of electron avalanches using Geant4
- XY207 EGU2012-13550
 A. Kulak, **J. Mlynarczyk**, M. Ostrowski, J. Kubisz, and A. Michalec
 Analysis of impulse signals with Hylaty ELF station
- XY208 EGU2012-10647
G. Satori, V Mushtak, M Neska, T Nagy, and V Barta
 Global lightning dynamics deduced from Schumann resonance frequency variations at two sites ~ 550 km apart
- XY209 EGU2012-10610
CG Price, B Lynn, Y Yair, N Reicher, and A Khain
 Modeling Lightning Activity in Hurricanes

- XY210 EGU2012-6656
S. M. Mendes and J. A. Corte-Real
 Investigation of the atmospheric environment in which deep convection associated with thunderstorms and lightning develops over continental Portugal - the RAIDEN Project.
- XY211 EGU2012-1417
I. Kolmasova, O. Santolik, and P. Novak
 Bursts of Regular Magnetic Field Pulses Produced by Lightning Discharges
- XY212 EGU2012-4137
Z. Kawasaki
 Observations of thuderstorm activity by RADAR network in Osaka
- XY213 EGU2012-9369
B. E. Carlson, P. Kochkin, A. P. J. van Deursen, R. Hansen, T. Gjesteland, and N. Ostgaard
 A direct search for energetic electrons produced by laboratory sparks
- XY214 EGU2012-9465
M. Marisaldi, F. Fuschino, M. Tavani, S. Dietrich, C. Labanti, M. Galli, A. Argan, A. Trois, E. Del Monte, F. Longo, G. Barbiellini, A. Bulgarelli, F. Gianotti, and M. Trifoglio
 Observational evidence of two different populations of Terrestrial Gamma-ray Flashes
- XY215 EGU2012-9489
G. Harrison and M. Joshi
 Early twentieth century response of the global atmospheric electric circuit to ENSO
- XY216 EGU2012-13047
M. Fullekrug, A. Mezentshev, S. Soula, O. van der Velde, J. Poupeney, C. Sudre, S. Gaffet, and J. Pincon
 Digital Low Frequency Radio Camera
- XY217 EGU2012-7116
A.A Toropov, V.I. Kozlov, V.A. Mullayarov, and S.A. Starodubtsev
 Neutron bursts associated with cloud-to-ground lightning discharges.
- XY218 EGU2012-5801
E. Arnone, J. Bor, O. A. Chanrion, R. Labanti, K. Mezuman, T. Neubert, A. Odzimek, S. Soula, O. van der Velde, Y. Yair, and Eurosprite
 On the distribution and seasonal cycle of transient luminous events above Europe
- XY219 EGU2012-5659
N. Ostgaard, B. Carlson, R. S. Hansen, T. Gjesteland, and A. Collier
 How common are TGFs?

CL1.15 – Temperature observations in the subsurface: contributions to climate sciences, soil sciences, permafrost, glaciology, hydrology, and heat flow studies (co-listed) – Orals

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

Room: 13

Chairperson: Jeanette Noetzli

- 08:30–08:45 EGU2012-9221
S. Gruber
 Decreasing sensitivity of permafrost temperature to environmental change challenges monitoring and data interpretation
- 08:45–09:00 EGU2012-7686
D. Kitover, H. Renssen, R. van Balen, J. Vandenberghe, and D.M. Roche
 Simulating permafrost evolution in Eurasia during the last deglaciation
- 09:00–09:15 EGU2012-3943
M. N, Gooseff, S. E. Godsey, J. E. Barrett, and A. Lewcowicz
 The Influence of Snow, Water Bodies, and Permafrost Degradation on Shallow Soil Energy and Hydrology in the Arctic and Antarctic
- 09:15–09:30 EGU2012-6375
S.C. Steele-Dunne, N. van de Giesen, J.H.A.M. Jansen, C. Hatch, J. Selker, S. Tyler, T. Ochsner, and M.H. Cosh
 Distributed Temperature Sensing as a tool for monitoring heat transfer processes in the shallow subsurface
- 09:30–09:45 EGU2012-795
A. Markert, S. Trinks, M. Facklam, and G. Wessolek
 A new method using evaporation for high-resolution measurements of soil thermal conductivity at changing water contents
- 09:45–10:00 EGU2012-1835
A. Rabinovich, G. Dagan, and T. Miloh
 Underground heat conduction near a spherical inhomogeneity: theory and applications
-

COFFEE BREAK

Chairperson: J.F. González Rouco

- 10:30–10:45 EGU2012-14423
V. Cermák
 Air - Ground - Bedrock Temperature Coupling, Its Monitoring at Borehole Climate Observatories
- 10:45–11:00 EGU2012-6252
J. Majorowicz, J. Šafanda, W. Gosnold, and M. Unsworth
 Subsurface temperature signature of a large Pleistocene - Holocene surface warming in the North Alberta, Canada
- 11:00–11:15 EGU2012-1423
F. Lucazeau and F. Rolandone
 Heat-Flow and Subsurface Temperature History in Eastern Senegal (West Africa)
- 11:15–11:30 EGU2012-13996
V. Bense
 Hydrogeological analysis using heat as a tracer in a variety of geological settings
- 11:30–11:45 EGU2012-12137
K. Zhu, P. Bayer, and P. Blum
 Urban heat fluxes in the subsurface of Cologne, Germany
- 11:45–12:00 EGU2012-13383
 M. Dłuzewski, **E. Zmudzka**, D. Woronko, and K. Biejał
 The influence of barchan shape on the moisture and temperature of the dune sand and the diversity of local climate

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

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

Hall Z | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

Chairperson: Jan Šafanda

- Z67 EGU2012-4470
S. Schneider, M. Hoelzle, and C. Hauck
 Influence of subsurface heterogeneity on observed borehole temperatures at a mountain permafrost site in the Upper Engadine, Swiss Alps
- Z68 EGU2012-2859
P. Džurdek, J. Šafanda, and D. Rajver
 Detection and Quantification of Local Anthropogenic and Regional Climatic Transient Signals in Temperature Logs from Czechia and Slovenia
- Z69 EGU2012-7382
V. Cermák, J. Šafanda, P. Dedeczek, and M. Kresl
 Round-Air Temperature Coupling: Results of Long-Term Temperature-Time Monitoring at the Experimental Borehole Site at Prague (The Czech Republic)
- Z70 EGU2012-6475
V. Rath
 GUMNET - A new subsurface observatory in the Guadarrama Mountains, Spain
- Z71 EGU2012-2754
V. Rath, J. E. Smerdon, J. F. González-Rouco, and H. Beltrami
 Which boreholes do we need to resolve the Common Era in borehole paleoclimatology?
- Z72 EGU2012-2870
G. Bouron, D. Mimoun, and D. Graillet
 Analysis of mechanisms and effects of snow-melting on the groundwater recharge downstream mountainous watershed in a climate-changing context. Example: the Lignon du Forez watershed, Massif Central, France.
- Z73 EGU2012-7609
 D. Demezhko, A. Kotlovanova, and **Yu. Khachay**
 Geothermal evidences of pre-industrial ground temperature changes in the Urals and Eastern Europe
- Z74 EGU2012-3707
N. Andrés, D. Palacios, J.J. Zamorano, C.E. Mendoza-Margáin, and L. Vázquez-Selem
 Ten years monitoring ground temperature at Iztaccíhuatl Volcano (México).
- Z75 EGU2012-3716
N. Andrés, D. Palacios, J.J. Zamorano, C.E. Mendoza-Margáin, and L. Vázquez-Selem
 Deglaciation, ground temperature and volcanic activity in Popocatepetl (México).

- Z76 EGU2012-6493
L.M. Tanarro, D. Palacios, A. Gómez-Ortiz, and F. Salvador-Franch
Snow cover and ground surface temperature on a talus slope affected by mass movements. Veleta cirque, Sierra Nevada, Spain
- Z77 EGU2012-9346
A. Kellner-Pirklbauer, G. Winkler, and M. Pauritsch
Widespread evidences of hoarfrost formation at a rock glacier in the Seckauer Tauern, Austria
- Z78 EGU2012-11953
E. Santolaria and V. Rath
Parametrizations of land-atmosphere energy and mass transfer: the role of the snow layer and the freeze/thaw cycle
- Z79 EGU2012-12336
M. B. Stevens, H. Beltrami, and J. F. Gonzalez-Rouco
New metrics for permafrost model validation
- Z80 EGU2012-11182
D. Mottaghy, **V. Rath**, and G. Schwamborn
The influence short and long term climate changes on the temperature field at the Lake El'gygytyn site: results from borehole data and modelling
- Z81 EGU2012-3160
G. Matharoo, H. Beltrami, V. Rath, and L. Tarasov
Effects of long-term history on borehole paleoclimatology
- Z82 EGU2012-12874
V. Rath, J. Alvarez-Solas, M. Montoya, and C. Ritz
Can boreholes help to constrain the dynamics of the Laurentide ice sheet on the millennial time-scale during last glacial period?
- Z83 EGU2012-13109
J. Noetzli, P. Deline, M. Phillips, and A. von Poschinger
Characteristics of the thermal regime in steep bedrock permafrost in the European Alps described by borehole temperatures and heat conduction modeling
- Z84 EGU2012-12981
M. Keuschnig, I. Hartmeyer, A. Schmidjell, and L. Schrott
The adaptation of iButtons® for near-surface rock temperature and thermal offset measurements in a high alpine environment - Instrumentation and first results, Kitzsteinhorn (3203 m), Hohe Tauern, Austria

ERE1.8 – Aspects of Biomass utilization from Forests and other Resources (co-listed) – Orals

Convener: V.J. Bruckman | Co-Conveners: E. Hochbichler, B. Veselinovic, V. Parravicini, S. Chauhan

Room: 19

Chairperson: n.n.

- 13:30–13:45 EGU2012-10518
E. Hochbichler, H. Hofmann, N. Bellos, C. Zeitlinger, and P. Liebhard
Short Rotation Coppice in Austria - Management and Productivity
- 13:45–14:00 EGU2012-7339
T. Terada
Biomass Potentials in Different Maintenance Scenarios of Satoyama Woodlands
- 14:00–14:15 EGU2012-1199
A. Repo, G. Kindermann, H. Böttcher, and J. Liski
Effects of forest biomass use for energy on the European forest litter and soil carbon stocks
- 14:15–14:30 EGU2012-8817
M.N. Futter, R.W. Lucas, G. Egnell, H. Holmström, H. Laudon, U. Nilsson, S.K. Oni, and T. Lämås
Will more intensive forest harvesting for bioenergy cause unacceptable depletion of base cation pools - a modelling study using the Heureka decision support system
- 14:30–14:45 EGU2012-2093
M. Zessner, S. Thaler, F. Bertrán de Lis, W. Kaltenbrunner, and N. Kreuzinger
Biomass and water: a critical review of the water footprint concept as sustainability criterion for biomass production
- 14:45–15:00 EGU2012-10715
I. Ostonen, P. Kupper, J. Söber, J. Aosaar, M. Varik, and K. Lõhmus
The effect of increased air humidity on fine root and rhizome biomass and turnover of silver birch forest ecosystem - a FAHM study.

ERE1.8 – Aspects of Biomass utilization from Forests and other Resources (co-listed) – Posters

Convener: V.J. Bruckman | Co-Conveners: E. Hochbichler, B. Veselinovic, V. Parravicini, S. Chauhan

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bojana Veselinovic

- XL95 EGU2012-12535
V.J. Bruckman and G. Glatzel
Lessons to be learned from the past: Forest biomass utilization and its belowground consequences
- XL96 EGU2012-7407
B. Veselinovic and H. Hager
Influence of windthrows and tree species on forest soil plant biomass and carbon stocks
- XL97 EGU2012-5437
V.J. Bruckman, S. Yan, E. Hochbichler, and G. Glatzel
Carbon pools and temporal dynamics along a rotation period in sessile oak dominated high forest and coppice with standards stands
- XL98 EGU2012-5205
S. Yan, V. J. Bruckman, G. Glatzel, and E. Hochbichler
Assessment of forest nutrient pools in view of biomass potentials - a case study from Austria oak stands
- XL99 EGU2012-12477
P. B. Tsonkova, A. Quinkenstein, C. Böhm, and D. Freese
Assessment of Carbon Sequestration in German Alley Cropping Systems
- XL100 EGU2012-4211
C. Ettmayer, K. Katzensteiner, and O. Eckmüllner
The combination of Forest Site Maps, Site specific Growth Models and Nutrient Balance Models as a Basis for Sustainable Management in the Northern Limestone Alps
- XL101 EGU2012-722
Lj. Brasanac-Bosanac, T. Cirkovic-Mitrovic, V. Popovic, and **D. Jokanovic**
Biomass in Serbia - potential of beech forests
- XL102 EGU2012-450
I. Bjelanovic and M. Krstic
Reclamation of coppice forests in order to increase the potential of woody biomass in Serbia
- XL103 EGU2012-6060
S. Lebzien, **M. Veste**, H. Fechner, L. Koning, D. Mantovani, and D. Freese
The Giant Knotweed (*Fallopia sachalinensis* var. *Igniscum*) as a new plant resource for biomass production for bioenergy
- XL104 EGU2012-9948
R. Sharma and S.K. Chauhan
Efficient utilization of short rotation tree biomass for cooking in India
- XL105 EGU2012-10046
S.K. Chauhan and R. Soni
Chemical composition and fuel wood characteristics of fast growing tree species in India
- XL106 EGU2012-11492
C. Ureña, J.M. Azañón, J.M. Caro, C. Irigaray, F. Corpas, A. Ramirez, F. Rivas, L.M. Salazar, and I. Mochón
Use of Biomass Ash as a stabilization agent for expansive marly soils (SE Spain)
- XL107 EGU2012-4186
M. Veste, C. Böhm, A. Quinkenstein, and D. Freese
Estimation of biological nitrogen fixation by black locust in short-rotation forests using natural ¹⁵N abundance method
- XL108 EGU2012-11654
C. Ureña, J.M. Azañón, F. Corpas, F. Nieto, and C. León-Buendía
Improving the geotechnical properties of expansive soils by mixture with olive mill wastewater
- XL109 EGU2012-12445
A. Slazak and D. Freese
Phosphorus kinetics in reclaimed lignite mine soils under short rotation coppices in NE Germany
- XL110 EGU2012-11710
A. Gioda, I.L. Monteiro, A.C. Almeida, S.S. Hacon, R. Dallacort, E. Ignotti, J.M. Godoy, A.L. Loureiro, F. Morais, and P. Artaxo
Observations about chemical composition of aerosols in the Brazilian Amazon region - Case study: Biomass burning in the subequatorial Amazon region
- XL111 EGU2012-181
K.B. Baker and V.M.L. LeMay
Firewood Volume by Diameter Class: Estimates for *G. Sepium* and *C. Velutina* Using a Nonlinear Mixed-Effect Taper Model
- XL112 EGU2012-11600
E. I. Pissinati de Rezende, A. S. Mangrich, M. G. F. Batista, J. M. S. Toledo, and E. H. Novotny
Production of bran castor biochar through slow pyrolysis

XL113 EGU2012-8719

D. Mantovani, M. Veste, and D. Freese

Biomass production and water use of Black Locust (*Robinia pseudoacacia* L.) for short-rotation plantation

Tuesday, 24 April

AS1.10 – The global monsoon system: variability and dynamics – Orals

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

Room: 10

Chairperson: n.n.

- 08:30–08:45 EGU2012-1232
R. Wu, J.-L. Chen, and W. Chen
Distinguishing Different Types of ENSO Influences on the Indian Summer Monsoon Variability
- 08:45–09:00 EGU2012-3551
J. Li, R. Ding, Z. Wu, J. Feng, and K. Ha
Interdecadal shift in the relationship between the East Asian summer monsoon and tropical SST
- 09:00–09:15 EGU2012-13987
C DeMott, C Stan, and D Randall
Evaluating Asian Monsoon Northward Propagation Mechanisms in the ERA-interim Reanalysis and SP-CCSM
- 09:15–09:30 EGU2012-10020
C. Prodhomme, S. Masson, P. Terray, T. Izumo, T. Tozuka, and T. Yamaga
Impacts of Indian Ocean SST biases on the Indo-Pacific climate as simulated in a global coupled model
- 09:30–09:45 EGU2012-8831
M. Vellinga, A. Arribas, and R. Graham
Predictability of onset of the West African monsoon in the Met Office's seasonal forecasting system GloSea4
- 09:45–10:00 EGU2012-12704
S. Materia, F. Fierli, A. Borrelli, S. Gualdi, and A. Bellucci
An analysis of the West African Monsoon predictability

HS4.3/AS1.18/NH1.2 – Ensemble hydro-meteorological forecasting for improved risk management: across scales and applications (co-organized) – Orals

Convener: M.-H. Ramos | Co-Conveners: J. Thielen, F Pappenberger, J.D. Brown, S. J. van Andel, Y. HE, G. Mascaro

Room: 36

Chairperson: Maria-Helena Ramos

- 13:30–13:45 EGU2012-1459
T.C. Pagano
Operational Ensemble River Forecasting in the United States and Australia: Practices and Challenges
- 13:45–14:00 EGU2012-3596
W. Collischonn, A. Meller, P. L. S. Dias, and D. S. Moreira
Hindcast experiments of ensemble streamflow forecasting for the Paraopeba river (Brazil)
- 14:00–14:15 EGU2012-2476
P. Horton, C. Obled, and M. Jaboyedoff
Real-time precipitation forecasting in the Swiss Alps by means of the analogue method
- 14:15–14:30 EGU2012-11909
T. Mathevet, L. Moulin, J. Gailhard, R. Garçon, P. Bernard, M. Le Lay, I. Zalachori, and J. Chardon
A one year experience of an operational streamflow ensemble forecasting chain taking into account human expertise
- 14:30–14:45 EGU2012-8002
N. Rebora, F. Silvestro, and L. Ferraris
Predicting flash flood in small basins with a probabilistic multicatchment tool
- 14:45–15:00 EGU2012-12953
S.J. van Andel, **F. Pappenberger**, M.H. Ramos, and J. Thielen
Do probabilistic forecasts lead to better decisions? Try it yourself!
- Chairperson: Yi He
- 15:30–15:45 EGU2012-8935
M. Teasdale, **J. Gaudet**, and L. Perreault
Statistical Properties and Quality of some Operational Inflow Forecasts at Hydro-Québec over Different Temporal Scales
- 15:45–16:00 EGU2012-13607
K. Foster, J. Olsson, C. Uvo, W. Yang, and J. Söderling
A comparison of different approaches for forecasting spring floods in Sweden

- 16:00–16:15 EGU2012-3993
P. Burek, L. Alfieri, J. Thielen-del Pozo, D. Muraro, F. Pappenberger, and B. Krzeminsk
 Looking at the big scale - Global Flood Forecasting
- 16:15–16:30 EGU2012-13021
H. Kim, B. Kim, Z. Liu, D. Yamazaki, B. Sanders, T. Oki, and J. Famiglietti
 Boundary Condition Transfer from Global Atmospheric Model to Local Flood Inundation Model
- 16:30–16:45 EGU2012-6677
D. Brochero, F. Anctil, and C. Gagné
 Comparison of three methods for the optimal allocation of hydrological model participation in an Ensemble Prediction System
- 16:45–17:00 EGU2012-11181
S. J. van Andel, J.D. Brown, M.H. Ramos, A. Weerts, J. Thielen, and J.C. Schaake
 HEPEx post-processing intercomparison experiment

HS4.3/AS1.18/NH1.2 – Ensemble hydro-meteorological forecasting for improved risk management: across scales and applications (co-organized) – Posters

Convener: M.-H. Ramos | Co-Conveners: J. Thielen, F Pappenberger, J.D. Brown, S. J. van Andel, Y. HE, G. Mascaro

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Giuseppe Mascaro

- A243 EGU2012-528
S. Liguori and M.A. Rico-Ramirez
 Probabilistic forecasts based on radar rainfall uncertainty
- A244 EGU2012-8487
T.-H. Kang, K.-T. Lee, and Y.-O. Kim
 Characteristics of Short-Range Probabilistic Flood Prediction in Korea
- A245 EGU2012-4721
P.J. Smith, K. Beven, A. Marchandise, and F. Pappenberger
 Forecasting future water levels to aid in flash flood risk management
- A246 EGU2012-5274
N. Addor, S. Jaun, F. Fundel, and M. Zappa
 An operational hydrological ensemble prediction system for the city of Zurich (Switzerland): assessing the added value of probabilistic forecasts
- A247 EGU2012-2985
F. Rousset-Regimbeau, E. Martin, G. Thirel, F. Habets, M. Coustau, S. Roquelaure, C. De Saint Aubin, and C. Ardilouze
 The Operational Hydro-meteorological Ensemble Prediction System at Meteo-France and its representation interface for the French Service for Flood Prediction (SCHAPI) : description and undergoing developments.
- A248 EGU2012-9565
P. Laiolo, S. Gabellani, N. Rebora, R. Rudari, L. Ferraris, S. Ratto, and H. Stevenin
 Verification of a probabilistic flood forecasting system for an Alpine Region of northern Italy
- A249 EGU2012-10327
G. Smiatek, H. Kunstmann, and J. Werhahn
 Performance of a coupled lagged ensemble weather and river runoff prediction model system for the Alpine Ammer River catchment
- A250 EGU2012-10077
 N. Guyennon, **E. Romano**, I. Portoghesi, F. Salerno, S. Calmanti, A.B. Petrangeli, E. Bruno, G. Tartari, and D. Copetti
 Comparing dynamical, stochastic, and combined downscaling approaches. Lessons from a case study in the Mediterranean
- A251 EGU2012-1712
T. Y. Gan and A. Gobena
 Incorporation of seasonal climate forecasts in the ensemble streamflow prediction system
- A252 EGU2012-10385
A. S. Jarman and L. A. Smith
 Distinguishing between skill and value in hurricane forecasting
- A253 EGU2012-3724
 DY Manful, **Y He**, J-F Exbrayat, F Pappenberger, H Cloke, L Breuer, NR Viney, and H-G Frede
 Development of a novel Nutrient Prediction System (NPS) for a perennial river in a semi-arid region
- A254 EGU2012-3909
Q. Ma, K.C. Wang, and Z.H. Xie
 A Study on Ensemble Forecasting of Soil Moisture Based on TIGGE

- A255 EGU2012-12710
W. Song, X. Xu, Q. Duan, S.J. van Andel, A.H. Lobbrecht, and D.P. Solomatine
 Development of pre-processing method for use of meteorological ensemble predictions as input to hydrological models: case study of the Huai River Basin, China
- A256 EGU2012-12277
R. Marty, H. Kuswanto, V. Fortin, and A.-C. Favre
 Combining the Bayesian Processor of Forecast with Bayesian Model Averaging for reliable weather forecasting
- A257 EGU2012-10443
S.S Johansen
 Local calibration of probabilistic quantitative precipitation forecasts using geostatistical model averaging
- A258 EGU2012-14046
I. Zalachori, M.-H. Ramos, R. Garçon, J. Gailhard, and T. Mathevet
 Statistical processing of forecasts for hydrological ensemble prediction: a comparative study of bias correction strategies
- A259 EGU2012-6326
F. Brissette, J. Chen, Z. Li, and R. Turcotte
 Combining stochastic weather generation and ensemble streamflow predictions for short to medium term flow forecasting over Quebec, Canada
- A260 EGU2012-9166
 T. Van Pham, **M.-H. Ramos**, M. J. Booij, and M. S. Krol
 Impact of different sources of uncertainty on the quality of ensemble streamflow forecasts
- A261 EGU2012-14202
G. Thirel and P. Burek
 Assessing the quality of the snow model used in the European Flood Awareness System (EFAS) against MODIS satellite observations over 8 years

AS1.21 – Quantitative precipitation forecasting in complex terrain: Results of the Convective and Orographically-induced Precipitation Study (COPS) and other campaigns (co-sponsored by the World Weather Research Program of the WMO) – Orals

Convener: Dr. Wulfmeyer | Co-Conveners: C. Kottmeier, A. Behrendt, P. Di Girolamo, R. Steinacker, M. Dorninger, MW Rotach

Room: 7

Chairperson: V. Wulfmeyer

- 10:30–10:45 EGU2012-11186
A. Behrendt, V. Wulfmeyer, Ch. Kottmeier, E. Richard, M. Dorninger, P. Di Girolamo, U. Corsmeier, N. Kalthoff, and H.-S. Bauer
 COPS science questions revisited: What have we learned so far from COPS?
- 10:45–11:00 EGU2012-2342
N. Kalthoff, S. Späth, K. Träumner, A. Wieser, J. Handwerker, F. Madonna, and A. Behrendt
 Dry and moist convective cells in the convective boundary layer over a Black Forest summit - synergetic effect of combined in situ and remote sensing observations
- 11:00–11:15 EGU2012-8639
 K. Schmidt, M. Hagen, H. Höller, E. Richard, and **H. Volkert**
 Detailed flow, hydrometeor and lightning characteristics of an isolated thunderstorm during COPS
- 11:15–11:30 EGU2012-10768
V. Smith, S. Mobbs, R. Burton, M. Hobby, F. Aoshima, V. Wulfmeyer, P. Di Girolamo, R. Bhawar, and E. Norton
 The role of orography in the regeneration of convection: A case study from the Convective and Orographically-induced Precipitation Study
- 11:30–11:45 EGU2012-5793
E. Richard, S. Bielli, M. Grzeschik, C. Flamant, C. Kiemle, and M. Dorninger
 Assimilation of water vapor lidar observations: impact study on the COPS precipitation forecasts and hindcasts
- 11:45–12:00 EGU2012-12451
M. Dorninger and T. Gorgas
 On the uncertainty of verification measures by reference data

AS1.21 – Quantitative precipitation forecasting in complex terrain: Results of the Convective and Orographically-induced Precipitation Study (COPS) and other campaigns (co-sponsored by the World Weather Research Program of the WMO) – Posters

Convener: Dr. Wulfmeyer | Co-Conveners: C. Kottmeier, A. Behrendt, P. Di Girolamo, R. Steinacker, M. Dorninger, MW Rotach

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: A. Behrendt

- XY1 EGU2012-4705
D. Stelitano, P. Di Girolamo, and D. Summa
Raman lidar observations of particle hygroscopicity during COPS
- XY2 EGU2012-4698
D. Summa, P. Di Girolamo, D. Stelitano, and T. Di Iorio
Raman lidar characterization of PBL structure during COPS
- XY3 EGU2012-10150
L. Labbouz, J. Van Baelen, F. Tridon, M. Reverdy, M. Hagen, G. Dick, and T. Gorgas
Precipitation on the lee side of the Vosges Mountains : multi-instrumental study of one case from the COPS campaign
- XY4 EGU2012-433
C. Barthlott, R. Burton, D. Kirshbaum, K. Hanley, E. Richard, J.-P. Chaboureaud, J. Trentmann, B. Kern, H.-S. Bauer, T. Schmitalla, C. Keil, Y. Seity, A. Gadian, A. Blyth, S. Mobbs, C. Flamant, J. Handwerker, and R. Maisenbacher
Initiation of deep convection over the Black Forest mountains during COPS IOP 8b: A multi-model approach
- XY5 EGU2012-5014
J. Schmidli
Large-eddy simulation of the daytime boundary layer and heat transfer processes over an idealized valley
- XY6 EGU2012-8879
S. Khodayar, N. Kalthoff, and G. Schädler
The impact of soil moisture variability on seasonal convective precipitation simulations via the soil-boundary layer interaction.
- XY7 EGU2012-9199
N. Filipović, R. Steinacker, M. Dorninger, and L. Tüchler
Comprehensive comparison of precipitation measurement systems for convective and non-convective events
- XY8 EGU2012-10572
C. Kiemle, L. Fischer, and G. C. Craig
Airborne lidar observations of mid-latitude mid-tropospheric water vapour variability
- XY9 EGU2012-12898
W. Wilms-Grabe, U. Corsmeier, H. Vogel, and Ch. Kottmeier
Transport and chemical conversion of air pollutants under convective conditions - Results of the COPS-TRACKS campaign
- XY10 EGU2012-13002
H.-S. Bauer, T. Schmitalla, F. Aoshima, A. Behrendt, and V. Wulfmeyer
Investigation of the process chain leading to the development of convection during COP IOP 4b
- XY11 EGU2012-13036
Dr. Wulfmeyer, Dr. Behrendt, and Späth
Turbulence measurements with lidar
- XY12 EGU2012-13191
S. Mariani and M. Casaioli
Using the MAP D-PHASE database to evaluate the QPF improvements of the new SIMM's BOLAM
- XY13 EGU2012-13479
M. Grzeschik, T. Schmitalla, H.-S. Bauer, and V. Wulfmeyer
Comparison of WRF 3D-Var with the DART EnKF for a COPS IOP
- XY14 EGU2012-4739
P. Di Girolamo, D. Summa, and D. Stelitano
Characterization of convection-related parameters by Raman lidar: Analysis of selected case studies from the Convective and Orographically-induced Precipitation Study

AS3.3 – Atmospheric Ice Particles – Orals

Convener: J. Curtius | Co-Conveners: T. Koop, C. Voigt

Room: 14

Chairperson: C. Voigt, J. Curtius

- 13:30–13:45 EGU2012-8743
C. Hoose, O. Möhler, M. Niemand, and I. Steinke
Heterogeneous ice nucleation parameterizations based on laboratory experiments

- 13:45–14:00 EGU2012-3728
A. Heymsfield, P. Field, S. Lasher-Trapp, Z. Wang, J. French, S. Haimov, D. Leon, D. Rogers, J. Stith, P. Demott, and K. Prather
 Early Ice Formation in Tropical Maritime Convection Observed during the Ice in Clouds-Tropical Experiment
- 14:00–14:15 EGU2012-3114
T. Choularton, K. Bower, J. Crosier, P. Connolly, J. Dorsey, Z. Lui, A. Blyth, and M. Gallagher
 Measurement of aerosol cloud interactions in mixed phase convective and frontal clouds
- 14:15–14:30 EGU2012-11154
V. T. J. Phillips
 Prediction of Ice-particle Number Concentrations from Aerosol Conditions in Observed Cases of Cold Clouds
- 14:30–14:45 EGU2012-10182
H. Bingemer, H. Klein, M. Ebert, W. Haunold, U. Bundke, T. Herrmann, K. Kandler, D. Müller-Ebert, S. Weinbruch, A. Judt, A. Wéber, B. Nillius, K. Ardon-Dryer, Z. Levin, and J. Curtius
 Aging affects the ice-nucleating properties of volcanic ash aerosol
- 14:45–15:00 EGU2012-3768
U. Schumann and K. Graf
 On the life time of contrail cirrus
- Chairperson: T. Koop, J. Curtius
- 15:30–15:45 EGU2012-5202
H. Grothe, B. Pummer, H. Bauer, and J. Bernardi
 The ice nucleation activity of biological aerosols
- 15:45–16:00 EGU2012-11163
T. Clauss, S. Hartmann, T.S. Temkiv, S. Augustin, U. Gosewinkel Karlson, M.M. Sahyoun, D. Niedermeier, H. Wex, J. Voigtländer, M. Raddatz, and F. Stratmann
 Immersion freezing of biological particles at LACIS
- 16:00–16:15 EGU2012-2133
S. M. Burrows, C. Hoose, U. Pöschl, and M. G. Lawrence
 Ice nuclei in marine air : bioparticles or dust?
- 16:15–16:30 EGU2012-11968
J. D. Atkinson and B. J. Murray
 Ice nucleation by atmospheric mineral dusts - do a few minerals dominate?
- 16:30–16:45 EGU2012-9447
J. B.C. Pettersson, X. Kong, E. S. Thomson, and N. Markovic´
 Inefficient formation of ice via heterogeneous nucleation at temperatures below 200 K
- 16:45–17:00 EGU2012-2715
M. Kippenberger, G. Schuster, and J. N. Crowley
 Trace gas burial in growing ice

AS3.3 – Atmospheric Ice Particles – Posters

Convener: J. Curtius | Co-Conveners: T. Koop, C. Voigt

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: C. Voigt, T. Koop

- XY15 EGU2012-399
C. Oehm, C. Chou, P. Amato, E. Attard, A.-M. Delort, C. Morris, A. Kiselev, O. Stetzer, O. Möhler, and T. Leisner
 Laboratory studies with cloud-derived Bacterial Cells acting as Ice Nuclei in the Immersion and Deposition Mode
- XY16 EGU2012-2402
B. G. Pummer, L. Atanasova, H. Bauer, J. Bernardi, I. S. Druzhinina, and H. Grothe
 Study on the ice nucleation activity of fungal spores (Ascomycota and Basidiomycota)
- XY17 EGU2012-11031
U. Bundke, B. Nillius, H. Bingemer, and J. Curtius
 Ambient and laboratory measurements of ice nuclei and their biological faction with the Fast Ice Nuclei CHamber FINCH-HALO using the new 405nm Version of the BIO-IN Sensor
- XY18 EGU2012-737
M. Hummel, C. Hoose, I. Steinke, S. Jäger, C. Oehm, O. Möhler, H. Vogel, and G. Schurgers
 Mesoscale simulations of pollen and agricultural soil dust containing bacteria as ice nucleators
- XY19 EGU2012-4512
F. Weiss, P. Baloh, and H. Grothe
 The impact of carboxylic acids on ice nucleation

- XY20 EGU2012-9958
P. Papagiannakopoulos, J.B.C. Pettersson, **V.C. Papadimitriou**, and M.N. Romanias
Heterogeneous interaction of carboxylic acids with pure ice and HNO₃-doped ice surfaces at upper tropospheric/lower stratospheric temperatures
- XY21 EGU2012-9182
C. Müller and T. Hoffmann
Method development for the qualification and quantification of reactive α -dicarbonyls methylglyoxal and glyoxal in snow and ice using stir bar sorptive extraction (SBSE) and HPLC-ESI-IT/MS
- XY22 EGU2012-11153
S. Facq, C. Focsa, M. Ziskind, and **B. Chazallon**
Influence of the presence of ethanol on the homogeneous freezing of ice particles
- XY23 EGU2012-9686
X. Kong, E. S. Thomson, N. Markovic, and J. B. C. Pettersson
The effects of surface-coating alcohols on water uptake on ice
- XY24 EGU2012-12459
O. Schrems, B. Okaikwei, and Th. Bluszc
Photochemistry of alkyl bromides trapped in water ice films
- XY25 EGU2012-8405
B. Riechers, F. Wittbracht, A. Hütten, and T. Koop
Investigation of Volume-Dependent Homogeneous Ice Nucleation of Water Droplets Using a Microfluidic Device
- XY26 EGU2012-3454
M. Sikand, J. Koskulics, B. Hamre, J. J. Stamnes, R. P. Lawson, and K. Stamnes
Mixed Phase Boundary Layer Clouds Observed from a Tethered Balloon Platform in the Arctic
- XY27 EGU2012-11328
A.. Danielczok, H. Bingemer, J. Curtius, and P.J. DeMott
The abundance of ice nuclei during airborne measurements over Germany and the Caribbean
- XY28 EGU2012-13134
T. Kuhn, A. J. Heymsfield, and S. A. Buehler
In-situ ice particle measurements over northern Sweden
- XY29 EGU2012-2094
D. Chang, H. Su, P. Reutter, J. Trentmann, M. Andreae, and U. Pöschl
Aerosol- and updraft-sensitive regimes of convective mixed-phase cloud formation: case studies and process analysis
- XY30 EGU2012-4690
T. Pander, K. Nerding, and T. Leisner
Ice multiplication in levitated microdroplets
- XY31 EGU2012-3240
C. Knight
Needle Growth of Ice from the Vapor at -5C

AS3.5 – Aerosol Chemistry and Microphysics (General Session) – Orals

Convener: M. Kalberer | Co-Conveners: F. Pope, U. K. Krieger

Room: 8

Chairperson: Markus Kalberer

- 08:30–09:00 EGU2012-8296
T. Koop
Amorphous semi-solid and solid states in organic aerosol particles
- 09:00–09:15 EGU2012-13097
I. Riipinen, J. R. Pierce, T. Yli-Juuti, D. R. Worsnop, T. Petäjä, M. Kulmala, and N. M. Donahue
Organic condensation onto atmospheric nanoparticles - recent developments and open questions
- 09:15–09:30 EGU2012-2132
J.P. Reid, D.L. Bones, R. Power, D. Lienhard, and U.K. Krieger
Contrasting the Evaporation and Condensation of Water from Glassy and Amorphous Aerosol Particles
- 09:30–09:45 EGU2012-5342
A. J. Huisman, D. M. Lienhard, A. T. Lambe, M. R. Canagaratna, T. B. Onasch, P. Davidovits, D. R. Worsnop, A. Virtanen, C. Marcolli, U. K. Krieger, and Th. Peter
Physical properties and photochemical stability of laboratory-generated SOA in an electrodynamic balance
- 09:45–10:00 EGU2012-7178
F.D. Pope, N.A. Hosny, C. Fitzgerald, M. Kalberer, and M.K. Kuimova
Fluorescence lifetime imaging of aerosol viscosity and phase
-

COFFEE BREAK

Chairperson: Francis Pope

- 10:30–10:45 EGU2012-7160
E. Saukko, A.T. Lambe, P. Massoli, T. Koop, J.P. Wright, D.R. Croasdale, D.A. Pedernera, T.B. Onasch, A. Laaksonen, P. Davidovits, D.R. Worsnop, and A. Virtanen
 Phase state and humidity-induced phase transition studies of SOA particles from biogenic and anthropogenic precursors
- 10:45–11:00 EGU2012-677
M. Song, C. Marcolli, U.K. Krieger, A. Zuend, and T. Peter
 Liquid-liquid phase separation in atmospheric aerosol particles: dependence on organic functionalities and mixture complexity
- 11:00–11:15 EGU2012-7331
F. Couvidat and C. Seigneur
 INFLUENCE OF HUMIDITY ON SOA FORMATION FROM ISOPRENE OXIDATION: EFFECT OF NO_x LEVEL
- 11:15–11:30 EGU2012-10488
G. W. Mann, K. J. Pringle, K. S. Carslaw, D. V. Spracklen, C. L. Reddington, and M. T. Woodhouse
 An intercomparison and evaluation of CCN and size distribution among AeroCom global aerosol models of a range of complexity
- 11:30–11:45 EGU2012-7155
K. I. Lieke, T. Rosenørn, K. Fuglsang, T. Frederiksen, A. C. Butcher, S. M. King, and M. Bilde
 Particles from a Diesel ship engine: Mixing state on the nano scale and cloud condensation abilities
- 11:45–12:00 EGU2012-12249
C. Pöhlker, K. Wiedemann, B. Sinha, M. Shiraiwa, S. S. Gunthe, P. Artaxo, M. K. Gilles, A. L. D. Kilcoyne, R. C. Moffet, M. Smith, M. Weigand, S. T. Martin, U. Pöschl, and M. O. Andreae
 Composition and formation of organic aerosol particles in the Amazon

AS3.5 – Aerosol Chemistry and Microphysics (General Session) – Posters

Convener: M. Kalberer | Co-Conveners: F. Pope, U. K. Krieger

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ulrich Krieger

- XY32 EGU2012-3214
C. Pöhlker, J. A. Huffmann, and U. Pöschl
 Autofluorescence of atmospheric bioaerosols - fluorescent biomolecules, biological standard particles and potential interferences
- XY33 EGU2012-6442
C. Kampf, E. Waxman, J. Slowik, J. Dommen, A. Prevot, U. Baltensperger, B. Noziere, T. Hoffmann, and R. Volkamer
 Effective Henry's Law constant measurements for glyoxal in model aerosols containing sulfate
- XY34 EGU2012-6458
E. Waxman, J. Slowik, C. Kampf, J. Timkovsky, B. Noziere, A. Praplan, L. Pffafenberg, R. Holzinger, T. Hoffmann, J. Dommen, A. Prevot, U. Baltensperger, and R. Volkamer
 Secondary Organic Aerosol Formation from Glyoxal: photochemical versus dark uptake and reversible versus irreversible SOA formation
- XY35 EGU2012-6829
E. Waxman, K. Dzepina, J. Lee-Taylor, B. Ervens, and R. Volkamer
 SOA Formation from Glyoxal in the Aerosol Aqueous Phase: A case study from Mexico City using an explicit laboratory-based model
- XY36 EGU2012-6469
S. Steimer, A. Huisman, U. Krieger, M. Lampimäki, C. Marcolli, T. Peter, and M. Ammann
 Relating physical state and reactivity: humidity dependent ozone uptake on tannic and shikimic acid
- XY37 EGU2012-8024
C. Fitzgerald, P.J. Gallimore, S. Fuller, J. Lee, V. Garrascon, P. Achakulwisut, A. Björkegren, D.R. Spring, F.D. Pope, and M. Kalberer
 Effects of aerosol phase and water uptake for understanding organic aerosol oxidation
- XY38 EGU2012-7396
A. Held and S.G. Gonser
 A thermal desorption mass spectrometer for freshly nucleated secondary aerosol particles

- XY39 EGU2012-9007
M. Brueggemann, A. Vogel, and T. Hoffmann
Analysis of secondary organic aerosol using a Micro-Orifice Volatilization Impactor (MOVI) coupled to an ion trap mass spectrometer with atmospheric pressure chemical ionization (APCI-IT/MS)
- XY40 EGU2012-2172
E. Praske, S.A. Lee, X. Tang, D.R. Cocker, P.J. Silva, and K.L. Purvis-Roberts
Detection of Alkylammonium Salts in Particulate Matter by Ion Chromatography
- XY41 EGU2012-6794
G. Grzinic, T. Bartels-Rausch, M. Birrer, and M. Ammann
Towards an experiment to investigate N₂O₅ uptake to aerosol particles at ambient conditions using the radioactive tracer ¹³N
- XY42 EGU2012-13335
Y. Dupart, L. Burel, P. Delichere, C. George, and B D'Anna
Heterogeneous reaction of sulphur dioxide on Eyjafjallajökull's volcanic ash
- XY43 EGU2012-9156
S. M. Andersson, B. G. Martinsson, J. Friberg, C. A. M. Brenninkmeijer, M. Hermann, K. P. Heue, P. F. J van Velthoven, and A. Zahn
Composition and evolution of volcanic aerosol following three eruptions in 2008 - 2010
- XY44 EGU2012-11746
R. Miranda, M.F. Andrade, A. Fornaro, P.A. André, and P.H. Saldiva
PM_{2.5} particles in six Brazilian cities and relation between particles and their optical properties for São Paulo
- XY45 EGU2012-1560
J. Sciare, N. Bonnaire, G. Mocnik, J. Nicolas, J.E. Petit, M. Bressi, R. Sarda-Estève, and L. Drinovic
Real-time measurements of levoglucosan in fine aerosols (PM_{2.5}) in the region of Paris (France)
- XY46 EGU2012-3822
R. Garcia, R. Hernandez, S. Solis, R. Perez, G. Hernandez, O. Morton, E. Hernandez, M.C. Torres, and A. Baez
Atmospheric dry deposition fluxes of trace elements measured in Queretaro City, Mexico
- XY47 EGU2012-4255
D. S. Kaul, S. N. Tripathi, and T. Gupta
Chemical, microphysical and optical properties of the aerosols during foggy and nonfoggy day over a typical location in Indo-Gangetic Plain
- XY48 EGU2012-5773
YF Cheng, H Su, D Rose, SS Gunthe, M Berghof, B Wehner, P Achtert, A Nowak, N Takegawa, Y Kondo, M Shiraiwa, YG Gong, M Shao, M Hu, T Zhu, YH Zhang, A Wiedensohler, MO Andreae, and U Pöschl
Size-resolved measurement of the mixing state of soot in the megacity Beijing, China: diurnal cycle, aging and parameterization
- XY49 EGU2012-6845
L. Golobokova, I. Marinayte, and G. Zhamsueva
Aerosols of Mongolian arid area
- XY50 EGU2012-6859
U. Filippova
Elemental composition of solid aerosols of different size fraction as exemplified by the Baikal region
- XY51 EGU2012-10970
N. Schiavon, F. Wagner, A. Candeias, K. Kandler, L. Tobias, and J. Mirao
Ground-level airborne particulate matter near important Portuguese Cultural Heritage sites in high polluted (Lisbon) and low polluted (Evora) urban environments
- XY52 EGU2012-12944
U. Dusek, M. Monaco, E. Weijers, and T. Röckmann
Fossil and contemporary sources of organic and elemental carbon at a rural and an urban site in the Netherlands
- XY53 EGU2012-10910
A.G. Rincon, A.I. Calvo, M. Dietzel, and **M. Kalberer**
Seasonal differences of urban organic aerosol composition - an ultra-high resolution mass spectrometry study
- XY54 EGU2012-987
P. Santos, E. Santos, and A. Duarte
Comparison of structural features of dissolved organic matter isolated from rainwater with those of aquatic humic substances
- XY55 EGU2012-1697
J.R. Pierce, I. Riipinen and the Additional authors Team
Quantification of the volatility of secondary organic compounds in ultrafine particles during nucleation events
- XY56 EGU2012-5300
R. G. Stevens, C. L. Lonsdale, C. A. Brock, M. K. Reed, J. H. Crawford, J. S. Holloway, T. B. Ryerson, L. G. Huey, J. B. Nowak, and J. R. Pierce
Variation in aerosol nucleation and growth in coal-fired power plant plumes due to background aerosol, meteorology and emissions: sensitivity analysis and parameterization.

- XY57 EGU2012-1698
C.L. Lonsdale, R.G Stevens, C.A Brock, P.A. Makar, and J.R. Pierce
 The effect of coal-fired power plant NOX, SO2 and particulate control technologies on aerosol nucleation and growth in source plumes
- XY58 EGU2012-2516
N. M. Donahue, E. S. Robinson, and E. M. Trump
 Gas-Phase Mixing of Organic Aerosol Systems
- XY59 EGU2012-2001
L.A. Lee, K.S. Carslaw, and K.J. Pringle
 Sensitivity analysis of a global aerosol model to understand how parametric uncertainties affect model predictions
- XY60 EGU2012-5476
 S.H. Jathar, S.C. Farina, A.L. Robinson, and **P.J. Adams**
 The influence of semi-volatile and reactive primary emissions on the abundance and properties of global organic aerosol
- XY61 EGU2012-5715
 D.M Westervelt, **P.J. Adams**, I. Riipinen, J.R. Pierce, and W. Trivitayanurak
 Formation and growth of nucleated particles into cloud condensation nuclei: Comparison of a global microphysics model with observations

AS3.10 – Satellite observations of tropospheric composition and pollution, analyses with models and applications – Orals

Convener: A. Richter | Co-Conveners: Prof. dr. Levelt, C. Clerbaux

Room: 14

Chairperson: Andreas Richter

- 08:30–08:45 EGU2012-11095
L.N. Lamsal, R.V. Martin, N.A. Krotkov, E.J. Bucsela, E.A. Celarier, A. van Donkelaar, and D. Parrish
 Using Satellite Remote Sensing and Modelling for Insights into NO2 Air Pollution and NOx Emissions.
- 08:45–09:00 EGU2012-3832
C. A. McLinden, V. E. Fioletov, and M. Pommier
 Air quality over the Canadian oil sands as seen from space
- 09:00–09:15 EGU2012-3275
J.-T. Lin
 Space based inverse modeling of anthropogenic and natural emissions of nitrogen oxides over China: seasonal and interannual variability
- 09:15–09:30 EGU2012-10408
S. Beirle, M. Penning de Vries, C. Hörmann, and T. Wagner
 Estimating the lifetime of SO2 from space: A case study of the Kilauea Volcano
- 09:30–09:45 EGU2012-10975
J. Cuesta, M. Eremenko, G. Dufour, M. Hoepfner, and J. Orphal
 Characterization of the 3D distribution of ozone and coarse aerosols in the Troposphere using IASI thermal infrared satellite observations
- 09:45–10:00 EGU2012-2508
K.C. Wells, D.B. Millet, L. Hu, K.E. Cady-Pereira, Y. Xiao, M.W. Shephard, C.L. Clerbaux, L. Clarisse, P.-F. Coheur, E.C. Apel, J. de Gouw, C. Warneke, H.B. Singh, A.H. Goldstein, and B.C. Sive
 Tropospheric methanol observations from space: Retrieval evaluation and constraints on the seasonality of biogenic emissions

COFFEE BREAK

Chairperson: Cathy Clerbaux

- 10:30–10:45 EGU2012-11896
M Parrington, P Palmer, C Clerbaux, P-F Coheur, K Bowman, J Worden, D Hurtmans, Y Rhoni, D Tarasick, E Hyer and the BORTAS Science Team
 Integrating satellite observations with models and in situ data to evaluate the influence of boreal biomass burning on tropospheric ozone during 2010 and 2011: An overview of the BORTAS project.
- 10:45–11:00 EGU2012-8837
 K. Miyazaki, **H. Eskes**, and K. Sudo
 Simultaneous assimilation of satellite NO2, O3, CO, and HNO3 data for the analysis of the tropospheric chemical composition

- 11:00–11:15 EGU2012-12325
C. Brühl, D. Taraborrelli, T. von Clarmann, N. Glatthor, A. Wiecele, and B. Funke
 MIPAS/ENVISAT observations of decay products of isoprene and other hydrocarbons in the upper troposphere and simulations with the new mechanism MIM3 in the CCM EMAC
- 11:15–11:30 EGU2012-6187
M.G. Schultz and the MACC Team
 Global Reactive Gases in the MACC project
- 11:30–11:45 EGU2012-4090
J. P. Veefkind, K.F. Boersma, R. van der A, H. Eskes, Q. Kleipool, N. Krotkov, I. Aben, J. de Vries, P. Ingmann, J. Tamminen, J. Joiner, P.K. Bhartia, and P.F. Levelt
 Air Quality Observations from Space: Results from the Ozone Monitoring Instrument (OMI) and Expected Results from the TROPOspheric Monitoring Instrument (TROPOMI)
- 11:45–12:00 EGU2012-4051
J. Kim and the GEMS Team
 GEMS(Geostationary Environment Monitoring Spectrometer) onboard the GeoKOMPSAT to Monitor Air Quality in high Temporal and Spatial Resolution over Asia-Pacific Region

AS3.10 – Satellite observations of tropospheric composition and pollution, analyses with models and applications – Posters

Convener: A. Richter | Co-Conveners: Prof. dr. Levelt, C. Clerbaux

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Pieter Levelt

- XY62 EGU2012-9092
J. Flemming and A. Inness
 Volcanic SO₂ plume forecasts based on UV satellite observations
- XY63 EGU2012-6731
Q. Zhang, S. W. Wang, K. B. He, R. V. Martin, A. Richter, N. A. Krotkov, and S. Philip
 Trends and effectiveness of emission control of sulfur dioxide in China: a satellite perspective
- XY64 EGU2012-8072
M. de Ruyter de Wildt, H. Eskes, and K. F. Boersma
 Correlation between economic trends in satellite-derived NO₂ concentrations over shipping lanes
- XY65 EGU2012-10232
G.C.M. Vinken and K.F. Boersma
 Constraints on ship NO_x emissions in Europe using OMI NO₂ observations
- XY66 EGU2012-5936
C. Rivera, W. Stremme, and M. Grutter
 NO₂ DOAS measurements from ground and space: comparison of ground based measurements and OMI data in Mexico City
- XY67 EGU2012-6511
K. Szymankiewicz, J. W. Kaminski, and J. Struzewska
 Interannual variability of measured and modelled tropospheric NO₂ column over Central Europe.
- XY68 EGU2012-5846
E. Marais, D. J. Jacob, D. Millet, J. Murphy, C. Reeves, M. Barkley, S. Casadio, T. Kurosu, K. Chance, G. Mills, J. Mao, and F. Paulot
 Inferring isoprene emissions from Africa using OMI observations of formaldehyde columns
- XY69 EGU2012-1646
S. F. Schreier, A. Richter, A. Schönhardt, and J. P. Burrows
 Relationship between MODIS fire counts and GOME-2 tropospheric NO₂ measurements
- XY70 EGU2012-785
A. Zien, A. Hilboll, A. Richter, and J.P. Burrows
 Comparison of NO₂ long-range transport events in GOME-2 observations and CTM simulations
- XY71 EGU2012-1747
A. Richter, F. Wittrock, M. Weber, and J.P. Burrows
 Evaluating the potential of GOME-2 ozone column retrievals in the Chappuis bands
- XY72 EGU2012-10849
J. Cuesta, M. Eremenko, X. Liu, G. Dufour, M. Hoepfner, Z. Cai, T. von Clarmann, J. Orphal, K. Chance, R. Spurr, and J.M. Flaud
 Multi-spectral retrieval of lowermost tropospheric ozone combining IASI and GOME-2 satellite observations
- XY73 EGU2012-9591
S. Bötzel, A. Ladstätter-Weissenmayer, F. Ebojie, C. von Savigny, and J.P. Burrows
 Comparison of Tropospheric Ozone Columns as seen by SCIAMACHY using Limb-Nadir-Matching with tropospheric Ozone Columns from Ozonesondes

- XY74 EGU2012-48
F. Ebojje, C. Savigny, A. Ladstätter-Weissenmayer, S. Bötzel, M. Weber, R. Alexei, H. Bovensmann, and J. Burrows
Retrieval of tropospheric ozone columns from SCIAMACHY limb-nadir matching observations
- XY75 EGU2012-3215
WW Verstraeten, M.H.A. van Geel, and KF Boersma
Understanding patterns of variability in tropospheric ozone over Europe and eastern Asia in 2005-2009 using TES observations and the TM5 chemistry transport model
- XY76 EGU2012-8778
S. Safieddine, C. Clerbaux, J. Hadji-Lazaro, M. George, D. Hurtmans, and P.F. Coheur
Global and local ozone measurements from the thermal infrared IASI/METOP sounder
- XY77 EGU2012-4210
R. Dupont, J.L. Attié, L. El Amraoui, B. Josse, M. Joly, and E. Jaumoillé
Coupled assimilation of satellite and ground based ozone data in order to improve modeling of Air Quality over Europe (POGEQA)
- XY78 EGU2012-8717
P. Sellitto, G. Dufour, M. Eremenko, and J. Cuesta
On the averaging kernels parametrization for the implementation of fast observing system simulation experiments targeted on tropospheric ozone observations
- XY79 EGU2012-11741
P. Valks, N. Hao, D. Loyola, W. Zimmer, I. De Smedt, G. Pinardi, J.-C. Lambert, M. Van Roozendael, and A. Delcloo
Tropospheric trace-gas column observations from GOME-2 for air quality applications
- XY80 EGU2012-9941
L. Vogel, H. Sihler, J. Lampel, T. Wagner, and U. Platt
Evaluation wavelength range mapping, a tool to optimize the evaluation window in differential absorption spectroscopy
- XY81 EGU2012-3157
T. Wagner, K. Mies, and S. Beirle
Ground based MAX-DOAS measurements of the total water vapor column and comparison with model results and satellite observations
- XY82 EGU2012-12390
S. Dikty, A. Richter, P. Johnston, K. Kreher, M. Weber, and J. P. Burrows
Validation of SCIAMACHY NO₂ and BrO with Lauder and Arrival Heights ground-based observations - challenges and results
- XY83 EGU2012-13803
J. Lee, S. Lee, Y. Hong, C. Song, W. Choi, D. Kim, S. Kim, and J. Hong
The effect of ozone and aerosols on the surface erythemal UV radiation estimated from OMI measurements
- XY84 EGU2012-11971
R.R. Sharma, A.G Gjendem, B. Kjeldstad, P. Espy, and B. Johnsen
Comparison of OMI and ground measured UV Index of Norwegian UV monitoring stations
- XY85 EGU2012-4871
P. Nabat, M. Mallet, I. Chiapello, F. Dulac, and S. Somot
A comparative synthesis of satellite-derived and model-simulated aerosol optical depth products in the Mediterranean region: towards a new 4D-reconstruction of the aerosol field
- XY86 EGU2012-7380
Q. Bourgeois, I. Bey, and P. Stier
A permanent aerosol layer at the tropical tropopause layer driven by the intertropical convergence zone
- XY87 EGU2012-7855
E. Emili, C. Popp, M. Zebisch, S. Wunderle, and **M. Petitta**
Particulate matter mapping in the European Alps from MODIS, SEVIRI, and in-situ measurements
- XY88 EGU2012-2793
W. Lahoz, J.-L. Attié, L. El Amraoui, and E. Hache
Monitoring air quality: the role of OSSEs in determining the future global observing system
- XY89 EGU2012-1900
B. Veihelmann, P. Ingmann, G. Bazalgette Courreges-Lacoste, B. Ahlers, H. Stark, and Y. Meijer
The Sentinel-4 Mission: Instrument Description and Atmospheric Composition Products
- XY90 EGU2012-8664
P. Sellitto, P. Dauphin, G. Dufour, M. Eremenko, J. Cuesta, A. Coman, G. Forêt, M. Beekmann, B. Gaubert, and J.-M. Flaud
Performance assessment of future thermal infrared geostationary instruments to monitor air quality
- XY91 EGU2012-13356
K. A. Walker, C. Sioris, J. C. McConnell, H. Buijs, L. Moreau, and the PHEMOS Science Team
Thermal and near-infrared sounding for weather, air quality and greenhouse gas monitoring in the Arctic from highly elliptical orbits

XY92 EGU2012-3179

C. Liu, S. Beirle, T. Butler, P. Hoor, P. Jöckel, A. Pozzer, M.G. Lawrence, J. Lelieveld, and T. Wagner
CO profile information from SCIAMACHY observations using 'cloud-slicing'

AS3.11 – Remote-Sensing of Atmospheric Carbon Dioxide and Methane – Orals

Convener: S. Houweling | Co-Conveners: M. Buchwitz, J. Notholt, H. Boesch

Room: 10

Chairperson: M. Buchwitz

10:30–10:45 EGU2012-328

J. Heymann, O. Schneising, M. Buchwitz, M. Reuter, H. Bovensmann, and J.P. Burrows
SCIAMACHY WFM-DOAS XCO₂: Improvements and comparison with FTS measurements

10:45–11:00 EGU2012-3570

T. Yokota, N. Kikuchi, Y. Yoshida, A. Bril, S. Oshchepkov, M. Inoue, I. Morino, O. Uchino, D. Belikov, T. Saeki, H. Takagi, S. Maksyutov, K. Hiraki, Y. Yokota, T. Matsunaga, A. Yuki, K. Hayashi, F. Kawazoe, and H. Watanabe

Status of the GOSAT XCO₂, XCH₄, and other data products

11:00–11:15 EGU2012-2838

H Boesch, A Cogan, R Parker, P Palmer, L Feng, A Fraser and the TCCON Team

Global Retrievals of CO₂ and CH₄ from GOSAT

11:15–11:30 EGU2012-3949

S. Oshchepkov, A. Bril, T. Yokota, I. Morino, Y. Yoshida, T. Matsunaga, D. Wunch, G. Toon, C. O'Dell, A. Butz, H. Boesch, N. Eguchi and the TCCON Team

Effects of atmospheric light scattering in validating spectroscopic space-based observations of carbon dioxide by ground-based FTS measurements

11:30–11:45 EGU2012-10993

D. Schepers, S. Guerlet, A. Butz, C. Frankenberg, S. Houweling, O. Hasekamp, J. Landgraf, and I. Aben
Methane retrievals from GOSAT shortwave infrared measurements: Performance comparison of proxy and physics retrieval algorithms

11:45–12:00 EGU2012-5054

A. Amediek, H.-C. Büdenbender, G. Ehret, A. Fix, C. Kiemle, **M. Quatrevalet**, M. Wirth, D. Hoffmann, J. Löhring, and V. Klein

CHARM-F: An airborne integral path differential absorption lidar for simultaneous measurements of carbon dioxide and methane columns

LUNCH BREAK

Chairperson: J. Notholt

13:30–13:45 EGU2012-1463

O. Uchino, I. Morino, Y. Yoshida, N. Kikuchi, M. Inoue, K. Nakamae, T. Yokota, D. Wunch, P. Wennberg, G. Toon, J. Notholt, V. Sherlock, B. Liley, D. Griffith, S. Kawakami, H. Ohyama, T. Nagai, T. Sakai, K. Arai, and H. Okumura

Advanced validation of the GOSAT-observed CO₂ and CH₄ at TCCON and prioritized observation sites

13:45–14:00 EGU2012-879

L. Kuai, J. Worden, S. Kulawik, K. Bowman, C. Frankenberg, E. Olsen, D. Wunch, R. Shia, B. Connor, C. Miller, and Y. Yung

Estimates of boundary layer CO₂ by combining TCCON and TES data

14:00–14:15 EGU2012-9498

Y. Te, P. Jeseck, J. Da Costa, N. M. Deutscher, T. Warneke, and J. Notholt

Remote sensing of GHG over Paris megacity and Orléans forest using ground-based QualAir FTS and TCCON-Orléans

14:15–14:30 EGU2012-10107

H. Bovensmann, K. Gerilowski, T. Krings, M. Buchwitz, T. Sachs, J. Erzinger, and J.P. Burrows
Quantification of point-source emissions of CO₂ and CH₄ using airborne absorption spectroscopic remote sensing

14:30–14:45 EGU2012-2474

Y.J. Meijer, P. Ingmann, A. Löscher and the CarbonSat Mission Advisory Group Team

CarbonSat: ESA's Earth Explorer 8 Candidate Mission

14:45–15:00 EGU2012-13389

J. H. Butler, P.P. Tans, C. Sweeney, and E.J. Dlugokencky

How ground-based observations can support satellite greenhouse gas retrievals

Chairperson: S. Houweling

- 15:30–15:45 EGU2012-5796
P. Bergamaschi, S. Houweling, A. Segers, M. Krol, R. Engelen, C. Frankenberg, R. Scheepmaker, and E. Dlugokencky
 Inverse modeling of global CH₄ emissions 2003-2010 using SCIAMACHY satellite retrievals and surface observations
- 15:45–16:00 EGU2012-4336
A. Fraser, P. Palmer, L. Feng, R. Parker, H. Boesch, and A. Cogan
 Estimating methane surface fluxes using GOSAT XCH₄ measurements
- 16:00–16:15 EGU2012-12393
G. Monteil, S. Houweling, S. Guerlet, D. Schepers, I. Aben, and T. Röckmann
 Inverse modeling of methane sources and sinks using GOSAT and SCIAMACHY retrieved xCH₄
- 16:15–16:30 EGU2012-11112
S. Basu, S. Houweling, S. Guerlet, and A. Butz
 CO₂ flux estimation from GOSAT measurements of CO₂ for 2009 - 2010
- 16:30–16:45 EGU2012-8826
S. Maksyutov, H. Takagi, R. Zhuravlev, A. Ganshin, M. Saito, T. Oda, V. Valsala, D. Belikov, T. Saeki, R. Saito, S. Oshchepkov, A. Bril, A. Lukyanov, R.J. Andres, B. Khattatov, and T. Yokota
 Estimation of regional CO₂ fluxes in 2009-2010 with GOSAT observations using two inverse modeling approaches.
- 16:45–17:00 EGU2012-11973
T. Kaminski, M. Scholze, and S. Houweling
 Quantifying the Benefit of an Active CO₂ Mission Concept in a Terrestrial Carbon Cycle Data Assimilation System.

AS3.11 – Remote-Sensing of Atmospheric Carbon Dioxide and Methane – Posters

Convener: S. Houweling | Co-Conveners: M. Buchwitz, J. Notholt, H. Boesch

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: H. Boesch

- XY93 EGU2012-772
L.M., Laurenza, U., Cortesi, S., Del Bianco, and M., Gai
 Application of KLIMA/G-POD algorithm to CO₂ retrieval from IASI/METOP-A observations and comparison with GOSAT/TANSO-FTS products
- XY94 EGU2012-8606
S. Payan, C. Camy-peyret, J. Bureau, and K. Shiomi
 Comparison between IASI and GOSAT retrievals in the thermal infrared
- XY95 EGU2012-9704
M. Buschmann, S. Dohe, E. Mahieu, N. Deutscher, T. Warneke, and J. Notholt
 CO₂ total column retrieval by mid-IR FT Spectroscopy
- XY96 EGU2012-10007
R. Sussmann, A. Ostler, F. Forster, M. Rettinger, T. Blumenstock, M. De Maziere, N.M. Deutscher, F. Desmet, S. Dohe, D.W.T. Griffith, F. Hase, N. Jones, J. Mendonca, J. Notholt, M. Palm, P.K. Patra, K. Strong, and C. Whaley
 Intercalibration of column-averaged methane from the Total Carbon Column Observing Network and the Network for the Detection of Atmospheric Composition Change
- XY97 EGU2012-7699
 N. Jones, **D. Griffith**, R. Macatangay, D. O'Brien, and A. Clark
 Retrieval of total column greenhouse gas amounts from low resolution ground based solar Fourier Transform spectra
- XY98 EGU2012-6615
A. Bezanilla, W. Stremme, and M. Grutter
 Retrieval of the vertical columns of CH₄ over Mexico City using Solar Absorption Infrared Spectroscopy.
- XY99 EGU2012-12806
F. Desmet, C. Hermans, M. De Mazière, N. Kumps, F. Scolas, J.-L. Baray, and J.-M. Metzger
 The First Results From the New TCCON Station at Réunion Island
- XY100 EGU2012-12644
D. G. Feist, M. C. Geibel, S. G. Niebling, R. Macatangay, N. Deutscher, N. Jones, and D. Griffith
 An updated intercomparison of two TCCON FTIR instruments at Wollongong, Australia, in 2010
- XY101 EGU2012-13218
S. G. Niebling and D. G. Feist
 Influence of vertical coverage on the comparison of total column greenhouse gases vs. airborne in-situ measurements

- XY102 EGU2012-12946
N.M. Deutscher, V. Sherlock, S. Mikaloff Fletcher, D. Wunch, P.O. Wennberg, D.W.T. Griffith, F. Chevallier, A.R. Jacobson, J. Notholt, P. Rayner, and T. Warneke
 Comparison of column-averaged dry-air mole fractions of CO₂ retrieved from TCCON ground-based FTIRs to Atmospheric Transport Model simulations
- XY103 EGU2012-12270
 M. C. Geibel, J. Messerschmidt, C. Gerbig, T. Blumenstock, F. Hase, O. Kolle, J. V. Lavri?, J. Notholt, M. Palm, M. Rettinger, M. Schmidt, R. Sussmann, T. Warneke, and **D. G. Feist**
 Calibration of column-averaged CH₄ over European TCCON sites
- XY104 EGU2012-5818
V. Gorschelev, A. Serdyuchenko, N. Humpage, M. Buchwitz, J. Remedios, and J. Burrows
 Improved line parameters for CH₄ around 1.6 microns
- XY105 EGU2012-3010
A. Galli, A. Butz, R. A. Scheepmaker, O. Hasekamp, J. Landgraf, P. Tol, D. Wunch, N. Deutscher, G. C. Toon, P. O. Wennberg, D. W. T. Griffith, and I. Aben
 CH₄, H₂O, and CO spectroscopy for the Sentinel-5 Precursor mission: an assessment with TCCON spectra
- XY106 EGU2012-5275
M. Nakajima, A. Kuze, K. Shiomi, and H. Suto
 Lessons learned from GOSAT and toward to GOSAT-2 mission
- XY107 EGU2012-3787
 A. Eldering, **M Gunson**, D Crisp, C. E. Miller and the OCO-2 Science Team
 The Orbiting Carbon Observatory (OCO-2) Mission and Experience Gained from the Greenhouse gases Observing Satellite (GOSAT)
- XY108 EGU2012-2790
M. Buchwitz, M. Reuter, O. Schneising, J. Heymann, H. Bovensmann, and J. P. Burrows
 CarbonSat: Quantification of random and systematic errors of column-averaged CO₂ and methane retrievals
- XY109 EGU2012-2725
M. Buchwitz, H. Boesch, M. Reuter and the GHG-CCI Team
 The GHG-CCI Project to Deliver the Essential Climate Variable Greenhouse Gases: Current status
- XY110 EGU2012-11939
M. Reuter, M. Buchwitz, O. Schneising, J. Heymann, H. Bovensmann, and J.P. Burrows
 Retrieval of atmospheric CO₂ from satellite near-infrared nadir spectra: inter-comparison of different algorithms
- XY111 EGU2012-3782
Y. Yoshida, N. Kikuchi, M. Inoue, I. Morino, O. Uchino, S. Oshchepkov, A. Bril, and T. Yokota
 Preliminary results of the improved GOSAT TANSO-FTS SWIR XCO₂ and XCH₄ retrievals
- XY112 EGU2012-3840
A. Bril, S. Oshchepkov, I. Morino, O. Uchino, D. Belikov, H.-S. Kim, S. Maksyutov, and T. Yokota
 PPDF-based retrievals of atmospheric methane from GOSAT observations
- XY113 EGU2012-2673
S. Guerlet, A. Butz, D. Schepers, O. Hasekamp, A. Galli, and I. Aben
 Evaluating the performance and added value of full physics retrievals of XCO₂ from GOSAT.
- XY114 EGU2012-5250
H. Suto, A. Kuze, K. Shiomi, and M. Nakajima
 GOSAT three-years operation on orbit and updated Level-1 processing
- XY115 EGU2012-13188
V. Proschek, G. Kirchengast, S. Schweitzer, P. Bernath, B. Thomas, J.-G. Wang, J. Brooke, K. Tereszchuk, G. Gonzalez-Abad, R. Hargreaves, C. Beale, P. Martin, V. Kasiutich, C. Gerbig, O. Kolle, and A. Loescher
 Demonstration of Greenhouse Gas Sounding by IR-Laser Occultation by a Ground-Based Crosslink Experiment at the Canary Islands
- XY116 EGU2012-11382
F. Harrison, E. Browell, J. Dobler, S. Kooi, D. McGregor, and Y. Choi
 Advancements in the Retrieval of CO₂ from an Airborne IM-CW Lidar operating in 1.57-um Region
- XY117 EGU2012-3239
M. Inoue, I. Morino, O. Uchino, Y. Miyamoto, Y. Yoshida, T. Yokota, C. Sweeney, P. P. Tans, and T. Machida
 Validation of XCH₄ derived from SWIR spectra of GOSAT TANSO-FTS with aircraft measurement data
- XY118 EGU2012-6748
D.A. Belikov, S. Maksyutov, S. Aoki, N.M. Deutscher, S. Dohe, D. Griffith, E. Kyro, I. Morino, T. Nakazawa, J. Notholt, M. Rettinger, M. Schneider, V. Sherlock, R. Sussmann, G.C. Toon, P.O. Wennberg, and D. Wunch
 Analysis of column-averaged carbon dioxide and methane concentrations simulated by NIES TM
- XY119 EGU2012-6774
R. Saito and the ACTM group and TCCON group Team
 Comparison of TCCON and ACTM atmospheric CO₂, CH₄ and N₂O column averages
- XY120 EGU2012-12978
S. Houweling, S. Basu, F. Chevallier, L. Feng, S. Maksyutov, P. Palmer, P. Peylin, Z. Poussi, and H. Takagi
 Global CO₂ fluxes from GOSAT: First results from an inter-comparison of inverse models

XY121 EGU2012-13639

H. Takagi, T. Oda, M. Saito, V. Valsala, D. Belikov, T. Saeki, R. Saito, I. Morino, O. Uchino, Y. Yoshida, Y. Yokota, A. Bril, S. Oshchepkov, R. J. Andres, and S. Maksyutov
Global CO₂ simulation using GOSAT-based surface CO₂ flux estimates

CL1.16/AS4.1/BG2.12/IG15 – Biogeochemistry of Atmospheric Methane: Isotopes to Models (co-organized) – Orals

Convener: T. Sowers | Co-Conveners: M. Bock, J. Singarayer

Room: 13

Chairperson: Todd Sowers

08:30–08:45 EGU2012-3211

L. Mitchell, E. Brook, T. Sowers, and J. Lee

Multidecadal variability and the Inter Polar Gradient of atmospheric methane in the late Holocene

08:45–09:00 EGU2012-9540

J. G. Levine, E. W. Wolff, A. E. Jones, M. A. Hutterli, L. C. Sime, O. Wild, P. O. Hopcroft, P. J. Valdes, A. T. Archibald, G. D. Carver, N. J. Warwick, and J. A. Pyle

The Ice-core Record of Atmospheric Methane: Chemistry-Climate Interactions on Tens to Thousands of Years

09:00–09:15 EGU2012-4938

I. Levin, G. Brailsford, T. Bromley, E. Dlugokencky, R. Fisher, R. Heinz, D. Lowe, D. Lowry, J.B. Miller, E. Nisbet, C. Poß, B.H. Vaughn, C. Veidt, and J.W.C. White

Two decades of stable carbon isotope measurements in atmospheric methane - what do they tell us about global methane budget changes?

09:15–09:30 EGU2012-13042

S. Houweling

Global sources and sinks of methane and the use of satellite measurements

09:30–09:45 EGU2012-2937

L. Möller, T. Sowers, M. Bock, R. Spahni, M. Behrens, J. Schmitt, H. Miller, and **H. Fischer**

Climate and CO₂ control on emissions and ecosystem composition of global methane sources over the last 160,000 years derived from $\delta^{13}\text{CH}_4$ in ice cores

09:45–10:00 EGU2012-162

J. Chappellaz, T. Blunier, X. Faïn, C. Stowasser, V. Gkinis, E. Brook, R. Rhodes, J. McConnell, S. Schüpbach, J. Rosen, R. Dallmayr, O. Pascual, and M. Bigler

Continuous Methane and Carbon Monoxide Concentration Measurements along the NEEM Core

CL1.16/AS4.1/BG2.12/IG15 – Biogeochemistry of Atmospheric Methane: Isotopes to Models (co-organized) – Posters

Convener: T. Sowers | Co-Conveners: M. Bock, J. Singarayer

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michael Bock

Z31 EGU2012-5751

A. Basu, M. G. Schultz, and L. Francois

Evaluation of a wetland methane emission parameterization for present-day and Last Glacial Maximum

Z32 EGU2012-10947

A. Budishchev, Y. Mi, A. Gallagher, J. van Huissteden, G. Schaepman-Strub, A.J. Dolman, and T.C. Maximov

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

Z33 EGU2012-13057

S. Dadson

Modelling land-atmosphere interactions in tropical African wetlands

Z34 EGU2012-7135

T. Umezawa, S. Sugawara, T. Sugiyama, K. Kawamura, S. Aoki, and T. Nakazawa

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

Z35 EGU2012-1699

S. Bryant, L. Mitchell, E. Brook, and T. Sowers

High-resolution methane records covering the Holocene

Z36 EGU2012-3217

H. Mitchell, M. Bock, and **T. Sowers**

Decoupling atmospheric methane isotope records during MIS 5-4 transition

Z37 EGU2012-2366

M. Bock, J. Schmitt, R. Schneider, and H. Fischer

Post pyrolysis trapping of molecular hydrogen improves precision for $\delta^2\text{D}(\text{CH}_4)$ analysis

- Z38 EGU2012-7234
J. Schmitt, **B. Seth**, and H. Fischer
In situ production of ethane and propane in dust-rich Greenland ice core samples: is methane also affected?
- Z39 EGU2012-14109
M Baumgartner, A Schilt, O Eicher, J Schmitt, J Schwander, R Spahni, **H Fischer**, and T Stocker
Interpolar difference of atmospheric methane around the last glacial maximum
- Z40 EGU2012-5578
T. Blunier, J. Chappellaz, S. Schuepbach, Ch. Stowasser, E. Brook, J. Rosen, R. Dallmayr, O. Pascual, M. Bigler, and D. Leuenberger
Steps towards a continuous methane concentration record back to 100 kyr BP
- Z41 EGU2012-4396
C. J. Sapart, G. Monteil, M. Prokopiou, R.S.W. van de Wal, P. Sperlich, J.O. Kaplan, K.M. Krumhardt, C. van der Veen, S. Houweling, M.C. Krol, T. Blunier, T. Sowers, P. Martinerie, D. Dahl-Jensen, and T. Röckmann
Natural and anthropogenic variations in methane sources over the last 2 millennia
- Z42 EGU2012-3868
H. Schaefer, D.F. Ferretti, K.R. Lassey, J.W.C. White, P. Sperlich, D.M. Etheridge, and D.C. Lowe
Methane source reconstructions for the last 300 years from Law Dome $\delta^{13}\text{CH}_4$ and their relation to past climate

AS4.4/BG2.16 – Boreal forest chemistry and physics (co-organized) – Orals

Convener: J. Williams | Co-Conveners: T. Petäjä

Room: 8

Chairperson: J. Williams, T. Petäjä

- 15:30–15:45 EGU2012-6971
J. Bäck, J. Aalto, P. Kolari, P. Hari, and M. Kulmala
Contribution of developing foliage to canopy emissions of volatile organic compounds
- 15:45–16:00 EGU2012-5191
A.C. Nölscher, J. Williams, V. Sinha, W. Song, A. Johnson, N. Yassaa, G. Phillips, J. Crowley, R. Axinte, H. Fischer, D. Gonzales, J. Valverde-Canossa, A. Vogel, T. Hoffmann, P. Rantala, J. Rinne, M. Kulmala, H. Ouwersloot, J. Vila, and J. Lelieveld
High missing OH reactivity in summertime boreal forest environment
- 16:00–16:15 EGU2012-9051
K. Hens and the HUMPPA-COPEC2010 Team
Hydroxyl radical measurements in a boreal forest during HUMPPA-COPEC 2010
- 16:15–16:30 EGU2012-10036
T. Nieminen, M. Dal Maso, T. Petäjä, P. P. Aalto, V.-M. Kerminen, P. Hari, and M. Kulmala
Trends on atmospheric new particle formation — 16 years of observations in boreal forest
- 16:30–16:45 EGU2012-8736
A. L. Vogel, M. Brüggemann, M. Äijälä, M. Ehn, H. Junninen, A. L. Corrigan, T. Petäjä, D. R. Worsnop, L. M. Russell, M. Kulmala, J. Williams, and T. Hoffmann
Online measurement of biogenic organic acids in the boreal forest using atmospheric pressure chemical ionization mass spectrometry (APCI-MS)
- 16:45–17:00 EGU2012-13285
A. Corrigan, L. Russell, M. Äijälä, T. Petäjä, M. Kulmala, W. Song, and J. Williams
Separation of biogenic and biomass burning submicron aerosol from a boreal forest in Hyytiälä, Finland during HUMPPA-COPEC 2010

AS4.4/BG2.16 – Boreal forest chemistry and physics (co-organized) – Posters

Convener: J. Williams | Co-Conveners: T. Petäjä

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: J. Bäck, N. Yassaa

- XY122 EGU2012-2267
J. Williams, T. Petäjä and the HUMPPA-COPEC Team
The summertime Boreal forest field measurement intensive (HUMPPA-COPEC-2010): an overview of meteorological and chemical influences.
- XY123 EGU2012-4203
N. Yassaa, J. Williams, W. Song, A. Vanhatalo, J. Bäck, and J. Lelieveld
Diel cycles of isoprenoids in the emissions of Norway spruce, different Scots pine chemotypes, and in Boreal forest ambient air during HUMPPA-COPEC-2010

- XY124 EGU2012-4014
H. Hellén, M. Henriksson, M. Kulmala, and H. Hakola
Semi-continuous measurements of mono- and sesquiterpene concentrations in Boreal Forest
- XY125 EGU2012-9735
R. Taipale, P. Rantala, M. K. Kajos, J. Patokoski, T. M. Ruuskanen, J. Aalto, P. Kolari, J. Bäck, P. Hari, M. Kulmala, and J. Rinne
Oxygenated VOC and monoterpene emissions from a boreal coniferous forest
- XY126 EGU2012-8852
G. J. Phillips, N. Pouvesle, J. Thieser, R. Axinte, G. Schuster, H. Fischer, J. Williams, and J. N. Crowley
Simultaneous measurements of peroxyacetyl nitrate and peroxyacetic acid by Chemical Ionization Mass Spectrometry (CIMS): contrasting boreal forest with rural continental Europe
- XY127 EGU2012-3022
R. Axinte, H. Fischer, H. Bozem, Z. Hosaynali Beygi, A. Reiffs, U. Parchatka, and R. Koenigstedt
Variation of Tropospheric Hydrogen Peroxide and Formaldehyde From the Subtropics to the Boreal Forest in Europe
- XY128 EGU2012-9526
P. Rantala, R. Taipale, T.M. Ruuskanen, J. Aalto, M.K. Kajos, J. Patokoski, S. Schallhart, and J. Rinne
Flux measurements of volatile organic compounds at SMEAR II using surface layer gradient method
- XY129 EGU2012-3619
R. Dlugi, M. Berger, M. Zelger, A. Hofzumahaus, F. Rohrer, K. Lu, F. Holland, and G. Kramm
Segregation Effects on Chemical Reactions in Atmospheric Flows: A Comparison of Experimental and Modeling Results
- XY130 EGU2012-5322
A.C. Nölscher, V. Sinha, S. Bockisch, T. Klüpfel, and J. Williams
A new method for direct total OH reactivity measurements using a fast Gas Chromatographic Photo-Ionization Detector (GC-PID)
- XY131 EGU2012-10362
A. Virkkula, **U. Makkonen**, J. Mäntykenttä, and H. Hakola
Seasonal and diurnal cycles of ammonia, nitrous acid and nitric acid at a forest site in Finland
- XY132 EGU2012-10557
T. Jokinen, M. Sipilä, H. Junninen, M. Ehn, J. Hakala, G. Lönn, T. Petäjä, M. Kulmala, and D. R. Worsnop
Sulphuric acid and neutral cluster measurements with CI-API-TOF
- XY133 EGU2012-12425
J. Joensuu, N. Altimir, M. Raivonen, P. Kolari, P. Keronen, T. Vesala, J. Bäck, P. Hari, E. Järvinen, and E. Nikinmaa
Role of plant-generated water vapor and VOC fluxes in shoot chamber measurements of O₃ and NO_x
- XY134 EGU2012-13376
A. van Eijck, C. Kampf, and T. Hoffmann
Oxygenated products of sesquiterpenes in secondary organic aerosol
- XY135 EGU2012-9991
M. Äijälä, H. Junninen, M. Ehn, T. Petäjä, A. Vogel, T. Hoffmann, A. Corrigan, L. Russell, U. Makkonen, A. Virkkula, J. Mäntykenttä, M. Kulmala, and D. Worsnop
Measurements of aerosol chemical composition in boreal forest summer conditions
- XY136 EGU2012-8465
S.A.K. Häkkinen, M. Äijälä, K. Lehtipalo, H. Junninen, A. Virkkula, D.R. Worsnop, M. Kulmala, T. Petäjä, and I. Riipinen
Aerosol volatility in a boreal forest environment
- XY137 EGU2012-10702
H.E. Manninen, **T. Nieminen**, A. Franchin, E. Järvinen, J. Kontkanen, A. Hirsikko, U. Hörrak, A. Mirme, H. Tammet, V.-M. Kerminen, T. Petäjä, and M. Kulmala
Atmospheric ions, boreal forests and impacts on climate

GI2.1/AS4.6 – Atmospheric and Meteorological Instrumentation (co-organized) – Orals

Convener: J. Vivekanandan | Co-Conveners: D. Parsons, M. Rose, C. Waldmann, M. Lange, J. Reuder, A. La Cour-Harbo

Room: 41

Chairperson: Manfred Lange and Joachim Reuder

- 08:30–08:45 EGU2012-897
J. Born, O. Möhler, W. Haunold, J. Schrod, I. Brooks, S. Norris, B. Brooks, M. Hill, and T. Leisner
Meteorological and Aerosol Sensing with small Unmanned Aerial Systems
- 08:45–09:00 EGU2012-3471
J. Reuder and M. Jonassen
Turbulence measurements in a wind park with the Micro-UAS SUMO

- 09:00–09:15 EGU2012-8218
K. Nicoll and R.G. Harrison
 Cloud detection using disposable airborne sensors
- 09:15–09:30 EGU2012-11103
A. Sobester, S. J. Johnston, J. P. Scanlan, E. E. Hart, and N. S. O'Brien
 Rapid Development of Bespoke Unmanned Platforms for Atmospheric Science
- 09:30–09:45 EGU2012-11404
G. Lohmann, S. Martin, A. Lampert, and P. Vörsmann
 UAS Measurements of the Boundary Layer Late Afternoon Transition
- 09:45–10:00 EGU2012-13124
Ö. Rögnvaldsson, H. Ágústsson, M.O. Jonassen, and H. Ólafsson
 Small unmanned airplanes and their use to improve on-demand local forecasts

COFFEE BREAK

Chairperson: Mike Rose, and Christoph Waldmann

- 10:30–10:45 EGU2012-11478
S. Langebner, C. Hasler, R. Schnitzhofer, F. Brilli, M. Jocher, and A. Hansel
 Ambient VOC-Measurements by GC-PTR-TOF
- 10:45–11:00 EGU2012-11454
A. Pierce, D. Obrist, H. Moosmuller, and C. Moore
 Cavity ring-down spectroscopy (CRDS) system for measuring atmospheric mercury using differential absorption
- 11:00–11:15 EGU2012-2467
R. A. Goldberg, F. J. Schmidlin, A. G. Feofilov, M. Bedrick, and R. L. Rose
 Comparison of Temperature Measurements in the Middle Atmosphere by Satellite with Profiles Obtained by Meteorological Rockets
- 11:15–11:30 EGU2012-2902
M. Ghysels, J. Cousin, N. Amarouche, L. Gomez-Martin, E. D. Riviere, and G. Durry
 Development of PicoSDLA laser sensors for in-situ measurements of CH₄, CO₂ and H₂O in the UTLS in the frame of the TRO-pico project.
- 11:30–11:45 EGU2012-682
R.A. Rose, T.R. Tsai, N.A. Macleod, G. Wysocki, and D. Weidmann
 Quantum Cascade Laser Heterodyne Radiometry for Atmospheric Observation
- 11:45–12:00 EGU2012-13843
J. Vivekanandan, E. Eloranta, S. Spuler, and B. Morley
 Calibration of High Spectral Resolution Lidar
- 12:00–12:15 EGU2012-13415
A. Heikkilä, T. Koskela, K. Lakkala, P. Kärhä, S. Syrjälä, H. Lemmetyinen, U. Feister, N. Kouremeti, A. Bais, S. Kazadzis, J.M. Vilaplana, J.J. Rodriguez, C. Guirado, and E. Cuevas
 New approaches in assessment of solar UV exposure ageing materials
- 12:15–12:30 EGU2012-10698
K. Y. Choi and E. J. Milton
 Airborne Hyperspectral Skydome: A New Dimension for Hyperspectral Sensing

GI2.1/AS4.6 – Atmospheric and Meteorological Instrumentation (co-organized) – Posters

Convener: J. Vivekanandan | Co-Conveners: D. Parsons, M. Rose, C. Waldmann, M. Lange, J. Reuder, A. La Cour-Harbo

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jothiram Vivekanandan

- A75 EGU2012-862
D. E. Constantin, A. Merlaud, M. Van Roozendaal, F. Mingireanu, M. Voiculescu, and L.P. Georgescu
 DOAS monitoring of tropospheric NO₂ from an UAV
- A76 EGU2012-4288
P. Anderson
 In situ measurements of TKE decay over sea-ice during evening transition using UAS.
- A77 EGU2012-5949
M. Horbanski, D. Pöhler, T. Mahr, T. Wagner, and U. Platt
 Application of DOAS Instruments for Trace Gas Measurements on Unmanned Aerial Systems

- A78 EGU2012-6327
S. Mayer, M. O. Jonassen, and J. Reuder
The Unmanned Aerial System SUMO: an alternative measurement tool for polar boundary layer studies
- A79 EGU2012-6387
M. A. Lange, S. Ioannou, and **C. Keleshis**
A UAS-Facility at the Energy, Environment and Water Research (EEWRC) Center of The Cyprus Institute (Cyl)
- A80 EGU2012-10562
D. Martinez and J. Cuxart
Application of the Micro-Meteorological UAV (M2AV) Carolo T200 for the Study of Barocline Flows
- A81 EGU2012-2326
A. Geddes and H Boesch
Development of a Fabry-Perot Etalon Spectrometer for High-resolution Aerosol Observations in the Oxygen A-Band
- A82 EGU2012-3169
F. J. Schmidlin, E. T. Northam, C. E. Ashburn, and C. B. Brothers
Upper Air Measurement Improvements
- A83 EGU2012-4155
E. Zabolotskikh and **L. Bobylev**
Enhanced Techniques for Mesoscale Cyclone Studies using Satellite Multi-sensor Approach
- A84 EGU2012-4819
C. Holstein-Rathlou, J.P. Merrison, J.J. Iversen, and P. Nornberg
Quantification of wind flow in the European Mars Simulation Wind Tunnel Facility
- A85 EGU2012-7078
H. J. Jost, J.J. Scherer, J.B. Paul, and M.L. Fischer
Analyzers for Ambient CH₄, CO, and N₂O Monitoring based on Mid-IR Difference Frequency Lasers
- A86 EGU2012-9877
A. H. Mortimer
A Novel Miniaturised Infrared Imaging Spectrometer for the Measurement of Atmospheric Trace Gases
- A87 EGU2012-12102
M. Weiß and B. van den Hurk
Land use change affecting our (modelled) climate
- A88 EGU2012-12491
M. Dorninger
MELIFT - A new device for accurate measurements in a snow rich environment
- A89 EGU2012-12779
T. Guggenmoser and the GLORIA Team
ESSenCe 2011 GLORIA Measurements
- A90 EGU2012-13240
J. Blank, J. Ungermann, T. Guggenmoser, M. Kaufmann, and M. Riese
JURASSIC Retrieval Processing

AS4.8 – Infrasound monitoring for atmospheric studies – Orals

Convener: A. Le Pichon | Co-Conveners: Dr L.G. Evers, T. Kvaerna

Room: 7

Chairperson: n.n.

- 08:30–08:45 EGU2012-2979
P. Keckhut and A. Hauchecorne
Investigations of the dynamic with lidars; potential contribution of Infrasound
- 08:45–09:00 EGU2012-5428
J. D. Assink, J.-M. Lalande, C. Talmadge, R. Waxler, A. Le Pichon, E. Blanc, and Ph. Blanc-Benon
Infrasound as an upper atmospheric probe: review and recent results
- 09:00–09:15 EGU2012-12355
M. Hedlin
Studies of large- and fine-scale atmospheric structure using dense seismic networks
- 09:15–09:30 EGU2012-7532
C. Pilger, F. Streicher, S. Wüst, and M. Bittner
Effects of fine-scale orography on infrasound propagation
- 09:30–09:45 EGU2012-8230
E. Blanc, M. Bittner, A. Hauchecorne, L. Ceranna, A. Charlton-Perez, M. Ripepe, L. Evers, T. Kvaerna, J. Lastovicka, L. Eliasson, N. Crosby, P. Blanc-Benon, S. Bernonville, A. Le Pichon, P. Keckhut, E. Marchetti, S. Wust, N. Brachet, P. Heinrich, C. Pilger and the ARISE Team
Atmospheric dynamics Research InfraStructure in Europe: The ARISE project

09:45–10:00 EGU2012-12262

D. Fee, R. Waxler, D. Drob, Y. Gitterman, and J. Given

Overview of the 2009 and 2011 Sayarim Infrasound Calibration Experiments

AS4.8 – Infrasound monitoring for atmospheric studies – Posters

Convener: A. Le Pichon | Co-Conveners: Dr L.G. Evers, T. Kvaerna

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY138 EGU2012-2698

T. Sindelarova, Z. Mosna, **J. Lastovicka**, J. Chum, D. Buresova, and J. Zednik

Observations of effects of earthquake swarms in the Czech microbarograph network

XY139 EGU2012-4306

D. Ghica and C. Ionescu

Infrasound and seismic signals from earthquakes and explosions observed with Plostina seismo-acoustic array

XY140 EGU2012-5089

M. Landès, A. Le Pichon, N.M. Shapiro, G. Hillers, M. Campillo, and L. Ceranna

On the modeling of microbarom observations

XY141 EGU2012-5355

A. Van Geyt and L.G. Evers

On the localization of infrasound sources with stratospheric arrivals

XY142 EGU2012-5500

P. Smets, L.G. Evers, A. van Geyt, and J.T. Fricke

Anomalous infrasound propagation in a hot stratosphere and the existence of extremely small shadow zones

XY143 EGU2012-6155

J. T. Fricke, E. N. Ruigrok, L. G. Evers, D. G. Simons, and K. Wapenaar

Results of Infrasound Interferometry in Netherlands

XY144 EGU2012-7161

I.-Y. Che, T. S. Kim, and H.-I. Lee

Infrasound signals coupled from an underwater explosion

XY145 EGU2012-7350

M. Charbit, P. Gaillard, and A. Le Pichon

Evaluating the performance of infrasound detectors

XY146 EGU2012-7410

M. Charbit, K. Abed-Meraim, G. Blanchet, A. Le Pichon, and Y. Cansi

OLS vs WLS for DOA Estimation Based on TDOA Estimates: Application to Infrasonic Signals

XY147 EGU2012-8077

P. Heinrich and E. Blanc

Numerical simulation of convectively generated gravity waves in West Africa and comparisons with observations

XY148 EGU2012-8080

A. Hauchecorne, J. Paredes, D. Cugnet, P. Keckhut, C. Cot, C. Millet, A. Le Pichon, and P. Heinrich

Development of the new realistic atmospheric model RACCORD from the ground to the thermosphere

XY149 EGU2012-9062

A. Le Pichon, L. Ceranna, and M. Landes

Observed and predicted performance of the global IMS infrasound network

XY150 EGU2012-9146

A. Le Pichon, L. Ceranna, and P. Kechut

Global scale stratospheric processes as measured by the infrasound IMS network

XY151 EGU2012-9401

A. Ramanantsoa, J.B. Andrianavaoisoa, **F. Randrianarinosy**, A. T. Rakotoarisoa, G. Rambolamanana, A.

Le Pichon, and E. Blanc

Meteorological conditions effects on I33MG detection capability

XY152 EGU2012-9696

K. Koch

Regional measurements of infrasound signals from ARIANE-5 engine tests in Southern Germany

XY153 EGU2012-10558

L. Ceranna and A. Le Pichon

How to estimate yield using remote infrasound recordings?

XY154 EGU2012-10632

R. Waxler, P. Blom, C. Talmadge, and G. Frazier

Observations of the refraction of the cyclonic microbarom signal by the cyclonic winds

- XY155 EGU2012-11629
D. Hart, K. Jones, L. Zimakov, and P. Martysevich
 Test results of the high-resolution, low power, portable microbarometer
- XY156 EGU2012-12617
D. Pepyne
 Design and Operation of Infrasound Stations for Hazardous Weather Detection
- XY157 EGU2012-13337
P. Campus, E. Marchetti, M. Ripepe, A. Le Pichon, P. Mialle, and N. Wallenstein
 Near- and far-field infrasound monitoring of Etna volcano
- XY158 EGU2012-13886
g. nief, p millier, n. brebion, and s. denis
 New portable digital microbarometer DMB one
- XY159 EGU2012-14421
M. Kallel and A. Agrebi
 Infrasound observations at IS48-Tunisia

AS4.10 – Integrated physical and chemical weather modelling with two-way interactions – Orals

Convener: A. Baklanov | Co-Conveners: J. Flemming, G. A. Grell

Room: 8

Chairperson: Alexander Baklanov and Georg Grell

- 13:30–13:45 EGU2012-3094
B. Vogel, E. Athanasopoulou, M. Bangert, A. Ferrone, K. Lundgren, H. Vogel, Ch. Knote, and D. Brunner
 The Fully Online Integrated Model System COSMO-ART to Simulate Direct and Indirect Effects of Aerosols
- 13:45–14:00 EGU2012-9249
J. Flemming, V. Huijnen, A. Inness, L. Jones, J. Arteta, V.H. Peuch, M.G. Schultz, O. Stein, I. Bouarar, A. Wagner, H. Flentje, J. Leita, and A. Richter
 Atmospheric chemistry in the integrated forecast system of ECMWF
- 14:00–14:15 EGU2012-12685
J. W. Kaminski and J. Struzewska
 Aerosol direct effect - regional simulations with the GEM-AQ model
- 14:15–14:30 EGU2012-10460
G. Kallos and S. Solomos
 Modeling cloud processes in a mixed-type aerosol environment
- 14:30–14:45 EGU2012-10705
M. T. Woodhouse, G. W. Mann, K. S. Carslaw, J. Flemming, J.-J. Morcrette, and O. Boucher
 A microphysical aerosol module in the ECMWF Integrated Forecasting System
- 14:45–15:00 EGU2012-10887
A. S. Zaakey, A. Baklanov, F. Solmon, F. Giorgi, R. Nuterman, B. H. Sass, U. S. Korsholm, K. P. Nielsen, J. H. Sørensen, and A. Mahura
 The signature of climate change on surface ozone: Using the Online integrated climate-chemistry model (EnvClimA)
- 15:00–15:15 EGU2012-11140
S. Archer-Nicholls, D. Lowe, S. Utembe, and G. McFiggans
 Using WRF-Chem to investigate the impact of night time nitrate radical chemistry and N₂O₅ heterogeneous chemistry on the chemical composition of the UK troposphere.

AS4.10 – Integrated physical and chemical weather modelling with two-way interactions – Posters

Convener: A. Baklanov | Co-Conveners: J. Flemming, G. A. Grell

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Johannes Flemming

- XY160 EGU2012-3130
G. A. Grell, S.A. McKeen, S. Sahm, S. Jones, and G. Creighton
 Evaluation of aerosol optical depth forecasts using the FIM-Chem (Flow-following finite volume Icosahedral Model).
- XY161 EGU2012-3587
 A. Baklanov, T. Elperin, **A. Fominykh**, and B. Krasovtsov
 Cell Model of In-cloud Scavenging of Highly Soluble Gases

- XY162 EGU2012-5079
A. Wagner and the MACC-II Team
 The Verification of MACC-II Global Reactive Gas Forecasts with Global Atmosphere Watch Surface Observations and Ozone-sonde Measurements from the NDACC, WOUDC, NILU and SHADOZ Databases
- XY163 EGU2012-6844
G. Surkova, A. Revokatova, A. Kirsanov, and G. Rivin
 Short-term forecast of air pollutants' concentrations over the central European part of Russia on the basis of COSMO-ART
- XY164 EGU2012-8089
R. Forkel, J. Werhahn, S. McKeen, S. Peckham, G. Grell, and P. Suppan
 A case study on the aerosol-meteorology feedback for Europe with WRF/Chem
- XY165 EGU2012-12643
S. R. Freitas, K. M. Longo, V. Marecal, M. Pirre, and T. Gmai
 A fully coupled regional atmospheric numerical model for integrated air quality and weather forecasting.
- XY166 EGU2012-12668
S.K. Barodka, A.M. Krasouski, A.G. Svetashev, L.N. Turishev, and V.V. Zhuchkevich
 Evolution and structure of ozone mini-holes: a mesoscale integrated modeling case study
- XY167 EGU2012-13605
B. Sørensen, E. Kaas, and P. H. Lauritzen
 An online-coupled NWP/ACT model with conserved Lagrangian levels
-
- NH1.8/AS4.15/ESSI1.3/HS5.10/HS7.7 – ICT-based hydrometeorology science and natural disaster societal impact assessment (co-organized) – Posters**
 Convener: A. Parodi | Co-Conveners: N. Rebora, G.C. Craig, A. Clematis, D. Kranzmueller, M. Schiffers
Hall X/Y | Display Time 08:00–19:30
 Author in Attendance: 17:30–19:00
 Chairperson: Antonio Parodi
- XY168 EGU2012-7308
D. D'Agostino
 An overview of Grid portal technologies for the development of HMR science gateways
- XY169 EGU2012-7622
Q. Harpham
 FluidEarth with OpenMI version 2.0 - Lowering the Barriers to Integrated Hydro-meteorological Modelling
- XY170 EGU2012-9137
L. Deki?, A. Mihalovi?, I. Jovi?i?, D. Vladikovi?, J. Jerini?, and M. Ivkovi?
 Forecasting river discharge using coupled WRF-NMM meteorological model and HBV runoff model, case studies
- XY171 EGU2012-9794
M. Marku, V. Mustaqi, E. Abazi, K. Zaimi, E. Vako, M. Gjonaj, F. Hoxhaj, M. Deda, E. Fiori, M. Massabò, and F. Castelli
 Meteorological and Hydrogeological Warning Thresholds in the operational bulletins of the Albanian National Centre for Forecast and Monitoring of Natural Risks
- XY172 EGU2012-10960
T. Bedrina, A. Parodi, A. Quarati, A. Clematis, N. Rebora, and D. Laiosa
 Integrating data and mashup concepts in Hydro-Meteorological Research: the torrential rainfall event in Genoa (4th November 2011) case study.
- XY173 EGU2012-11270
E. Boldrini, F. Salas, D. R. Maidment, P. Mazzetti, M. Santoro, S. Nativi, and B. Domenico
 Bridging the gap between Hydrologic and Atmospheric communities through a standard based framework
- XY174 EGU2012-11898
L. Mediero, L. Garrote, A. Requena, and A. Chávez
 Comparison between genetic programming and an ensemble Kalman filter as data assimilation techniques for probabilistic flood forecasting
- XY175 EGU2012-12246
V. Bacu, D. Mihon, T. Stefanut, D. Rodila, P. Cau, S. Manca, C. Soru, and D. Gorgan
 Hydrological Scenario Using Tools and Applications Available in enviroGRIDS Portal
- XY176 EGU2012-12962
H.R.A. Jagers, M. Genseberger, and M.A.F.H. van den Broek
 Using HPC within an operational forecasting configuration
- XY177 EGU2012-13796
M. Shapovalov
 Effect of Severe Weather Processes on the Social and Economic Activity in the North Caucasus Region

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

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

Room: 1

Chairperson: M. Semenov

- 08:30–08:45 EGU2012-7685
A. Gobin and I. Piccard
Meteorological risks, impacts on crop production systems and agricultural insurances in Belgium
- 08:45–09:00 EGU2012-556
S.A. Khresat
Adaptation measures to reduce the impact of climate variability on crop production in Jordan
- 09:00–09:15 EGU2012-13551
K. C. Kersebaum, M. Gandorfer, and M. Wegehenkel
Assessment of production risks for winter wheat in different German regions under climate change conditions
- 09:15–09:30 EGU2012-4151
E. Vanuytrecht, D. Raes, P. Willems, and M. Semenov
Comparing climate change impacts on crops in Belgium based on CMIP3 and EU-ENSEMBLES multi-model ensembles
- 09:30–09:45 EGU2012-1690
H. Fraga, J. A. Santos, A.C. Malheiro, and J. Moutinho-Pereira
Viticultural zoning in Portugal: current conditions and future scenarios
- 09:45–10:00 EGU2012-6249
Z. Dunkel, E. Vincze, and A. Moring
Meteorological contribution to the mitigation and adaptation of the 'extreme water events' of Hungarian Great Plain

COFFEE BREAK

Chairperson: A. Gobin

- 10:30–10:45 EGU2012-13848
M. Capa-Morocho, B. Rodríguez-Fonseca, and M. Ruiz-Ramos
Climatic variability effects on summer cropping systems of the Iberian Peninsula
- 10:45–11:00 EGU2012-14106
M. Bielza, T. Maestro, A. Algarra, and A. Garrido
Analysis of the impact of water shortage on irrigated fruit yields in Spain
- 11:00–11:15 EGU2012-8204
M. Gil, A. Garrido, and N. Hernández-Mora
Economic Drought Impact on Agriculture: analysis of all agricultural sectors affected
- 11:15–11:30 EGU2012-4085
N. R. Dalezios, A. Blanta, and N.V. Spyropoulos
Remotely Sensed Quantitative Drought Risk Assessment in Vulnerable Agroecosystems
- 11:30–11:45 EGU2012-13927
E. Iglesias and **K. Baez**
Innovation in drought risk management: exploring the potential of weather index insurance
- 11:45–12:00 EGU2012-13945
J.A. Escribano Rodríguez, A.M. Tarquis, and C.G. Hernandez Díaz-Ambrona
Pasture Drought Insurance Based on NDVI and SAVI

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

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Nicolas Dalezios

- XY178 EGU2012-378
D. Lobo, K. Verbist, D. Gabriels, M. Puche, G. Bracho, G. Soto, and F. Santibañez
Zonation of hydric regimens in Venezuela based on rainfall characteristics

- XY179 EGU2012-4817
Z. Hussain and S. Saeed
Intraseasonal to interannual variability of summer monsoon rainfall and its influence on the Agricultural corps in mountainous Kashmir
- XY180 EGU2012-6667
R.R Muita, F.F van Ogtrop, and R.W Vervoort
Dry spell trend analysis in Kenya and the Murray Darling Basin using daily rainfall
- XY181 EGU2012-10700
M. G. Cortina-Januchs, J. Quintanilla-Dominguez, A. Vega-Corona, and D. Andina
Time series prediction in agroecosystems
- XY182 EGU2012-10745
J M Anton, J B Grau, A M Tarquis, D Andina, and M E Sanchez
Prediction in cases with superposition of different hydrological phenomena, such as from weather "cold drops"
- XY183 EGU2012-13094
V. Mereu, A. Gallo, G. Carboni, and D. Spano
Impact of climate change and adaptation strategies on crop production in Nigeria
- XY184 EGU2012-13788
A. Florentino, D. Torres, A. Ospina, J. Contreras, Z. Palma, and J. Silvera
Soil physical conditions as livestock treading effect in tropical Agroecosystem of dryland and strategies to mitigate desertification risk
- XY185 EGU2012-13790
A. Ospina, A. Florentino, and V. Lorenzo
Soil management system for water conservation and mitigation of global change effect
- XY186 EGU2012-13851
M. Capa-Morocho, M. Ruiz-Ramos, and B. Rodríguez-Fonseca
Methodological discussion for interdisciplinary project on the effects of climatic variability on cropping systems.
- XY187 EGU2012-14338
M.A. Rodrigues, A. Monteiro, A. Rocha, H. Quenol, and J.R. de Freitas
Application of Bioclimatic Indexes to the Characterization of the Viticulture Aptitude within the Demarcated Douro Region
- XY188 EGU2012-14339
M.A. Rodrigues, A. Rocha, A. Monteiro, H. Quénol, and J.R. de Freitas
Prediction of Frost Risks and Plagues using WRF model: a Port Wine region case study
- XY189 EGU2012-2396
MA Semenov and S Pilkington-Bennett
Validation of ELPIS baseline scenarios using ECA&D observed data
- XY190 EGU2012-6224
A. Giarolla, N. Resende, S. C. Chou, P. S. Tavares, and D. C. Rodrigues
COFFEE BEVERAGE QUALITY ASSESSMENT BASED ON ETA/CPTEC-HadCM3 MODEL (A1B-IPCC/SRES SCENARIO), SOUTHEASTERN BRAZIL
- XY191 EGU2012-9024
K. Szafranek, B. Jakubiak, R. Lech, and M. Tomczuk
Results of analysis of archive MSG data in the context of MCS prediction system development for economic decisions assistance - case studies
- XY192 EGU2012-9473
H. S. Choi, U. Schneider, E. Schmid, and H. Held
The value of seasonal forecasting and crop mix adaptation to climate variability for agriculture under climate change
- XY193 EGU2012-13944
J.L. Valencia, A. Saa-Requejo, J.M. Gascó, and A.M. Tarquis
Frequency and Intensity of drought events over Ebro River basin
- XY194 EGU2012-5666
J M Anton, J B Grau, A M Tarquis, D Andina, J M Cisneros, and **E Sanchez**
Discussion about decision support systems using continuous multi-criteria methods for planning in areas with hydro-basins, agriculture and forests, from examples in Argentine.
- XY195 EGU2012-5774
D. Perez-Lopez, M. Ruiz-Ramos, E. Sánchez-Sánchez, A. Centeno, I. Prieto-Egido, and N. Lopez-de-la-Franca
Influence of climate change on the flowering of temperate fruit trees
- XY196 EGU2012-2697
J. M. Anton, J. B. Grau, A. M. Tarquis, D. Andina, and J. M. Cisneros
Development of mathematical models to elaborate strategies, select alternatives and development of plans for adaptation of communities to climate change in different geographical areas including costs to implement it

- XY197 EGU2012-3698
J. M. Mirás Avalos, E. Vidal Vázquez, P. Sande Fouz, and A. Paz González
 Coping with Uncertainties in Mapping Extreme and Mean Temperatures at the Regional Level for Risk Management in Agriculture: A Case Study in Galicia, NW Spain
- XY198 EGU2012-12312
T. Calheiros, M.G. Pereira, J.G. Pinto, L. Caramelo, J. Gomes-Laranjo, and C.C. Dacamara
 Assessing potential changes of chestnut productivity in Europe under future climate conditions
- XY199 EGU2012-12447
M. G. Castiglione, M. C. Sasal, M. G. Wilson, A. Paz González, and J. D. Oszust
 Temporal Variability of Physical Properties on an Aquic Argiudoll under no Tillage
- XY200 EGU2012-12860
J. Ramarohetra and B. Sultan
 Are satellite based rainfall estimates accurate enough for crop modelling under Sahelian climate?
- XY201 EGU2012-13138
M. A. Pilatti, R. Marano, O. Felli, A. Alesso, M. E. Carrizo, and M. C. Miretti
 Degradation and Improvement of Argiudolls in Centre Santa Fe (Argentina): Changes in Physical and Chemical Soil Properties and in its Productive Capacity Using a sSmulation Model of Crop Growth
- XY202 EGU2012-14075
C. Lozano, A.M. Tarquis, and J.A. Gómez-Barona
 Sum Insured Determination for Cereal, Citrus and Vineyards in the Spanish Agricultural Insurance System

GI2.5 – Preparatory activities for the scientific utilisation of the GMES Sentinel satellites constellations including Cal/Val activities of their optical instruments. (co-listed) – Posters

Convener: M. Berger | Co-Conveners: J. Aschbacher, H. Mortimer, B. Bojkov

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Hugh Mortimer, Michael Berger, Josef Aschbacher

- A97 EGU2012-8674
A. H. Mortimer and D. Smith
 The Spectral Response Recharacterisation of the Advanced Along Track Scanning Radiometer (AATSR) Using a High Resolution Fourier Transform Spectrometer.
- A98 EGU2012-11166
K. Y. Choi and E. J. Milton
 Significance of Radiometric Calibration Accuracy in Multi-Scale Validation between Ground, Airborne and Spaceborne Platforms
- A99 EGU2012-589
Y.J. Li, Y. Xue, C. Li, and L.K. Yang
 LABITS: An Algorithm for Land Aerosol and Bidirectional Reflectance Inversion by Time Series Technique and its Applications on NOAA AVHRR Data
- A100 EGU2012-1662
H. Nett, P. Ingmann, and K. McMullan
 ESA's Sentinel-5 Precursor Mission: a GMES Mission for Global Observations of Atmospheric Composition
- A101 EGU2012-2335
F. Olschewski, C. Rolf, P. Steffens, A. Kleinert, C. Piesch, A. Ebersoldt, C. Monte, B. Gutschwager, J. Hollandt, P. Preusse, F. Friedl-Vallon, and R. Koppmann
 Large-Area Radiation Sources for the In-flight Calibration of the GLORIA Interferometer
- A102 EGU2012-4156
C.-R. Li, L.-L. Tang, H.-B. Niu, X.-N. Zhou, Z.-Y. Liu, L.-L. Ma, and Y.-S. Zhou
 Potential of Sentinel Satellites for Schistosomiasis Monitoring
- A103 EGU2012-4194
V.R. Gavrilov, A. A. Katysheva, B.B. Khlevnoy, B. E. Lisyansky, S.P. Morozova, A.S. Panfilov, V.I. Sapritsky, and M.V. Solodilov
 Uncertainty evaluation of optical instruments radiometric calibration using integrating sphere
- A104 EGU2012-5038
J. Verrelst, J.P. Rivera, L. Alonso, L. Guanter, J. Delegido, and J. Moreno
 Evaluating Machine learning regression algorithms for operational retrieval of biophysical parameters: opportunities for Sentinel-2 and -3
- A105 EGU2012-6067
K. Dabrowska-Zielinska, M. Budzynska, M. Tomaszewska, M. Bartold, and K. Turlej
 ENVISAT.MERIS spectral bands and ENVISAT ASAR - discussion on applications of Sentinel 1 and 2 for agriculture in Poland.
- A106 EGU2012-6137
R. Roebeling, J. Schulz, T. Hewison, and B. Theodore
 Inter-calibration of METEOSAT IR and WV channels using HIRS

- A107 EGU2012-7265
S.C. Wagner, T. Hewison, and R.A. Roebeling
A Review of the Strategy for the Meteosat Solar Band Calibration
- A108 EGU2012-7376
S.C. Wagner and T. Hewison
Implementation of an Inter-Calibration Method between Meteosat SEVIRI and MODIS Solar Bands using Deep Convective Cloud Targets
- A109 EGU2012-7439
A. Regan, P. Silvestrin, D. Fernandez, N. Leveque, and S. Eves
Earth Observation Convoy: Synergetic Observations with Satellites Flying in Formation with European Operational Missions - Possibilities for New Science
- A110 EGU2012-9317
H. Rebhan, C. Donlon, B. Berruti, A. Bongiorno, P. Femenias, P. Goryl, U. Klein, B. Seitz, J. Nieke, and C. Mavrocordatos
Sentinel-3 Mission Overview and Status
- A111 EGU2012-10160
J. Balodis, I. Janpaule, A. Rubans, A. Zarinsh, M. Abele, A. Ubelis, and M. Cekule
Eventual Participation in GMES of Institute of Geodesy and Geoinformation
- A112 EGU2012-11042
D. Odermatt, J. Pitarch, J. Carpenter, F. Pomati, M. Kawka, A. Wuest, and M. Schaeppman
Matching stratified plankton blooms with satellite data estimated chl-a
- A113 EGU2012-11278
S. Salvi, F. Sarti, A. Mouratidis, A. Coletta, and S. Zoffoli
InSAR monitoring for seismic risk management: the Sentinel 1 contribution
- A114 EGU2012-11523
C. Lamarche, M. Tomaszewska, K. Dabrowska-Zielinska, and P. Defourny
Object-based automatic change detection in forested areas of Poland between 2000 and 2006 using NDVI times series at moderate resolution.
- A115 EGU2012-12740
P. Féménias, H. Rebhan, C. Donlon, A. Bongiorno, and C. Mavrocordatos
Sentinel-3 Surface Topography Mission: Payload, Data Products and Cal/Val Preparation
- A116 EGU2012-13224
H.C. Winsemius, G.R. Brakenridge, R. Westerhoff, J. Huizinga, N. Villars, and C. Bishop
Flood mapping by combining the strengths of optical and Sentinel active radar remote sensing

ML2 – Arthur Holmes Medal Lecture by Vincent Courtillot (co-listed) – Orals

Convener: D. B. Dingwell

Room: D

Chairperson: n.n.

- 12:15–13:15 EGU2012-14439
V. Courtillot
On the importance of debate in (geo-)scientific research (Arthur Holmes Medal Lecture)

Wednesday, 25 April

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

Convener: G. Rivière | Co-Conveners: O. Martius, V Grubišić

Room: 11

Chairperson: n.n.

- 13:30–13:45 EGU2012-8191
G. Magnusdottir
Spatial variability of the North Atlantic Oscillation
- 13:45–14:00 EGU2012-7809
C. Li and J. J. Wettstein
Linking jet variability and jet driving processes in the midlatitudes
- 14:00–14:15 EGU2012-2743
C. Michel, G. Rivière, and L. Terray
The dynamical link between surface cyclogenesis, upper-tropospheric Rossby wave breaking and the life cycle of the Scandinavian blocking
- 14:15–14:30 EGU2012-6205
G. Masato, B. Hoskins, and T. Woollings
Wave-breaking characteristics of mid- and high-latitude blocking
- 14:30–14:45 EGU2012-3829
A. Fujii, Y. Kuroda, and H. Mukougawa
Mechanism and Predictability of Persistent Euro-Russian Blocking in Summer of 2010 Examined by Ensemble Hindcast and Forecast Dataset
- 14:45–15:00 EGU2012-3027
V. Wirth and **J. Eichhorn**
Long-lived Rossby wave trains as precursors to strong surface cyclones over Central Europe
- Chairperson: n.n.
- 15:30–15:45 EGU2012-6793
T. Gong, S. Feldstein, and D. Luo
A simple GCM model study on the relationship between ENSO and the Southern Annular Mode
- 15:45–16:00 EGU2012-972
A. Arakelian and F. Codron
Southern Hemisphere Jet Position and Variability in the IPSL GCM at varying resolutions
- 16:00–16:15 EGU2012-2290
T. Spengler and J. Egger
Potential Vorticity Attribution and Causality
- 16:15–16:30 EGU2012-3733
P. Knippertz, A. H. Fink, S. Pohle, and J. G. Pinto
Diagnosing the Influence of Diabatic Processes on the Explosive Deepening of Extratropical Cyclones over the North Atlantic Ocean
- 16:30–16:45 EGU2012-9469
M. Graf, M. Sprenger, and H. Wernli
Classification of cyclogenesis events based on a comprehensive set of potential precursors
- 16:45–17:00 EGU2012-6412
J. Booth, S. Wang, and L. Polvani
Midlatitude Storms in a Moist World: Lessons from Idealized Baroclinic Life Cycle Experiments

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

Convener: G. Rivière | Co-Conveners: O. Martius, V Grubišić

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY1 EGU2012-573
P. Davini, C. Cagnazzo, R. Neale, and J. Tribbia
Coupling among the North Atlantic Oscillation, atmospheric blocking and the Atlantic jet stream variability in climate models
- XY2 EGU2012-2462
Y. Li and J. Li
Propagation of Planetary Waves in the Horizontal Non-uniform Basic Flow

- XY3 EGU2012-3903
H. Mukougawa and M. Mabuchi
Hemispheric Circulation Regimes Associated with Predominant Anomaly Patterns of Wintertime Temperature Distribution over the Far East
- XY4 EGU2012-3076
M. Drouard, G. Rivière, and P. Arbogast
Interaction between the Pacific and Atlantic storm tracks and its implication on the North Atlantic Oscillation.
- XY5 EGU2012-4759
D. H. W. Peters, A. Schneidereit, P. Vargin, S. Schubert, F. Lunkeit, X. Zhu, and K. Fraedrich
Wave analysis for different time scales contributing to the anomalous long-lasting blocking high over Eastern Europe during summer 2010
- XY6 EGU2012-2135
C. Spensberger and T. Spengler
Can topographic blocking be diagnosed using deformation?
- XY7 EGU2012-3579
Y. Zhang, X. Yang, Y. Nie, and G. Chen
Annular-mode-like variation in a multi-layer QG model
- XY8 EGU2012-13194
J. Blanco-Fuentes and P. Zurita-Gotor
The variability of baroclinicity in the extratropical troposphere
- XY9 EGU2012-4167
L. S. Graff and J. H. LaCasce
Shifts in the extra-tropical storm track in response to SST changes
- XY10 EGU2012-11072
Y.-O. Kwon and T.M. Joyce
Northern Hemisphere Atmospheric Transient Eddy Fluxes from the MERRA and Their Co-variability with Ocean Frontal Variability near the Western Boundary Current Regions
- XY11 EGU2012-3741
P. Knippertz, H. Wernli, and G. Gläser
Global Tropical Moisture Exports and their Influence on Extratropical Cyclone Activity
- XY12 EGU2012-3841
Y. Liu
A Preliminary Analysis of the Structure of a Northeast cold vortex and the Mechanism for its Evolution
- XY13 EGU2012-9874
P. Ludwig, D. Yuen, K. Born, J.G. Pinto, and R. Drinka
Xynthia: analysis of an exceptional extra-tropical cyclone
- XY14 EGU2012-8067
T.P. Baker, P. Knippertz, and A. Blyth
The role of microphysics in the development of mesoscale areas of high winds around occluded cyclones
- XY15 EGU2012-8180
L. H. Baker, **S. L. Gray**, and P. A. Clark
Idealized simulations of sting jet cyclones
- XY16 EGU2012-10688
H. Sodemann and H. Wernli
An intercomparison of Lagrangian methods to diagnose evaporation regions of water vapour and precipitation
- XY17 EGU2012-12077
J. Chagnon, S. Gray, and J. Methven
Observation and simulation of mesoscale diabatic potential vorticity structures in north Atlantic cyclones
- XY18 EGU2012-9049
M. Sprenger, **L. Mayoraz**, V. Stauch, B. Sharman, and J. Polymeris
Observation and Modeling of Clear Air Turbulence (CAT) over Europe
- XY19 EGU2012-9820
J. Wagner and A. Gohm
Idealised simulations of valley winds: the role of domain size and horizontal resolution
- XY20 EGU2012-7154
K. Trachte, R. Rollenbeck, and J. Bendix
Orographic enhancement of rainfalls in the Rio San Francisco valley in southern Ecuador
- XY21 EGU2012-9471
D.B. Schönemann and T. Frisius
Analysis of tropical cyclone dynamics in two models of different complexity
- XY22 EGU2012-13908
K. Kosiba, J. Wurman, and P. Robinson
Fine-scale radar observations of boundary layer structures in landfalling hurricanes

- XY23 EGU2012-10732
V. Smith, P. Anderson, A. Elvidge, A. Gadian, J. King, A. Kirchgaessner, R. Ladkin, T. Lachlan-Cope, and S. Mobbs
 An overview of observations and mesoscale synoptics during the OFCAP field project
- XY24 EGU2012-10801
V. Smith, S. Mobbs, A. Gadian, T. Lachlan-Cope, R. Ladkin, and A. Elvidge
 Observations and WRF modelling of orographically-generated gravity waves above the Antarctic Peninsula during (OFCAP)
- XY25 EGU2012-11701
H. Ólafsson and G.N. Petersen
 The heat source of the foehn revisited
- XY26 EGU2012-13751
H. Ólafsson, M.O. Jonassen, Ó. Rögnvaldsson, H. Ágústsson, B.L. Kristinsdóttir, J. Reuder, and B.G.P. Hjarðar
 The MOSO II field experiment
- XY27 EGU2012-3667
E. W. Kolstad
 A global climatology of favourable conditions for polar lows
- XY28 EGU2012-12361
M.O. Jonassen, H. Ólafsson, J. Reuder, and J.A. Olseth
 Numerical analysis of local acceleration and deceleration of atmospheric flow during a windstorm in the Bergen area
- XY29 EGU2012-13726
H. Ágústsson and H. Ólafsson
 Nocturnal circulations during calm and cloudfree weather over a mountainous high-latitude island

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

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

Room: 10

Chairperson: n.n.

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

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

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY30 EGU2012-3451
 M.S. Kotelnikova, **Z.V. Verbitskaya**, and V.V. Nikulin
 Experimental and numerical study of tornado-like vortex formation
- XY31 EGU2012-12996
Th von Larcher and R Klein
 Multiple Scales in Fluid Dynamics and Meteorology: The DFG Priority Programme 1276 MetStröm

- XY32 EGU2012-9709
A. Rabitti and L. R. M. Maas
Wave ray dynamics of rotating spherical fluid domains
- XY33 EGU2012-13649
J. Ogaja and A. Will
Theoretical and numerical analysis of convergence properties of the higher order spatial schemes in the COSMO model
- XY34 EGU2012-406
J. Cao and Q. Xu
Computing Streamfunction and Velocity Potential in a Limited Domain of Arbitrary Shape
- XY35 EGU2012-1830
F. Zaussinger, F. Kupka, H. J. Muthsam, N. Happenhofer, and H. Grimm-Strele
Layered convection in double diffusive fluids
- XY36 EGU2012-2928
J. LaCasce
The SQG model with quasi-realistic stratification
- XY37 EGU2012-3035
M. Voigt and V. Wirth
Dynamics of orographic banner clouds
- XY38 EGU2012-3111
J.-I. Yano
Mass-Flux Subgrid-Scale Parameterization in Analogy with Multi-Component Flows: A Formulation Towards Scale Independence
- XY39 EGU2012-3415
C. Erath
A new multi-tracer transport scheme for the dynamical core of NCAR's Community Atmosphere Model
- XY40 EGU2012-4448
S. Tobias and B. Marston
Direct Statistical Simulation of Geophysical Flows
- XY41 EGU2012-4981
T. Seelig, U. Harlander, I. D. Borcia, and C. Egbers
Zonal mean flow excitation due to inertial waves propagating in the meridional plane
- XY42 EGU2012-5059
P. Paleo Cageao, B. Turnbull, and P. Bartelt
Experimental Modelling of Debris Flows
- XY43 EGU2012-5368
U. Harlander, G. B. Wright, and C. Egbers
Reconstruction of the 3D flow field in a differentially heated rotating annulus laboratory experiment
- XY44 EGU2012-7342
S. Koch, **U. Harlander**, R. Hollerbach, and C. Egbers
Inertial waves in a rotating spherical shell: Comparison between numerical simulations and laboratory experiments
- XY45 EGU2012-7385
Yu. D. Chashechkin
Adequate mathematical modelling of environmental processes
- XY46 EGU2012-7403
N. Lahaye and V. Zeitlin
Modons and multipolar coherent structures in a two-layer Rotating Shallow Water model
- XY47 EGU2012-7782
B. Futterer, **F. Zaussinger**, and C. Egbers
Experimental and numerical simulation of the spherical mantle convection microgravity experiment GeoFlow II of low viscosity ratio
- XY48 EGU2012-8045
Th von Larcher, A. Fournier, and R. Hollerbach
The influence of a sloping bottom endwall on the linear stability in the thermally driven baroclinic annulus with a free surface
- XY49 EGU2012-9822
A. Lazar, A. Stegner, and E. Heifetz
Inertial instability of oceanic submesoscale vortices: linear analysis, marginal stability criterion and laboratory experiments
- XY50 EGU2012-10411
I. D. Borcia, **U. Harlander**, T. Seelig, and C. Egbers
Comparing attractor frequency bands with eigen frequencies for a confined rotating fluid
- XY51 EGU2012-11268
D. Halleaux and N. Renno
Measurements confirm a thermodynamical theory for convective vortices

- XY52 EGU2012-12645
W. Bauer, A. Gassmann, M. Baumann, V. Heuveline, L. Scheck, and S. Jones
 Simulation of tropical-cyclone-like vortices in shallow-water ICON-hex using goal-oriented r-adaptivity
- XY53 EGU2012-13906
O. Fuhrer, T. Gysi, X. Lapillonne, and T. Schulthess
 Considerations for implementing NWP dynamical cores on next generation computers.
- XY54 EGU2012-12186
P. Augier and E. Lindborg
 Spectral budget of energy and potential enstrophy in high resolution General Circulation Models

AS1.9 – Atmospheric Convection: Dynamics, Chemistry, and Vertical Transport – Orals

Convener: J.-I. Yano | Co-Conveners: H. Tost, L. Donner, C. Hohenegger

Room: 7

Chairperson: cathy hohenegger

- 08:30–08:45 EGU2012-3682
B. Moebis and B. Stevens
 Analyzing the double ITCZ phenomenon with ECHAM6 in aqua-planet mode
- 08:45–09:00 EGU2012-13842
 H. Schlager, **F. Arnold**, R. Baumann, H. Aufmhoff, A. Reiter, H. Simgen, S. Lindemann, L. Rauch, F. Kaether, and U. Schumann
 Discovery of cyclone induced East-Asian pollution transport to the lower stratosphere by airborne measurements of Fukushima Xe-133 and SO₂: Potential implications for aerosol and climate
- 09:00–09:15 EGU2012-8948
B. Antonescu, G. Vaughan, and D.M. Schultz
 Is tropopause folding promoting or suppressing deep convection? First results from TROSIAD
- 09:15–09:30 EGU2012-575
D. Zovko Rajak and T. Lane
 Idealised Simulations of Turbulence Near Thunderstorms
- 09:30–09:45 EGU2012-10882
A. Parodi, J. von Hardenberg, and A. Provenzale
 Precipitation in a boiling soup: is microphysics driving the statistical properties of intense turbulent convection?
- 09:45–10:00 EGU2012-8078
S. Sherwood, D. Hernandez-Deckers, M. Colin, and F. Robinson
 Do growing cumulus experience friction?

AS1.9 – Atmospheric Convection: Dynamics, Chemistry, and Vertical Transport – Posters

Convener: J.-I. Yano | Co-Conveners: H. Tost, L. Donner, C. Hohenegger

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: leo donner

- XY55 EGU2012-8840
V.P. Sadokov and K.D. Vasilevsky
 One-dimensional non-stationary convection model
- XY56 EGU2012-2632
D. Pollack, I. Beau, and JF. gueremy
 A methodology to evaluate parameterization schemes applied on west africa using enthalpy and water budgets
- XY57 EGU2012-3118
 J.-I. Yano, **S. Kumar**, and G. Roff
 Towards Compressed Super-Parameterization: Test of NAM-SCA under Single-Column GCM Configurations
- XY58 EGU2012-47
K. Barfus and C. Bernhofer
 Analyzing GCM performances by means of tropospheric stability indexes
- XY59 EGU2012-13593
A. Berg, K. Findell, B. Lintner, and P. Gentine
 Assessing the sensitivity of convective rainfall to surface turbulent fluxes in GFDL's AM2.1 and AM3 atmospheric models
- XY60 EGU2012-4233
J. Marsham, S. B. Trier, C. A. Davis, T. M. Weckwerth, J. W. Wilson, and D. A. Ahijevych
 Nocturnal Elevated Convection Initiation Leading to a Daytime Surface-Based Squall Line during 13 June IHOP_2002

- XY61 EGU2012-3124
J.-I. Yano and R. S. Plant
A Simple Model for A Discharge-Recharge Cycle of a Convective System: Finite Departure from Convective Quasi-Equilibrium and Periodic Cycle
- XY62 EGU2012-1333
Q. Li and Y Wang
Formation and Quasi-Periodic Behavior of Outer Spiral Rainbands in a Numerically Simulated Tropical Cyclone
- XY63 EGU2012-741
M. R. Glinton, S. L. Gray, J. M. Chagnon, and C. J. Morcrette
A climatological link between slantwise instability and surface weather conditions
- XY64 EGU2012-248
L. Wang, K. Kodera, and W. Chen
Observed triggering of tropical convection by a cold surge: Implications for MJO initiation
- XY65 EGU2012-6938
Y. Luo, R. Zhang, W. Qian, and Z. Luo
Intercomparison of Deep Convection over the Tibetan Plateau-Asian Monsoon Region and Subtropical North America in Boreal Summer Using CloudSat/CALIPSO Data
- XY66 EGU2012-12732
P. Wang, S. Su, Z. Charvat, M. Setvak, and K. Cheng
Deep convective cross-tropopause transport in the tropics and evidence by A-Train satellites
- XY67 EGU2012-11458
H. Tost and A. J. G. Baumgaertner
Convective mixing of trace compounds: a multi-year model analysis

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

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

Room: 15

Chairperson: Jean Liliensten

- 10:30–11:00 EGU2012-7630
N.A. Krivova, W. Ball, Y.C. Unruh, and S.K. Solanki
Solar Spectral Irradiance Variations
- 11:00–11:15 EGU2012-1520
T. Woods
Solar Irradiance Variability: Comparisons of Observations over Solar Cycles 21-24
- 11:15–11:30 EGU2012-1920
S. C. Solomon and **L. Qian**
The Interaction of Solar and Geomagnetic Activity with Climate Change in the Thermosphere
- 11:30–11:45 EGU2012-2344
M. Fedrizzi and **S.L. Bruinsma**
Modeling Space Weather in the thermosphere
- 11:45–12:00 EGU2012-8702
M. Rapp, R. Latteck, P. Hoffmann, M. Zecha, G. Stober, T. Renkowitz, and W. Singer
Mid-mesospheric radar echoes: recent observations with a novel MST-radar and implications for the scattering mechanism

LUNCH BREAK

Chairperson: Jean Liliensten

- 13:30–13:45 EGU2012-8267
A. Seppälä
Particle precipitation impacts on the atmosphere
- 13:45–14:15 EGU2012-7098
P. T. Verronen, M.E. Andersson, C.J. Rodger, M.A. Clilverd, S. Wang, and B.R. Carson
Precipitating Radiation Belt Electrons and Mesospheric Odd Hydrogen
- 14:15–14:30 EGU2012-7368
M. Sinnhuber, N. Wieters, and H. Winkler
Energetic particle precipitation into the middle atmosphere: measurements and model predictions

- 14:30–15:00 EGU2012-2828
F.-J. Lübken
 Highlights of the CAWSES programme in Germany
 Chairperson: Franz-Josef Luebken
- 15:30–16:00 EGU2012-11335
C. von Savigny, C. Robert, N. Rahpoe, H. Winkler, E. Becker, H. Bovensmann, M. T. DeLand, and J. P. Burrows
 On the impact of short-term solar variability on the polar summer mesopause and noctilucent clouds
- 16:00–16:15 EGU2012-2860
U. Cubasch, U. Langematz, A. Kubin, C. Brühl, T. Spangehl, and A. Baumgärtner
 Solar Effects on Chemistry and Climate Including Ocean Interactions
- 16:15–16:30 EGU2012-12600
 J.G. Anet, **E. Rozanov**, and T. Peter
 FUPSOL: Modelling the Future and Past Solar Influence on Earth Climate
- 16:30–16:45 EGU2012-10845
A. Kubin, J. Abalichin, B. Ayarzagüena, U. Langematz, and P. Jöckel
 A model study on the downward propagation of the 11-year solar signal in a warming climate
- 16:45–17:00 EGU2012-8757
S. Ineson, A. A. Scaife, J. R. Knight, J. C. Manners, N. J. Dunstone, L. J. Gray, and J. D. Haigh
 Solar forcing of winter climate variability in the northern hemisphere

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

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

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Franz-Josef Luebken

- Z1 EGU2012-2905
F.-J. Lübken and U. Berger
 Temperature and ice layer trends in the summer middle atmosphere
- Z2 EGU2012-3030
H. Lühr and K. Häusler
 Dependence of the thermospheric density on solar and magnetic activity
- Z3 EGU2012-3781
P. Stauning
 Solar activity - climate relations: A critical review.
- Z4 EGU2012-3859
 M. Smith and **A. J. McDonald**
 Using finite-time Lyapunov exponents to investigate the effect of stratospheric sudden warmings on the polar vortices
- Z5 EGU2012-3873
A. J. McDonald
 Inter-hemispheric variations in stratopause structure
- Z6 EGU2012-4267
L. Sfica and M. Voiculescu
 Interplay between effects of solar forcing and internal climatic factors on tropospheric and stratospheric temperature anomalies in the Northern Hemisphere
- Z7 EGU2012-4960
J. Hildebrand, G. Baumgarten, J. Fiedler, and F.-J. Lübken
 Simultaneous wind and temperature measurements with a twin Doppler lidar in Northern Norway
- Z8 EGU2012-5303
M. Kaufmann, H. Schmidt, C. Lehmann, M. Ern, and M. Riese
 The evolution of atomic hydrogen between 2002 and 2008
- Z9 EGU2012-5427
J. Höffner, R.J. Morris, B. Kaifler, T. Viehl, and F.-J. Lübken
 First results of combined Fe-lidar/Radar measurements at Davis, 69° S.
- Z10 EGU2012-5445
D.A. Newnham, P.J. Espy, M.A. Clilverd, C.J. Rodger, A. Seppälä, D.J. Maxfield, P. Hartogh, K. Holmén, and R.B. Horne
 Observations of nitric oxide in the Antarctic middle atmosphere during recurrent geomagnetic storms

- Z11 EGU2012-5513
J. O'Regan, J-P. Muller, and S. Matthews
Towards understanding the nature of any relationship between Solar Activity and Cosmic Rays with thunderstorm activity and lightning discharge
- Z12 EGU2012-5726
S. Dewitte, S. Mekaoui, A. Chevalier, C. Conscience, E. Janssen, M. Van Ruymbeke, Z. Phing, J-P. Noel, M. Meftah, and G. Thuillier
Science results from the Sova-Picard Total Solar Irradiance instrument
- Z13 EGU2012-6059
M. Kopp, M. Gerding, J. Höffner, and F.-J. Lübken
Tidal signatures in temperature data derived by lidars in the mid-latitude middle atmosphere
- Z14 EGU2012-6453
C. Delaney, S. G. Jennings, and A. Ó Rodaighe
Polar Mesospheric Cloud Occurrence from Geostationary Satellite Observations in the Northern Hemisphere for the Period 2001 to 2005
- Z15 EGU2012-6797
V. R. Narukull, T. Tsuda, D.M. Rigglin, and S. Gurubaran
Long-term variability of mean winds in the mesosphere and lower thermosphere within $\pm 22^\circ$
- Z16 EGU2012-6852
J. Grahn and A. J. McDonald
Testing metrics of mixing using a chaotic advection model
- Z17 EGU2012-6998
L. Hejkrlik
Spectral analysis of luni-solar signal in daily meteorological data at Prague-Klementinum 1775 to 2011
- Z18 EGU2012-7643
P. Francia and M. Vellante
Long term changes in the plasmaspheric density through measurements of the ULF resonance frequency at low latitude
- Z19 EGU2012-7645
S. Versick, B. Funke, A. Gardini, G. Stiller, T. von Clarmann, and O. Kirner
Comparison of EMAC model results to satellite observations in the winter 2008/09 within the HEPPA-II intercomparison
- Z20 EGU2012-7767
A.L. Morozova and M.A. Pais
Different forcings and their effect on temperature variations in Portugal: volcanic eruptions, anthropogenic aerosols, atmospheric circulation and solar activity
- Z21 EGU2012-7887
V. Dobrica, C. Suteanu, and C. Demetrescu
Solar/geomagnetic signature in climate parameters. A comparative analysis of temperature evolution in Atlantic Canada and Central-Eastern Europe
- Z22 EGU2012-8254
G. Cessateur, A.I. Shapiro, M. Dominique, M. Kretzschmar, N. Krivova, A.V. Shapiro, W. Schmutz, M. Schoell, S. Solanki, R. Tagirov, G. Thuillier, C. Wehrli, and K.L. Yeo
Solar Spectral Irradiance as observed by LYRA/PROBA2 and PREMOS/PICARD
- Z23 EGU2012-8271
J. O. Pepke Pedersen
Ion-induced nucleation of the sulfuric acid - water system
- Z24 EGU2012-8338
S. Kowalewski, M. Palm, and J. Notholt
The Mesospheric OH* layer above Spitsbergen: Investigation of polar mesospheric dynamics and temperature trends by means of ground based OH* airglow measurements and model studies
- Z25 EGU2012-8347
M. Palus and D. Novotna
Phase coherence between solar/geomagnetic activity and climate variability from the stratosphere to the troposphere and the North Atlantic Oscillation
- Z26 EGU2012-8701
S. Kalisch, P. Preusse, M. Ern, S. D. Eckermann, and M. Riese
Gravity wave - planetary wave interaction simulated by gravity wave ray-tracing
- Z27 EGU2012-8881
N. Bergeot, I. Tsagouri, C. Bruyninx, J. Legrand, J.-M. Chevalier, P. Defraigne, Q. Baire, and E. Pottiaux
Effect of Space Weather on Ionospheric Total Electron Content Variation during the 23rd Solar Cycle.
- Z28 EGU2012-9292
L.E.A. Vieira, T. Dudok de Wit, and M. Kretzschmar
Modeling the evolution of the total and solar irradiance based on HMI/SDO magnetograms and solar surface magnetic flux transport models

- Z29 EGU2012-9589
T. Asikainen, V. Maliniemi, and K. Mursula
The corrected NOAA/POES energetic particle database for space climate studies
- Z30 EGU2012-10210
H. Lu, C. Franzke, M. Jarvis, and O. Martius
Possible Effect of Solar Wind on Rossby Wave Propagation and Breaking
- Z31 EGU2012-10255
V. Maliniemi, T. Asikainen, and K. Mursula
Correlation between surface temperature variations and energetic electron precipitation in northern hemisphere winter during the last three solar cycles
- Z32 EGU2012-10492
O. K. Kvissel, Y. J. Orsolini, and F. Stordal
Formation of stratospheric nitric acid by a hydrated ion cluster reaction: chemical and dynamical effects of energetic particle precipitation on the middle atmosphere
- Z33 EGU2012-10752
T. Reddmann, B. Funke, G. Stiller, S. Versick, J.M. Wissing, R. Ruhnke, W. Kouker, and A. Vlasov
The thermospheric NOx intrusion in Arctic winter 2008/2009
- Z34 EGU2012-10815
C. G. Hoffmann, D. E. Kinnison, R. R. Garcia, M. Palm, J. Notholt, U. Raffalski, and J. Groß
CO-based examination of the Arctic middle atmosphere dynamics in the Specified Dynamics version of the Whole Atmosphere Community Climate Model (SD-WACCM) using ground-based CO observations from Kiruna
- Z35 EGU2012-11122
I. Cnossen and **H. Lu**
The Vertical Connection of the QBO-Modulated 11-year Solar Cycle Signature during NH Early Winter
- Z36 EGU2012-11861
B. Strelnikov, A. Szewczyk, and M. Rapp
In-situ measurements of small-scale structures in neutrals and plasma species during ECOMA-2010
- Z37 EGU2012-12709
T. Demissie, M. Daae, N. Kleinknecht, and P. Espy
Planetary waves during a moderate geomagnetic storm
- Z38 EGU2012-2496
S. Misios and H. Schmidt
Model assessment of the response of the tropical lower stratosphere to the 11-yr solar cycle
- Z39 EGU2012-7239
G. Chiodo, D.R. Marsh, N. Calvo, and K. Matthes
The impact of volcanic events and ENSO on the detection of the solar cycle signal in the tropical lower stratosphere
- Z40 EGU2012-3330
K. Rypdal
Global temperature response to radiative forcing: solar cycle versus volcanic eruptions
- Z41 EGU2012-7456
M. Ern, P. Preusse, S. Kalisch, M. Kaufmann, and M. Riese
Global distribution of quasi two-day waves in the mesosphere and possible effects of gravity waves

NH1.1/AS1.16 – Extreme meteorological and hydrological events induced by severe weather and climate change (co-organized) – Orals

Convener: A. Loukas | Co-Conveners: U. Ulbrich, M.C. Llasat

Room: D

Chairperson: M.C. Llasat

- 08:30–08:45 EGU2012-242
K. A. Reed, M. F. Wehner, and C. Jablonowski
Towards the Direct Simulation of Tropical Cyclones in the High-Resolution Community Atmosphere Model
- 08:45–09:00 EGU2012-1311
B. D. Malamud and D.L. Turcotte
Statistics of Severe Tornadoes and Severe Tornado Outbreaks
- 09:00–09:15 EGU2012-3119
R.M. Trigo, F. Varino, J. Vaquero, and M.A. Valente
Atmospheric circulation leading to record breaking precipitation and floods in southern Iberia in December 1876
- 09:15–09:30 EGU2012-8647
A. Comellas, E. Fiori, L. Molini, F. Pignone, N. Rebora, F. Silvestro, F. Siccardi, and A. Parodi
Cloud-permitting simulation of the torrential rainfall event in Genoa (Liguria, Italy) on November 4th, 2011

- 09:30–09:45 EGU2012-9617
I. Yucel and A. Onen
 Evaluating the extreme precipitation events using a mesoscale atmosphere model
- 09:45–10:00 EGU2012-44
Y. Tramblay, W. Badi, F. Driouech, S. El Adlouni, L. Neppel, and E. Servat
 Climate change effects on extreme precipitation events in Morocco

COFFEE BREAK

Chairperson: U. Ulbrich

- 10:30–10:45 EGU2012-7741
M.C. Llasat, R. Marcos, and M. Turco
 Is convective precipitation increasing? The case of Catalonia
- 10:45–11:00 EGU2012-1990
K. Breinl
 Pluvial and fluvial flooding: integration in probabilistic flood hazard assessment using a coupled rainfall-discharge generator
- 11:00–11:15 EGU2012-4662
D. Panagoulia, I. Trichakis, and G. J. Tsekouras
 Flow Forecasting via Artificial Neural Networks - A Study for Input Variables conditioned on atmospheric circulation
- 11:15–11:30 EGU2012-7157
Y.J. Kwak, K. Takeuchi, K. Fukami, and J. Magome
 Assessment of Flood Risk and Future Change due to Climate Change in Asia-Pacific Region Based on MRI-GCM Model
- 11:30–11:45 EGU2012-8967
M. Velasco, A. Cabello, A. Barrera-Escoda, P.A. Versini, and M. Zappa
 Application of a rule-based system for flash flood forecasting taking into account climate change in the Llobregat basin
- 11:45–12:00 EGU2012-12156
V. Ntegeka, P. Willems, and J. Monbaliu
 On the relative importance of the climate change factors along the river Scheldt considering climate scenarios for upstream inland and downstream coastal (mean sea level and surge) boundary conditions

LUNCH BREAK

Chairperson: A. Loukas

- 13:30–13:45 EGU2012-13060
H. von Waldow and O. Martius
 Joint probabilities of extreme precipitation and wind gusts in Germany
- 13:45–14:00 EGU2012-1892
Z. Zhang, C. Xu, X. Chen, and Y. Hong
 The characteristics of global droughts and ENSO teleconnections
- 14:00–14:15 EGU2012-7257
B. Kurnik, L. Kajfez - Bogataj, and A. Jol
 Analyzing uncertainties of climate impacts on the water deficit in agriculture soil over Europe
- 14:15–14:30 EGU2012-13870
G. Di Baldassarre
 Evaluating the benefits of risk prevention initiatives
- 14:30–14:45 EGU2012-2796
L.A.T. Machado, J. Sukaragi, C. Freitas, W. Escobar, and C. Angelis
 Pilot Project for Early Warning; The CHUVA-SOS
- 14:45–15:00 EGU2012-5808
H. Held, F.-W. Gerstengarbe, F. Hattermann, J. G. Pinto, U. Ulbrich, U. Böhm, K. Born, M. Büchner, M. G. Donat, M. Kücken, G. C. Leckebusch, K. Nissen, T. Nocke, H. Österle, T. Pardowitz, P. C. Werner, O. Burghoff, U. Broecker, and A. Kubik
 Future projections of insured losses in the German private building sector following the A1B climatic change scenario

NH1.1/AS1.16 – Extreme meteorological and hydrological events induced by severe weather and climate change (co-organized) – Posters

Convener: A. Loukas | Co-Conveners: U. Ulbrich, M.C. Llasat

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 15:30–17:00

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

- XY180 EGU2012-95
O. Martius, H. Sodemann, H. Joos, S. Pfahl, A. Winnschall, M. Croci-Maspoli, M. Graf, E. Madonna, B. Mueller, S. Schemm, J. Sedlacek, M. Sprenger, and H. Wernli
 On the dynamics of the July 2010 Pakistan precipitation events and the central role of land surface - atmosphere interactions
- XY181 EGU2012-541
G. Wong, D. Maraun, and M. Vrac
 Stochastic bias correction for mean and extreme precipitation
- XY182 EGU2012-2949
L. Campo and F. Caparrini
 The effects of future climate on the flow regime in Tuscany: a numerical simulation with the distributed hydrological model MOBIDIC
- XY183 EGU2012-3126
F. Varino, R.M. Trigo, and J.L. Zêzere
 Reassessing the impacts and the atmospheric circulation of the large storms over Portugal
- XY184 EGU2012-4097
B. Gräler, S. Vandenberghe, M.J. van den Berg, S. Grimaldi, A. Petroselli, B. De Baets, and N.E.C. Verhoest
 Multivariate Return Periods based on Vine Copulas
- XY185 EGU2012-4726
S. Ahmad, T. Koike, and K. Nishii
 A Study on Extremely Dry and Wet Summer Monsoon in Pakistan by Focusing on the Anomalous States of the Upper Troposphere
- XY186 EGU2012-4812
M. Kallache
 Drought assessment in the Duero basin (Central Spain) by means of multivariate extreme value statistics
- XY187 EGU2012-5188
M. Nied, T. Pardowitz, K. Nissen, Y. Hundecha, B. Merz, and U. Ulbrich
 Elbe floods: An interaction of hydrological and meteorological (pre-)conditions
- XY188 EGU2012-5358
S. Pfahl
 Quantifying the relevance of local blockings for temperature extremes on sub-daily to daily time scales
- XY189 EGU2012-5490
Z. Popova, M. Ivanova, L.S. Pereira, V. Alexandrov, K. Doneva, P. Alexandrova, and M. Kercheva
 Drought vulnerability quantification in Bulgaria through modeling crop productivity and irrigation requirements
- XY190 EGU2012-5871
M. Biafore, L. Cristiano, S. Gentile, M. Gentilella, M. Giannattasio, and F. Napoli
 The 2010 flood in the Sele river basin (Southern Italy)
- XY191 EGU2012-5978
Y. Huang, Y. Qian, Y. Yao, and D. Huang
 Impact of the inhomogeneous temperature variation on the extreme precipitation events in East China
- XY192 EGU2012-7208
N. Kawano, S. Sobue, M. Shimada, and K. Ohyoshi
 Flood disaster monitoring in Thailand by using a airborne L-band SAR: Polarimetric and interferometry Synthetic Aperture Radar with L-band(Pi-SAR-L)
- XY193 EGU2012-7681
V. Potop, C. Boronean?, M. Mozny, P. Stepanek, and P. Skalak
 Observed evolution of drought episodes assessed with the Standardized Precipitation Evapotranspiration Index (SPEI) over the Czech Republic
- XY194 EGU2012-7683
A. Bonazzi, E. Bellone, and S. Khare
 The probability of tropical cyclone landfalls in Western North Pacific
- XY195 EGU2012-7787
Sj Chyi, Jw Lin, and Ml Hsieh
 The temporal and spatial characteristics of river accumulation events from LIA(Little Ice Age) in Taiwan
- XY196 EGU2012-8577
T. D. Hewson
 The sting jet that roared - a remarkable windstorm crosses Scotland

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

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

- XY197 EGU2012-9328
J. Hosek
Calculation of extreme wind climate for landscape modelling
- XY198 EGU2012-9330
M. Lakatos, A. Möring, T. Szentimrey, Á. Németh, Z. Bihari, T. Kovács, and E. Vincze
Identifying areas with high risk of wind gusts, precipitation and hail based on interpolated and recorded data in Hungary
- XY199 EGU2012-9714
I. Zveryaev, Yu. Zyulyaeva, S. Gulev, and P. Koltermann
Intercomparison of the Russian Summer Heat Waves of 2010 and 1972
- XY200 EGU2012-9938
Y. Yulizar, S. Kumar Singh, and A. Bárdossy
Study of Changes in the Frequencies of Unusual Hydrological and Meteorological Events
- XY201 EGU2012-10380
P.-L. Lin, W.-K. Tao, and C.-Y. Chen
The impact of Microphysics and Data assimilation on simulation of Typhoon Morakot
- XY202 EGU2012-10919
H. Zhang and K. Fraedrich
Greatest point rainfall related to duration: Scaling and multifractal analysis in climate model simulations
- XY203 EGU2012-11462
A. Amiri Farahani, D. Maraun, and J. Luterbacher
Predictors for local daily precipitation extremes in Germany representing the general atmospheric circulation
- XY204 EGU2012-12114
C. Dessy, L. Di Carlo, G. Fois, P. Fiorucci, M. d'Andrea, and E. Trasforini
Operational setup of a diagnostic chain, implemented within the Proterina-C project, to include weather measures in the RISICO system for dynamic wildfire risk evaluation in Sardinia (Italy)
- XY205 EGU2012-12662
F.E.L. Otto, M.R. Allen, A. Bowery, J. Imbers, R. Jones, N. Massey, J. Miller, S. Rosier, C. Rye, M. Thurston, S. Wilson, and H. Yamazaki
Attribution of precipitation changes in African rainforest
- XY206 EGU2012-12856
A. Yatagai, H. Nakamura, T. Miyasaka, and K. Okumiya
Meteorological Conditions Related to the August 2010 Flood Event in Ladakh, in the West Himalayas
- XY207 EGU2012-13317
H. Ágústsson, Á. J. Elíasson, E. Thorsteins, Ó. Rögnvaldsson, and H. Ólafsson
Atmospheric icing of structures: Observations and simulations
- XY208 EGU2012-13688
M.O. Jonassen, H. Ágústsson, and H. Ólafsson
Sensitivity of atmospheric gravity waves to surface roughness and surface heat fluxes
- XY209 EGU2012-13802
G. Lysitsa, **A. Loukas**, and L. Vasiliades
A stochastic bias-corrected downscaling method for climate change impacts assessment on droughts
- XY210 EGU2012-14304
E. Fiori, C. Keil, A. Parodi, N. Rebora, and G.C. Craig
Dynamical downscaling of severe hydrometeorological events: the role of a stochastic parameterization for convection
- XY211 EGU2012-14362
M. Fiorini, R. Rudari, L. Candela, A. Corina, and G. Boni
Added value flooding products coupling hydraulic modeling and COSMO Sky-Med SAR imagery

NP2.2/AS1.19 – Nonlinear Dynamics of the Atmosphere, Ocean and the Climate System (co-organized) – Orals

Convener: K. Dethloff | Co-Conveners: C. Franzke, F. Kwasniok, F. Sévellec, T. Huck

Room: 17

Chairperson: Christian Franzke and Florian Sevellec

- 10:30–10:45 EGU2012-6325
H. A. Dijkstra, J. Saenz, A. Hogg, and L. M. Frankcombe
Energetics of Multidecadal Atlantic Ocean Variability
- 10:45–11:00 EGU2012-4279
A. Venaille, J. Le Sommer, J.-M. Molines, and B. Barnier
Intrinsic variability of oceanic flows above topography anomalies

- 11:00–11:15 EGU2012-6290
M. den Toom, H.A. Dijkstra, A.A. Cimadoribus, and S.S. Drijfhout
 Effect of Atmospheric Feedbacks on the Stability of the Atlantic Meridional Overturning Circulation
- 11:15–11:30 EGU2012-8060
T. Penduff, S. Gregorio, M. Juza, B. Barnier, W.K. Dewar, and J.-M. Molines
 Intrinsic variability in the eddying ocean at low frequency: climate-relevant fingerprints.
- 11:30–11:45 EGU2012-4325
R. Farneti and G.K. Vallis
 Meridional energy transport in the coupled atmosphere-ocean system: Compensation and partitioning
- 11:45–12:00 EGU2012-372
O. Martius and H. Wernli
 Forcing mechanisms of the wintertime subtropical jet over Africa
- 12:00–12:15 EGU2012-2750
C. Michel and G. Rivière
 Sensitivity of the position and variability of the eddy-driven jet and storm-track to different SST profiles in an aquaplanet general circulation model (Arpège)

NP2.2/AS1.19 – Nonlinear Dynamics of the Atmosphere, Ocean and the Climate System (co-organized) – Posters

Convener: K. Dethloff | Co-Conveners: C. Franzke, F. Kwasiok, F. Sévellec, T. Huck

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Thierry Huck and Frank Kwasiok

- XY383 EGU2012-748
D. Ferjani, T. Huck, and A. Colin de Verdière
 Influence of bottom topography and mean circulation on large-scale decadal basin modes
- XY384 EGU2012-1732
K. Dethloff and D. Handorf
 The skill of current climate models in reproducing atmospheric teleconnection patterns and related dynamical feedbacks
- XY385 EGU2012-2071
J. M. Huthnance
 On ocean-atmosphere time scales
- XY386 EGU2012-2137
C. Spensberger and T. Spengler
 Introducing a non-spectral Quasi-Geostrophic model
- XY387 EGU2012-2408
A. A. Cimadoribus, S. S. Drijfhout, and H. A. Dijkstra
 Atlantic Meridional Overturning Circulation and freshwater budget: a simple model to investigate their connection.
- XY388 EGU2012-4790
T. Zivkovic
 Dynamics of El-Niño: Is it stochastic or deterministic?
- XY389 EGU2012-4044
A. Gritsun
 Circulation regimes and unstable periodic orbits in the models of large scale atmospheric dynamics
- XY390 EGU2012-6883
J. A. Saenz, A. M. Hogg, G. O. Hughes, and R. W. Griffiths
 Mechanical power input to the oceans from buoyancy and wind
- XY391 EGU2012-7932
E. Dahms, F. Lunkeit, and K. Fraedrich
 Low-frequency climate variability of an aquaplanet
- XY392 EGU2012-8534
A. Hannachi and A. Turner
 Monsoon convection dynamics and nonlinear dimensionality reduction vis Isomap
- XY393 EGU2012-9692
T. Huck, A. Colin de Verdière, and D. Ferjani
 Multidecadal oscillations of the thermohaline circulation: bottom topography damping vs. atmospheric forcing stochastic excitation
- XY394 EGU2012-11131
S. Brand, K. Dethloff, and D. Handorf
 Annular Modes in an AOGCM with interactive stratospheric chemistry

AS3.2 – Halogens in the Troposphere – Orals

Convener: R. von Glasow | Co-Conveners: R. Sander, L.J. Carpenter, A. Saiz-Lopez, R. Volkamer, J.M.C. Plane

Room: 8

Chairperson: n.n.

08:30–08:45 EGU2012-8241

J. C. Gomez Martin, T.D. Hay, A.S. Mahajan, C. Prados-Roman, C. Ordoñez, S.-J. Royer, S. Yvon-Lewis, M.V. Agama Reyes, J.F. Paredes Mora, M. Sorribas Panero, M. Gil, S. MacDonald, J.M.C. Plane, and A. Saiz-Lopez
On the latitudinal and seasonal distribution of reactive halogens in the Eastern Pacific marine boundary layer

08:45–09:00 EGU2012-8358

F. Wang, A. Saiz-Lopez, A.S. Mahajan, J. C. Gomez Martin, D. Armstrong, M. Lemes, T.D. Hay, and C. Prados-Roman
Measurements of oxidised mercury over the Equatorial Pacific Ocean: role of halogens

09:00–09:15 EGU2012-6761

R. Volkamer, S. Coburn, B. Dix, R. Sinreich, M. Lechner, E. Atlas, A. Guenther, T. Duhl, R. Sommariva, R. von Glasow, S. Myriokefalitakis, and M. Kanakidou
Controls from a widespread surface ocean organic micro layer on atmospheric oxidative capacity

09:15–09:30 EGU2012-9071

S. M. MacDonald, L. J. Carpenter, M. D. Shaw, R. Kumar, and J. M. C. Plane
The "inorganic" iodine source in the marine environment: experimental and modelling studies

09:30–09:45 EGU2012-14030

A. Schönhardt, A. Richter, and J. P. Burrows
IO columns and the relation to chlorophyll-a as observed from satellite

09:45–10:00 EGU2012-12054

B. Quack, E. Atlas, Q. Shi, H. Hepach, S. Raimund, J. Kinzel, E. Leedham, S. Fuhlbrügge, S. Wiegmann, W. Chea, F. Wittke, A. Robinson, N. Harris, K. Kreher, B. Sturges, A. Bracher, D. Wallace, and K. Krüger
Halocarbon distributions and emissions in the western tropical Pacific during the SHIVA SONNE expedition in November 2011

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2012-2745

I. Kraut, H. Vogel, Ch. Kottmeier, and B. Vogel
Impact of Halogen Species in the Troposphere on the Ozone concentration on the Regional Scale

10:45–11:00 EGU2012-2663

G. J. Phillips, M. J. Tang, J. Thieser, B. Brickwedde, G. Schuster, and J. N. Crowley
Significant concentrations of nitryl chloride observed in rural continental Europe associated with the influence of sea salt chloride and anthropogenic emissions

11:00–11:15 EGU2012-9439

L. Vogel, N. Bobrowski, M. Fickel, C. Hoermann, C. Kern, R. von Glasow, and U. Platt
Volcanic plumes: BrO formation during the first 100 minutes after emission

11:15–11:30 EGU2012-12751

D. Schäuble, **C. Voigt**, P. Jeßberger, T. Jurkat, and S. Kaufmann
First detection of Cl₂ in the volcanic plume from Mt. Etna

11:30–11:45 EGU2012-7624

J. Aschmann and B.-M. Sinnhuber
Dehydration in the tropical tropopause layer: A possible sink of inorganic bromine?

11:45–12:00 EGU2012-8580

A. Saiz-Lopez, C. Ordoñez, J. C. Gomez Martin, J.-F. Lamarque, and D.E. Kinnison
Global modelling of upper tropospheric-lower stratospheric iodine: budget and implications for ozone

AS3.2 – Halogens in the Troposphere – Posters

Convener: R. von Glasow | Co-Conveners: R. Sander, L.J. Carpenter, A. Saiz-Lopez, R. Volkamer, J.M.C. Plane

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Lucy Carpenter

- XY68 EGU2012-688
K Leather, A Bacak, D Shallcross, and C Percival
 Temperature Dependence of the Rate Constant and Product Studies for BrO with CH₃O₂ using a Turbulent Flow Tube coupled to Chemical Ionisation Mass Spectrometry
- XY69 EGU2012-6566
J. Ofner, K. Kamilli, A. Held, and C. Zetzsch
 Formation of halogen-induced secondary organic aerosol (XOA)
- XY70 EGU2012-4312
D.S. Venables, E.R. Ashu-Ayem, U. Nitschke, C. Monahan, J. Chen, S.B. Darby, P.D. Smith, C.D. O'Dowd, and D.B. Stengel
 Release of I₂ by *Laminaria digitata* in chamber experiments
- XY71 EGU2012-8874
U. R. Thorenz, M. Kundel, R.-J. Huang, and T. Hoffmann
 Trace analysis of short-lived iodine-containing volatiles emitted by different types of algae
- XY72 EGU2012-10398
R.-J. Huang, U. R. Thorenz, M. Kundel, C. Kampf, A. Vogel, D. Ceburnis, and C. D. O'Dowd
 A new insight into the particulate iodine in the marine boundary layer
- XY73 EGU2012-2933
L.J. Carpenter, M.D. Shaw, S. MacDonald, R. Kumar, and J.M.C. Plane
 Experimental and modelling studies of iodine emissions from the ocean interfacial layer
- XY74 EGU2012-2457
A. Merlaud, N. Theys, C. Fayt, C. Hermans, and M. Van Roozendaal
 Airborne DOAS measurements of iodine monoxide off the North Coast of Norway
- XY75 EGU2012-10471
D. Pöhler, M. Horbanski, S. Schmitt, M. Anthofer, J. Tschritter, and U. Platt
 Observations of IO hot-spots at coastal sites with the combination of a mobile CE- and LP- DOAS
- XY76 EGU2012-6337
 J.J. Najera and **W.J. Bloss**
 Measurements and Modelling of Reactive Iodine Oxides in the Coastal MBL
- XY77 EGU2012-8138
 R. Sommariva and **R. von Glasow**
 Multi-phase halogen chemistry in the tropical Atlantic Ocean
- XY78 EGU2012-6951
S.J. Andrews and L.J. Carpenter
 Analysis of very short-lived halocarbons in the ocean and atmosphere using fully automated sampling techniques
- XY79 EGU2012-8466
A. Saiz-Lopez, T.D. Hay, J. C. Gomez Martin, M.C. Parrondo Sempere, M. Gil, M.V. Agama Reyes, and J.F. Paredes Mora
 Long-term tropospheric ozone and halogens measurements in the Eastern Pacific
- XY80 EGU2012-5645
S. Sala, H. Bönisch, T. Keber, and A. Engel
 Using airborne in-situ measurements of brominated hydrocarbons in the Western Pacific to improve the understanding of atmospheric halogen loading.
- XY81 EGU2012-11164
 E. Peters, J. Lampel, **F. Wittrock**, M. Vrekoussis, A. Richter, J.P. Burrows, J. Tschritter, M. Dorf, B. Quack, J. Sentian, and K. Pfeilsticker
 MAX-DOAS measurements of atmospheric trace gases during the SHIVA campaign
- XY82 EGU2012-9411
S. Fuhlbrügge, K. Krüger, F. Wittke, E. Atlas, and B. Quack
 Impact of the marine boundary layer on atmospheric VSLs abundances?
- XY83 EGU2012-9112
 S. Bleicher, J. Buxmann, N. Balzer, T. Riedel, J. Thornton, U. Platt, and **C. Zetzsch**
 Autocatalytic halogen release from salt droplets and salt pans
- XY84 EGU2012-9921
T. Krause, S. Studenroth, I. Mulder, C. Tubbesing, K. Kotte, J. Ofner, W. Junkermann, and H.F. Schöler
 Salt lakes of Western Australia - Natural abiotic formation of volatile organic compounds
- XY85 EGU2012-10140
I. Mulder, T. Krause, S. Studenroth, C. Tubbesing, K. Kotte, and H.F. Schöler
 Methyl-methionine as a precursor for methyl chloride and dimethyl sulphide produced in terrestrial salt lakes
- XY86 EGU2012-12475
 E. Tas, **D. Obrist**, C. Moore, M. Peleg, and M. Luria
 Bromine-induced Atmospheric Mercury Depletion Events (AMDEs) at the Dead Sea: magnitude, frequency, spatial extent, and modeled reaction pathways

- XY87 EGU2012-10010
T. Krause, S. Studenroth, M. Furchner, A. Hoffman, S. Lippe, K. Kotte, and H.F. Schöler
The Brenner Moor - A saline bog as a source for halogenated and non-halogenated volatile compounds
- XY88 EGU2012-10096
C. Tubbesing, T. Krause, I. Mulder, K. Kotte, and H.F. Schöler
Methionine as a potential precursor for halogenated compounds by the reaction with iron minerals
- XY89 EGU2012-5700
Z. Buys, A. E. Jones, and R. von Glasow
Exploring triggers for polar tropospheric ODEs, using a 1-D snow photochemistry model (MISTRA-SNOW).
- XY90 EGU2012-10134
H. Sihler, T. Wagner, **C. Hörmann**, S. Beirle, S. Dörner, U. Frieß, and U. Platt
Identification of tropospheric BrO column densities from satellite measurements and their relation to meteorological parameters
- XY91 EGU2012-11527
L. Jourdain, M. Pirre, V. Marécal, B. Josse, and C. Oppenheimer
Evolution and impact of volcanic halogens in regional chemistry climate model simulations
- XY92 EGU2012-6486
L. Grellier, B. Josse, and V. Marécal
3-dimensional atmospheric chemistry modelling of the halogen species in a volcano plume: the representativeness issue
- XY93 EGU2012-8058
R. von Glasow
Modelling of reactive chemistry in tropospheric volcanic plumes
- XY94 EGU2012-6556
N. Bobrowski, L. Vogel, U. Platt, S. Arellano, B. Galle, T. Hansteen, and S. Bredemeyer
Bromine monoxide evolution in early plumes of Mutnovsky and Gorely (Kamchatka, Russia)
- XY95 EGU2012-10667
C. Hörmann, H. Sihler, N. Bobrowski, U. Platt, and T. Wagner
Systematic investigation of bromine monoxide in volcanic plumes from space by using the GOME-2 instrument

AS3.8 – Atmospheric composition: variability and trends – Orals

Convener: O. Tarasova | Co-Conveners: S. Szopa, E. Nisbet, A. Pozzer, P. Jimenez-Guerrero

Room: 14

Chairperson: Oksana Tarasova

- 08:30–08:45 EGU2012-10350
M. Andrade, P. Laj, A. Wiedensohler, P. Bonasoni, M. Ramonet, R. Krejci, K. Sellegri, E. Weingartner, D. Whiteman, P. Ginot, F. Zaratti and the Chacaltaya Team
First atmospheric observations from the high altitude Chacaltaya GAW station (Bolivia - 5200 m)
- 08:45–09:00 EGU2012-9756
J.-L. Bonne, M. Delmotte, J.V. Lavric, A.C. Manning, L. Bopp, W. Brand, V. Kazan, A. Stohl, and O. Cloué
Four years of atmospheric oxygen and carbon dioxide record at Ivittuut, southern Greenland
- 09:00–09:15 EGU2012-940
C. D. Holmes, M. J. Prather, M. Mu, I. S. A. Isaksen, and O. A. Sovde
Future methane, OH, and their uncertainties: parametric relations with emissions and climate change
- 09:15–09:30 EGU2012-13137
N. Bänd?, M. Krol, M. van Weele, T. van Noije, and T. Röckmann
Quantifying the processes contributing to the anomalous methane growth rate after the eruption of Mt. Pinatubo
- 09:30–09:45 EGU2012-5492
U. Karstens, C. Rödenbeck, C. Gerbig, P. Bergamaschi, F.T. Koch, K. Trusilova, M. Heimann and the Atmospheric Measurements Team
Estimation of European CH₄ and N₂O emissions using a regional-scale atmospheric inversion system
- 09:45–10:00 EGU2012-334
X. Fang, J. Wu, S. Su, Y. Shi, D. Wan, J. Zhang, and J. Hu
Estimates and trends of major anthropogenic halocarbon emissions from China

COFFEE BREAK

Chairperson: Pedro Jiménez Guerrero

- 10:30–10:45 EGU2012-13229
R.L. Thompson, P. Bousquet, F. Chevallier, S. Zaehle, L. Bopp, and E. Dlugokencky
 Inter-annual variability in atmospheric nitrous oxide over the past two decades
- 10:45–11:00 EGU2012-1744
P. Schneider and R. J. van der A
 Global Trends of Tropospheric NO₂ Observed From Space
- 11:00–11:15 EGU2012-8631
 A. Misra, A. Gaur, D. Bhattu, S. Ghosh, A. K. Dwivedi, R. Dalai, D. Paul, T. Gupta, **S. N. Tripathi**, S. K. Mishra, S. Singh, and E. J. Welton
 Study of Dust Characteristics over the Indo-Gangetic Basin by Measurement of Physical, Chemical, Morphological, and Optical Properties
- 11:15–11:30 EGU2012-10831
H. Baars, D. Althausen, A. Ansmann, R. Engelmann, B. Heese, D. Müller, T. Pauliquevis, R. Souza, and P. Artaxo
 Seasonal aerosol characteristics in the Amazon rain forest
- 11:30–11:45 EGU2012-6233
M.G. Schultz, O. Tarasova, and V. Thouret
 Decadal Changes in Tropospheric Ozone
- 11:45–12:00 EGU2012-4880
M. Coldewey-Egbers, D. Loyola, W. Zimmer, M. van Roozendaal, C. Lerot, M. Dameris, H. Garny, P. Braesicke, M. Koukoulis, and D. Balis
 Global long-term ozone trends derived from different observed and modelled data sets

LUNCH BREAK

Chairperson: Sophie Szopa

- 13:30–13:45 EGU2012-4359
F. S. R. Pausata, L. Pozzoli, E. Vignati, and F.J. Dentener
 North Atlantic Oscillation and tropospheric ozone variability in Europe: model analysis and measurements intercomparison
- 13:45–14:00 EGU2012-1593
X. Xu, W. Lin, and B. Ge
 Background ozone in North China: trends, photochemical and transport impacts
- 14:00–14:15 EGU2012-6497
S. Wu
 Effects of Stratospheric Ozone Change on Photochemistry and Air Quality in the Troposphere
- 14:15–14:30 EGU2012-13392
C. Gebhardt, A. Rozanov, M. Weber, and J. P. Burrows
 A decade of ozone and bromine profiles from SCIAMACHY measured in limb mode
- 14:30–14:45 EGU2012-9312
M. Pastel, F. Goutail, J.-P. Pommereau, M. Weber, A. Pazmino, and G. Held
 Long-term evolution of tropical stratospheric O₃ and NO₂ Columns
- 14:45–15:00 EGU2012-521
V. Rakitin, A. Dzhola, E. Fokeeva, E. Grechko, and E. Starikova
 Long-term variations of CO total column over Moscow and its outskirts
- Chairperson: Euan Nisbet
- 15:30–15:45 EGU2012-8340
P. Castellanos and K.F. Boersma
 Reductions in nitrogen oxides over Europe driven by environmental policy and economic recession
- 15:45–16:00 EGU2012-2022
C Ambelas Skjøth and C Geels
 Variations in European ammonia emissions due to daily weather fluctuations and climate change
- 16:00–16:15 EGU2012-6176
H.E. Rieder, A.M. Fiore, L.M. Polvani, J.-F. Lamarque, Y. Fang, and J. Staehelin
 Changes in the frequency of extreme air pollution events over the Eastern United States and Europe
- 16:15–16:30 EGU2012-5325
A. Manders, A. Mues, R. Kranenburg, B. van Ulft, E. van Meijgaard, and M. Schaap
 The impact of uncertainties in climate models on future air quality modelling

- 16:30–16:45 EGU2012-8955
P Jiménez-Guerrero, R Baró, JJ Gómez-Navarro, R Lorente-Plazas, JA García-Valero, Z. Hernández, and JP Montávez
 What strategy is needed for attaining the EU air quality regulations under future climate change scenarios? A sensitivity analysis over Europe
- 16:45–17:00 EGU2012-3075
V. Poulain, S. Bekki, M. Marchand, M. Chipperfield, NDACC Pis, and CCMVal2-Pls
 Evaluation of Chemistry-Climate Models using NDACC observations.

AS3.8 – Atmospheric composition: variability and trends – Posters

Convener: O. Tarasova | Co-Conveners: S. Szopa, E. Nisbet, A. Pozzer, P Jimenez-Guerrero

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Oksana Tarasova

- XY96 EGU2012-5122
E. Morgan, J. Lavri?, M. Seely, and M. Heimann
 Establishment of an atmospheric observatory for trace gases and atmospheric oxygen in Namibia
- XY97 EGU2012-992
K. Weigel, A. Rozanov, F. Azam, K.-U. Eichmann, M. Weber, H. Bovensmann, G. P. Stiller, and J. P. Burrows
 Water vapor in the upper troposphere and lower stratosphere from SCIAMACHY limb measurements, 2002 - 2011
- XY98 EGU2012-7923
B. Lejeune, E. Mahieu, M. Schneider, F. Hase, C. Servais, and P. Demoulin
 Long-term series of tropospheric water vapour amounts and HDO/H₂O ratio profiles above Jungfraujoch.
- XY99 EGU2012-13764
 FF Paes, **HF Campos Velho**, and FM Ramos
 Identifying CO₂ bio-geochemical cycle for the ground-atmosphere system by artificial neural networks.
- XY100 EGU2012-8814
J. Bielewski, M. Chmiel, and I. Sliwka
 Fifteen years of CFCs and SF₆ measurements in air of Krakow, Poland
- XY101 EGU2012-6957
 I.C. Shin, H.C. Lim, Y.W. Kim, S.H. Kim, and **J.G. Yu**
 Trend in Greenhouse Gases Concentration in Anmyeon-Do, Korea Global Atmosphere Watch Station, South Korea
- XY102 EGU2012-1879
M.L. Sánchez, I.A. Pérez, M.A. García, and N. Pardo
 Greenhouse gas measurements in the upper Spanish plateau
- XY103 EGU2012-3777
J. Necki, L. Chmura, and M. Zimnoch
 Influence of orography on variability of a non-CO₂ greenhouse gases concentrations measured at Kasprowy Wierch station, Tatra, Poland
- XY104 EGU2012-9239
W. Kausch, S. Noll, M. Barden, A. Smette, C. Szyszka, A. Jones, S. Kimeswenger, H. Sana, and H. Horst
 Monitoring greenhouse gases with astronomical observations
- XY105 EGU2012-12397
J.-D. Paris, P. Ciais, L. Rivier, F. Chevallier, H. Dolman, J.-M. Flaud, C. Garrec, C. Gerbig, J. Grace, E. Huertas, T. Johannessen, A. Jordan, I. Levin, D. Papale, R. Valentini, A. Watson, T. Vesala, and ICOS-PP consortium
 Integrated Carbon Observation System
- XY106 EGU2012-11353
J. H. Butler, S.A. Montzka, T.J. Conway, E.J. Dlugokencky, J.W. Elkins, K.A. Masari, R.C. Schnell, and P.P. Tans
 The NOAA Annual Greenhouse Gas Index - 2012 Update
- XY107 EGU2012-11012
O. A. Tarasova, H. Koide, E. Dlugokencky, B. Hall, S. A. Montzka, P. Krummel, E. Brunke, and H.-E. Scheel
 The state of greenhouse gases in the atmosphere using global observations through 2010
- XY108 EGU2012-4326
A.M. Batenburg, M.E. Popa, A.T. Vermeulen, W.C.M. van den Bulk, P.A.C. Jongejan, and T. Röckmann
 The stable isotopic composition of atmospheric molecular hydrogen at the Cabauw tall tower in the Netherlands
- XY109 EGU2012-3658
J. Necki and L. Chmura
 Variation of molecular hydrogen tropospheric concentration over Southern Poland - results of the continuous chromatographic measurements.

- XY110 EGU2012-1420
É. Lecoeur, C. Seigneur, L. Terray, and C. Pagé
Influence of Climate on PM_{2.5} Concentrations over Europe : a Meteorological Analysis using a 9-year Model Simulation
- XY111 EGU2012-12473
C. Knote and D. Brunner
Effects of changing gaseous precursor emissions on aerosol chemical composition in Europe
- XY112 EGU2012-11294
T. C. Landi, A. Marinoni, P. Cristofanelli, U. Bonafè, F. Calzolari, R. Duchi, P. Laj, P. Villani, and P. Bonasoni
Aerosols and gases concentrations observed at Stelvio National Park (Italian Alps) during summer conditions
- XY113 EGU2012-2702
O. Lyapina, M. Schultz, H.-E. Scheel, M. Fröhlich, and B. Buchmann
Comparison of tropospheric ozone trends from European mountain stations
- XY114 EGU2012-3192
WW Verstraeten, J. Zörner, and KF Boersma
Evaluating trends in tropospheric ozone observations from TES with sonde data for the period 2005-2010
- XY115 EGU2012-11583
R. Kivi, E. Kyrö, and P. Heikkinen
Long-term observations of tropospheric ozone over Northern Finland
- XY116 EGU2012-13574
W. Chehade, M. Weber, and J.P. Burrows
Long term ozone trend analysis for the years 1978 - 2011 from merged data sets of various satellites.
- XY117 EGU2012-13038
M. Nishizawa, **T. Nagashima**, H. Kawase, T. Nozawa, K. Sudo, and T. Ohara
Future development of surface ozone over East Asia under RCPs scenarios
- XY118 EGU2012-7715
J. Struzewska, J.W. Kaminski, and M. Jefimow
Ozone pollution during heat wave periods over last 15 years in Central Europe
- XY119 EGU2012-6206
A. Berchet, J.-D. Paris, G. Ancellet, K. Law, A. Stohl, P. Nédélec, M. Yu Arshinov, B. D. Belan, and P. Ciais
Tropospheric ozone over Siberia in spring 2010: long-range transport of biomass burning and anthropogenic emissions, stratospheric intrusion and remote boundary layer influence
- XY120 EGU2012-10167
D. Hubert, **T. Verhoelst**, S. Vandenbussche, J. Granville, D. Pieroux, and J.-C. Lambert
Detectability of past changes in the vertical distribution of ozone with twelve limb sounders
- XY121 EGU2012-6664
K. A. Walker, C. Waymark, A. Jones, C. D. Boone, and P. F. Bernath
Validation of version 3.0 profiles from the Atmospheric Chemistry Experiment Fourier Transform Spectrometer (ACE-FTS)
- XY122 EGU2012-896
Ya.A. Virolainen, Yu.M. Timofeyev, D.V. Ionov, V.S. Kostsov, and A.V. Poberovsky
The ozone vertical structure determining from ground-based Fourier spectrometer solar IR radiation measurements
- XY123 EGU2012-4993
F. Hendrick, D. Ionov, F. Goutail, A. Pazmino, U. Friess, M. Gil, J.-C. Lambert, M. Navarro, M. Pastel, J.-P. Pommereau, A. Richter, T. Wagner, F. Wittrock, and M. Van Roozendael
New NDACC recommendations for the retrieval of stratospheric NO₂ columns
- XY124 EGU2012-6196
G. Milinevsky, O. Evtushevsky, A. Grytsai, V. Danylevsky, V. Kravchenko, M. Sosonkin, N. Eremenko, Z. Grytsai, S. Kovalenok, E. Udodov, D. Gladikov, P. Silin, L. Savitska, and N. Kochergan
Two years ozone layer study at Kyiv-Goloseyev site by Dobson spectrophotometer
- XY125 EGU2012-9126
W. Bader, A. Perrin, D. Jacquemart, K. Sudo, H. Yashiro, M. Gauss, P. Demoulin, C. Servais, and E. Mahieu
Retrievals of ethane from ground-based high-resolution FTIR solar observations with updated line parameters: determination of the optimum strategy for the Jungfraujoch station.
- XY126 EGU2012-9111
E. Mahieu, W. Bader, B. Lejeune, C. Vigouroux, P. Demoulin, C. Servais, G. Roland, and R. Zander
Seeking for the optimum retrieval strategy of methanol (CH₃OH) from ground-based high-resolution FTIR solar observations recorded at the high-altitude Jungfraujoch station (46.5°N)
- XY127 EGU2012-13476
F. Geiger, C. Warneke, M. Graus, J. Gilman, B. Lerner, J. de Gouw, J. M. Roberts, M. Neumaier, and A. Zahn
Volatile organic compounds in the Uintah Basin, Utah: first results of the new PTR-MS system

- XY128 EGU2012-11256
A. Colomb, C. Gaimoz, J. Fleuret, V. Jacob, L. Bouvier, J-M. Pichon, D. Picard, M. Ribeiro, E. Freney, E. Asmi, M. Hervo, C. Rose, J-L. Jaffrezo, and K. Sellegri
 Measurements of volatile organic compounds (VOCs) at the puy de Dôme research station (France, 1465m a.s.l.).
- XY129 EGU2012-5656
G. Pinardi, C. Adams, S. Beirle, A. Cede, U. Friess, M. Gil, H. Irie, E. Peters, A. Pitters, O. Puentedura, A. Richter, R. Shaigan, E. Spinei, K. Strong, H. Takashima, T. Wagner, F. Wittrock, S. Yilmaz, and M. Van Roozendael
 Intercomparison of MAXDOAS HCHO slant columns during the CINDI campaign
- XY130 EGU2012-10377
 F. Pankratov, **A. Mahura**, O. Katz, and A. Konoplev
 Long-term Continuous Monitoring of Mercury in the Russian Arctic: Evaluation of Impact from Icelandic Volcanic Eruptions
- XY131 EGU2012-7347
A. Inness, R. Engelen, J. Flemming and the MACC Team
 The MACC reanalysis: An 8-year data set of atmospheric composition
- XY132 EGU2012-4647
 D. Akritidis, **P. Zanis**, E. Katragkou, I. Tegoulas, A. Poupkou, K. Markakis, Th. Karacostas, and I. Pytharoulis
 Evaluation of regional climate - air quality simulations over Europe for the period 1996-2006 with emphasis on tropospheric ozone: The impact of chemical boundary conditions
- XY133 EGU2012-4888
A. Pozzer, P. Zimmermann, U. Doering, J. van Aardenne, F. Dentener, and J. Lelieveld
 Effects of future anthropogenic pollution emissions on global air quality
- XY134 EGU2012-9667
G. Clain, S. Szopa, O. Tripathi, R. Vautard, L. Menut, A. Colette, and B. Bessagnet
 Modelling the impact of global changes on summer european surface ozone levels at the 2050 horizon
- XY135 EGU2012-7794
J. Langner, M. Engardt, A. Baklanov, M. Gauss, C. Geels, G.B. Hedegaard, D. Simpson, J. Soares, M. Sofiev, and A. Zakey
 ENSCLIM - A multi-model study of impacts of climate change on surface ozone in Europe
- XY136 EGU2012-5672
D.K Wasiuk, D.E. Shallcross, and M.H. Lowenberg
 Modelling the impact of aircraft emissions on atmospheric composition
- XY137 EGU2012-9028
 M. Porebska, **M. Zdunek**, J. Kaminski, J. Struzekwska, and L. Loboeki
 Identification of stratospheric intrusion mechanisms over Europe - analysis of GEM-AQ model simulations for 2006
- XY138 EGU2012-1846
M. Hirtl, S. Mantovani, B.C. Krüger, and G. Triebnig
 AQA-PM: Extension of the Air-Quality model for Austria with satellite based Particulate Matter estimates
- XY139 EGU2012-8975
K. Weigel, M. Weber, A. Rozanov, K.-U. Eichmann, H. Bovensmann, and J. P. Burrows
 SCIAMACHY long term validation 2010 (SCILOV-10) - first result
- XY140 EGU2012-12159
M. C. Pitts, L. W. Thomason, J. Zawodny, and C. Hill
 SAGE III on the International Space Station
- XY141 EGU2012-13118
C. Lund Myhre, A. Fahre Vik, R. Logna, K. Torseth, H. Linné, and E. O'Connor
 ACTRIS Data Centre: An atmospheric data portal
- XY142 EGU2012-13375
M. E. Popa, M. K. Vollmer, W. Brand, A. Jordan, M. Rothe, A. M. Batenburg, S. Pathirana, and T. Röckmann
 Islisberg-2011 - measurements of vehicle emissions in a highway tunnel: CO₂, CO, H₂, N₂O, O₂/N₂; stable isotopes of CO₂, CO and H₂
- XY143 EGU2012-5310
M. Duan and Q. Min
 Understanding of the Observed Trend in Radiation at the ARM SGP Site

AS3.12 – Remote Sensing of Clouds and Aerosols: Techniques and Applications – Orals

Convener: J. Cermak | Co-Conveners: Dr. de Leeuw, Dr. Kokhanovsky

Room: 10

Chairperson: n.n.

- 08:30–08:45 EGU2012-8977
F. Prata, A. Durant, and A. Kylling
 The airborne volcanic object imaging detector (AVOID): A new tool for airborne atmospheric remote sensing of clouds
- 08:45–09:00 EGU2012-12257
S. V. Sanghavi, J. V. Martonchik, J. Landgraf, and U. Platt
 Retrieval of the optical depth and vertical distribution of particulate scatterers in the atmosphere using O2 A- and B-band SCIAMACHY observations over Kanpur: a case study.
- 09:00–09:15 EGU2012-7777
E. Emili, A. Lyapustin, Y. Wang, C. Popp, S. Korkin, M. Zebisch, S. Wunderle, and M. Petitta
 MODIS AOD retrieval at high horizontal resolution with MAIAC on the Alpine region
- 09:15–09:30 EGU2012-2468
N. Schutgens, M. Nakata, and T. Nakajima
 Empirical correction of Coll. 5 MODIS AOT and AE over ocean for data-assimilation
- 09:30–09:45 EGU2012-2724
J. Banks and H. Brindley
 Satellite Observations from SEVIRI of Saharan dust over West Africa, within the context of the Fennec project
- 09:45–10:00 EGU2012-11289
N. Huneus, F. Chevallier, and O. Boucher
 Estimating aerosol emissions by assimilating observed aerosol optical depth in a global aerosol model

COFFEE BREAK

Chairperson: n.n.

- 10:30–10:45 EGU2012-6379
D. Rosenfeld, E. Williams, M. O. Andreae, E. Freud, U. Pöschl, and N. O. Rennó
 The scientific basis for a satellite mission to retrieve CCN and its impacts on convective cloud
- 10:45–11:00 EGU2012-6663
J. Mather
 New ARM Measurements of Clouds, Aerosols, and the Atmospheric State
- 11:00–11:15 EGU2012-7702
 M. Lefèvre, A. Oumbe, P. Blanc, B. Gschwind, Z. Qu, **L. Wald**, M. Schroedter-Homscheidt, C. Hoyer-Klick, A. Arola, and J.-J. Morcrette
 Using MACC-derived products to predict clear-sky irradiance at surface
- 11:15–11:30 EGU2012-13682
J. Redemann, Y. Shinozuka, M. Vaughan, P. Russell, M. Kacenelenbogen, J. Livingston, O. Torres, and L. Remer
 Direct aerosol radiative effects based on combined A-Train observations
- 11:30–11:45 EGU2012-6088
S. Griessbach, L. Hoffmann, M. von Hobe, R. Müller, and R. Spang
 A six-year record of volcanic ash detection with Envisat MIPAS
- 11:45–12:00 EGU2012-5286
G. de Leeuw, T. Holzer-Popp and the aerosol_cci Team
 Evaluation and comparison of aerosol retrieval algorithms

LUNCH BREAK

Chairperson: n.n.

- 13:30–13:45 EGU2012-6173
R. Roebeling, B. Baum, R. Bennartz, U. Hamann, A. Heidinger, A. Thoss, and A. Walther
 Outcome of the Third Cloud Retrieval Evaluation Workshop
- 13:45–14:00 EGU2012-10833
M Jerg, M Stengel, R Hollmann, C Poulsen and the ESA CCI Cloud Team
 The ESA Cloud CCI project: Generation of Multi Sensor consistent Cloud Properties with an Optimal Estimation Based Retrieval Algorithm
- 14:00–14:15 EGU2012-774
L. Lelli, J. Yoon, A. Kokhanovsky, V. Rozanov, M. Vountas, and J.P. Burrows
 Global and regional trends of cloud properties derived by hyperspectral measurements in the O2 A-band

- 14:15–14:30 EGU2012-3260
M. C. Chan and J. C. Comiso
 Arctic Cloud Cover Characteristics from MODIS, CALIOP, and CloudSat
- 14:30–14:45 EGU2012-5454
N. King and G. Vaughan
 Vertical profile retrievals of marine stratocumulus from passive remote sensing: An assessment of information content and the potential for improved retrievals from hyperspectral measurements
- 14:45–15:00 EGU2012-10697
Y.-S. Choi and H. Cho
 On the Use of Geostationary Satellites for Climate Feedback Study

AS3.12 – Remote Sensing of Clouds and Aerosols: Techniques and Applications – Posters

Convener: J. Cermak | Co-Conveners: Dr. de Leeuw, Dr. Kokhanovsky

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jan Cermak

- XY144 EGU2012-924
L. Fang, T. Yu, and X. Gu
 Remote sensing of aerosols and atmospheric correction of HJ-1 CCD data over urban areas
- XY145 EGU2012-3997
S. Vandenbussche, S. Kochenova, A.-C. Vandaele, N. Kumps, and M. De Mazière
 Retrieval of Saharan desert dust optical depth from thermal infrared measurements by IASI
- XY146 EGU2012-4820
M. Campanelli, C. Bassani, M. Cacciani, A.M. Siani, C. Perrino, S. Canepari, A. Di Sarra, R. Salzano, G.P. Casasanta, C. Tirelli, and V. Estelles
 Direct effect of aerosol on incident solar radiation at the surface as a function of aerosol mixtures measured in the center of Rome.
- XY147 EGU2012-6228
G. Milinevsky, V. Danylevsky, A. Bovchaliuk, V. Bovchaliuk, M. Sosonkin, Ph. Goloub, and O. Dubovik
 Atmospheric aerosol properties over Ukraine from sunphotometer and satellite measurements during 2008 - 2011
- XY148 EGU2012-7757
I. Sano, S. Mukai, M. Nakata, B. Holben, and N. Sugimoto
 Regional distribution of PM_{2.5} over a megacity Osaka in Japan derived from satellite, AERONET and/or LIDAR measurements
- XY149 EGU2012-7994
S. Mukai, M. Nakata, and I. Sano
 Variation of aerosol characteristics in the detail scale of time and space
- XY150 EGU2012-9232
A. J. van Beelen, G. J. H. Roelofs, O. P. Hasekamp, and T. Roeckmann
 Estimation of aerosol water through combined analysis of remote sensing measurements and aerosol-hygroscopicity modelling.
- XY151 EGU2012-9988
C. Talianu, D. Nicolae, E. Carstea, and L. Belegante
 Boundary layer heights determinate from Raman multiwavelengths lidar and microwave radiometer measurements
- XY152 EGU2012-10309
 S. Segura, **V. Estelles**, M.P. Utrillas, and J.A. Martinez-Lozano
 Validation of MODIS aerosol optical depth over a Mediterranean and coastal urban environment (Valencia, Spain)
- XY153 EGU2012-10370
A.-M. Sundström, J. Huttunen, A. Arola, P. Kolmonen, L. Sogacheva, and G. de Leeuw
 Estimation of the direct aerosol radiative effect over China based on satellite remote sensing measurements
- XY154 EGU2012-7803
M. Penning de Vries, P. Stammes, and T. Wagner
 Systematic aerosol characterization by combining GOME-2 UV Aerosol Indices with trace gas concentrations
- XY155 EGU2012-10204
V. Estelles, M. Campanelli, F.J. Expósito, M.P. Utrillas, J.P. Díaz, and J.A. Martínez-Lozano
 Aerosol radiative forcing in the European Skynet Radiometers network
- XY156 EGU2012-10648
F. Ernst, C. von Savigny, A. Rozanov, V. Rozanov, K.-U. Eichmann, H. Bovensmann, and J. P. Burrows
 Stratospheric aerosol extinction profile retrievals from SCIAMACHY limb-scatter observations

- XY157 EGU2012-11250
H.-S. Kim and Y.-S. Choi
Effect of cosmic ray on global high cloud from MODIS
- XY158 EGU2012-12863
M. Kühnlein, T. Naus, T. Appelhans, A.A. Kokhanovsky, and B. Thies
An evaluation of a semi-analytical cloud property retrieval using Meteosat Second Generation, MODIS and CloudSat
- XY159 EGU2012-13018
A. Vogel, K. Weber, C. Fischer, A.J. Prata, and A.J. Durant
Aircraft in situ and remote sensing measurements of emissions from Etna volcano, Sicily
- XY160 EGU2012-10228
Z. Qu, A. Oumbe, P. Blanc, M. Lefèvre, L. Wald, M. Schroedter-Homscheidt, and G. Gesell
A new method for assessing surface solar irradiance: Heliosat-4
- XY161 EGU2012-1046
L. Mei, Y. Xue, and A.A. Kokhanovsky
Aerosol optical depth and type retrieval using MSG/SEVIRI data
- XY162 EGU2012-10479
AD Deroubaix, NM Martiny, IC Chiapello, and BM Marticorena
Remote sensing of desert dust aerosols over the Sahel : potential use for health impact studies
- XY163 EGU2012-10817
D. Efremenko, A. Doicu, D. Loyola, and T. Trautmann
On the implementation of the discrete ordinate method with small-angle approximation for a pseudo-spherical atmosphere
- XY164 EGU2012-11145
H. Maxime, K. Sellegri, and J.-C. Roger
Climatology of aerosol optical properties with a synergy of remote sensing/altitude in situ measurements.
- XY165 EGU2012-12064
B. Kabata?, W. P. Menzel, A. Bilgili, and L. E. Gumley
Comparing Ship Track Droplet Sizes Inferred from Terra and Aqua MODIS Data
- XY166 EGU2012-13517
P. Glantz and M. Tesche
Assessment of diverse algorithms applied on MODIS Aqua and Terra data over land surfaces in Europe
- XY167 EGU2012-13754
X. W. He, Y. Xue, Y. J. Li, J. Guang, L. K. Yang, and H. Xu
Monitoring the Haze Using Multi-sensor Aerosol Optical Depth Data
- XY168 EGU2012-14003
O-G Tudose, A. Balanici, O. Couach, and I. Balin
Urban Planetary Boundary Layer investigations in cold season and complex topography in IASI city area using ESYROLIDAR
- XY169 EGU2012-4919
K.-P. Heue, C. Brenninkmeijer, D. Walter, T. Wagner, A. Zahn, T. Deutschmann, and U. Platt
Observation of clouds with an airborne DOAS instrument
- XY170 EGU2012-660
C. Li, Y. Xue, Y.J. Li, L.K. Yang, and T.T. Hou
Simultaneous Retrieval of Aerosol Optical Depth and Surface Reflectance over Land within Short Temporal Interval Using MSG Data
- XY171 EGU2012-7845
D. Martynenko, T. Holzer-Popp, L. Klüser, and M. Schroedter-Homscheidt
Synergetic retrieval of aerosol properties from MetOp
- XY172 EGU2012-8395
S. Peyridieu, **V. Capelle**, C. Tsamalis, C. Pierangelo, and A. Chédin
Saharan dust coarse mode effective radius retrieved from IASI over the Atlantic Ocean
- XY173 EGU2012-8526
D. C. Stein-Zweers, J. P. Veeffkind, and J. de Haan
OMI simulated aerosol index: Initial results and verification as part of the Aerosol-CCI project
- XY174 EGU2012-8715
A. Misra, S. N. Tripathi, D. S. Kaul, and E. J. Welton
Comparison of CALIOP Level 2, Version 3 Backscatter and Extinction products with MPLNET data at Kanpur, India
- XY175 EGU2012-9134
B. Espinar, P. Blanc, **L. Wald**, C. Hoyer-Klick, M. Schroedter-Homscheidt, and T. Wanderer
On quality control procedures for solar radiation and meteorological measures, from subhourly to monthly average time periods
- XY176 EGU2012-917
S. Wang, X. Gu, T. Yu, and J. Gao
Retrieval of aerosol properties for fine/coarse mode aerosol mixtures from PARASOL observations

- XY177 EGU2012-9510
S. Dörner, S. Kühl, J. Pukite, M. Penning de Vries, C. Hörmann, C. von Savigny, and T. Wagner
 Retrieval of Stratospheric Aerosol Properties from SCIAMACHY limb observations
- XY178 EGU2012-4146
A.F.J. Sanders, J.F. de Haan, and J.P. Veefkind
 Retrieval of Aerosol Height with TROPOMI
- XY179 EGU2012-6676
Y.C. Chen, B. Hamre, S. Stamnes, Ø. Frette, K. Stamnes, and J.J. Stamnes
 Retrieval of aerosol climatology from Sun-Photometer measurements at Andenes, Norway.

IG3/AS4.2 – Stable Isotopes in Atmospheric Research (co-organized) – Orals

Convener: R. Koppmann | Co-Conveners: J. Kaiser, M. S. Johnson

Room: 34

Chairperson: Jan Kaiser

- 08:30–08:45 EGU2012-4679
F. Robert and P. Reinhardt
 Non-mass dependent isotope fractionation in Ozone
- 08:45–09:00 EGU2012-6589
E. Sofen, B. Alexander, E. Steig, M. Thiemens, S. Kunasek, H. Amos, A. Schauer, M. Hastings, J. Bautista, T. Jackson, L. Vogel, J. McConnell, and D. Pasteris
 Assessing the anthropogenic influence on atmospheric oxidants using the oxygen isotopic composition of sulfate and nitrate from the WAIS-Divide ice core
- 09:00–09:15 EGU2012-163
Y. Lin, R.N. Clayton, L. Huang, N. Nakamura, and J.R. Lyons
 Oxygen isotope anomaly observed in water vapor from Alert, Canada and the implication for the stratosphere
- 09:15–09:30 EGU2012-11129
C. Reutenauer, A. Landais, M-N. Woillez, C. Risi, P. Braconnot, T. Blunier, V. Mariotti, and M. Kageyama
 Quantification of the role of orbital and millennial timescale processes on $\delta^{18}\text{O}$ and $\delta^2\text{H}$ signals
- 09:30–09:45 EGU2012-11188
F. Aemisegger, P. Sturm, P. Graf, H. Sodemann, S. Pfahl, A. Knohl, and H. Wernli
 Measuring fast variations of $\delta^{18}\text{O}$ and $\delta^2\text{H}$ in atmospheric water vapour using laser spectroscopy: an instrument inter-comparison and characterisation study
- 09:45–10:00 EGU2012-11378
J. Lyons, D. Blackie, G. Stark, and J Pickering
 The origin of sulfur MIF effects in ancient rocks based on isotopic SO_2 cross sections

COFFEE BREAK

Chairperson: Ralf Koppmann

- 10:30–10:45 EGU2012-7317
 J. A. Schmidt, **M. S. Johnson**, and R. Schinke
 Isotope effects in N_2O photolysis from first principles
- 10:45–11:00 EGU2012-14243
J. Kaiser, J. Laube, E. McKenna, S. Maxwell, T. Röckmann, and A. Engel
 Chlorine isotope fractionation in CFC-12 reflects the latitude dependence of stratospheric chemistry and transport rates
- 11:00–11:15 EGU2012-2362
M. Bock, J. Schmitt, and H. Fischer
 Similar response in $\delta(\text{CH}_4)$ during Holocene, Eem, MIS 11 and antecedent terminations
- 11:15–11:30 EGU2012-9863
J. Wintel, E. Hösen, F. Bühler, H.-P. Heuser, P. Knieling, R. Koppmann, M. Krebsbach, C. Linke, and H. Spahn
 Stable Carbon Isotope Ratios of Toluene in the Boundary Layer and the Lower Troposphere
- 11:30–11:45 EGU2012-7824
 X. F. Sang, **I. Gensch**, W. Laumer, B. Kammer, C. Y. Chan, G. Engling, A. Wahner, H. Wissel, and A. Kiendler-Scharr
 Stable carbon isotope ratio analysis of anhydrosugars in biomass burning source aerosol

11:45–12:00 EGU2012-12009

M. Reuter, H. Bovensmann, M. Buchwitz, J.P. Burrows, N.M. Deutscher, J. Heymann, O. Schneising, and T. WarnekeOn the potential of space based and ground based FTS measurements for remote sensing of atmospheric CO₂ isotopologues**IG3/AS4.2 – Stable Isotopes in Atmospheric Research (co-organized) – Posters**

Convener: R. Koppmann | Co-Conveners: J. Kaiser, M. S. Johnson

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

A369 EGU2012-1562

H. C. Steen-Larsen, A. E. Sveinbjörnsdóttir, TH. Jónsson, and S. J. Johnsen
Monitoring the water vapor isotopic composition in the temperate North Atlantic

A370 EGU2012-1563

H. C. Steen-Larsen, A. E. Sveinbjörnsdóttir, A. Peters, and J. Rosset
Monitoring the water vapor isotopic composition in the sub-tropical North Atlantic

A371 EGU2012-7119

K. Gribanov, R. Imasu, J. Jouzel, F.-M. Breon, C. Clerbaux, and M. Kolyasnikova
HDO mapping in the atmosphere over Western Siberia from satellite data with validation using ground based FTIR measurements

A372 EGU2012-6968

N. Rokotyan, V. Zakharov, K. Gribanov, J. Jouzel, T. Warneke, and J. Notholt
Methods of retrieval of ¹³CH₄/¹²CH₄ and ¹³CO₂/¹²CO₂ ratio in atmosphere using ground-based FTIR spectral measurements

A373 EGU2012-6779

P. Sperlich, M. Guillevic, C. Buizert, T. Jenk, H. Schaefer, and T. Blunier
A new solution to a standard problem: creating atmosphere-like isotope reference gases with precisely referenced ¹³C - CH₄

A374 EGU2012-6795

P. Sperlich, C. Buizert, M. Guillevic, T. Jenk, C.J. Sapart, T. Röckmann, M. Bock, J. Schmitt, H. Fischer, and T. Blunier
A setup to analyze isotopes of paleoatmospheric CH₄ and N₂O in a single ice core sample

A375 EGU2012-11264

E. González-Sosa, C. Mastachi-Loza, R. Becerril-Piña, and NM Ramos-Salinas
Study of Urban environmental quality through Isotopes ¹³C

A376 EGU2012-10816

D. Fibiger and M. Hastings
Quantifying the isotopic composition of NO_x emission sources: An analysis of collection methods

A377 EGU2012-6717

S. Shrestha, S. Shrestha, T. Nakamura, and F. Kazama
Stable isotopic composition of ¹⁵N-NO₃⁻ and ¹⁸O-NO₃⁻ in precipitation of Kathmandu valley during monsoon season

A378 EGU2012-9821

C. Meusinger, T.A. Berhanu, J. Erbland, F. Domine, J. Savarino, and M.S. Johnson
Photochemical Isotope Effects in Snowpack Nitrate

A379 EGU2012-935

A.A. Wiegel and K.A. Boering
Measurements and kinetics modeling of the O₂/CO₂ dependence of the oxygen-17 isotope anomaly in carbon dioxide

A380 EGU2012-5799

T. Blunier, M.L. Bender, B. Barnett, and J.C. von Fisher
Planetary fertility during the past 400 ka based on the triple isotope composition of atmospheric oxygen in trapped gases from the Vostok ice core

A381 EGU2012-5489

S. Ranjan, M. Leuenberger, R. Winkler, and A. Landais
Influence of pH on ¹⁷O using the conventional equilibration device and a comparison to the CoF₃ method

A382 EGU2012-6177

D. Mrozek and T. Röckmann
Online, high precision analytical method for determination of ¹⁷O in stratospheric CO₂ with the use of CeO₂ isotopic exchange

A384 EGU2012-14267

S. O. Danielache, S. Hattori, **M. S. Johnson**, Y. Ueno, S. Nanbu, and N. Yoshida
Ultraviolet Spectroscopy of ³²S, ³³S, ³⁴S and ³⁶S Sulphur Dioxide: Isotopic model for the SO₂^{*} reaction.

- A385 EGU2012-14271
M. B. Enghoff, N. Bork, S. Hattori, C. Meusinger, M. Nakagawa, J. O. P. Pedersen, S. O. Danielache, Y. Ueno, **M. S. Johnson**, N. Yoshida, and H. Svensmark
An isotopic view of ionising radiation as a source of sulphuric acid
- A386 EGU2012-14268
S. Hattori, J. A. Schmidt, S. O. Danielache, **M. S. Johnson**, R. Schinke, H. Kjaergaard, S. Toyoda, Y. Ueno, and N. Yoshida
Ultraviolet absorption cross sections of isotopically substituted carbonyl sulfide species: Theory, experiment and modeling
- A387 EGU2012-14162
J. Kaiser, A. Angert, B. Bergquist, W. Brand, S. Ono, T. Röckmann, and J. Savarino
IUPAC Project: Terminology and definition of quantities related to the isotope distribution in elements with more than two stable isotopes

PS2.5/AS4.18 – Atmospheres of Terrestrial Planets (co-organized) – Posters

Convener: W.J. Markiewicz | Co-Conveners: E. Marcq, A. Määttänen

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY501 EGU2012-3232
T. G. Slanger, O. Kostko, D. A. Pejakovic, and K. S. Kalogerakis
GOAT (Global Oxygen And Temperature) Mapping
- XY502 EGU2012-9813
S. Noll, W. Kausch, M. Barden, A.M. Jones, C. Szyszka, and S. Kimeswenger
An atmospheric radiation model for the Very Large Telescope at Cerro Paranal in Chile
- XY503 EGU2012-2560
O. Kostko, S. Raj, K. M. Campbell, D. A. Pejakovic, T. G. Slanger, and **K. S. Kalogerakis**
O₂(b¹Σ⁺_g, v = 0, 1) Relative Yield in O(1D) + O₂ Energy Transfer
- XY504 EGU2012-4241
J.W. Stock, C.S. Boxe, R. Lehmann, J.L. Grenfell, A.B.C. Patzer, H. Rauer, and Y.L. Yung
Photochemistry of the Martian atmosphere: Pathway analysis of ozone formation and destruction
- XY505 EGU2012-6182
B. Shizgal, R. Sospedra-Alfonso, and A. Yau
Energetic Oxygen in the Terrestrial Exosphere
- XY506 EGU2012-7818
A. Beth, A. Kotova, P. Garnier, D. Toublanc, I. Dandouras, P.C. Brandt, K. Dialynas, and S.M. Krimigis
Modeling the satellite particles in planetary exospheres : application to Titan, Earth and Mars
- XY507 EGU2012-12495
S. Guslyakova, A. Fedorova, O. Korabiev, F. Lefevre, F. Montmessin, and J.-L. Bertaux
Oxygen dayglow observations on Mars by SPICAM IR
- XY508 EGU2012-2554
K. S. Kalogerakis, J. Thiebaud, D. Matsiev, and R. A. Copeland
Laboratory Investigation of Relaxation Pathways for Vibrationally Excited OH
- XY509 EGU2012-12628
F. Daerden, **L. Neary**, J. Whiteway, C. Dickinson, L. Komguem, J.C. McConnell, and J.W. Kaminski
Simulating the Phoenix Lander meteorological conditions with a Mars GCM
- XY510 EGU2012-4940
O. Kempainen, W. Schmidt, and A.-M. Harri
Analysis of the re-processed high-resolution whole-mission meteorological data of the Viking Landers
- XY511 EGU2012-4830
C. Holstein-Rathlou, J.P. Merrison, C.F. Brædstrup, and P. Nornberg
The effects of electric fields on wind driven particulate detachment
- XY512 EGU2012-418
Y. Willame, A.-C. Vandaele, C. Depiesse, D. Gillotay, S. Kochenova, and F. Montmessin
Preliminary results of aerosols' properties studied with EPF measurements from the SPICAM/UV instrument
- XY513 EGU2012-10438
P. Machado, T. Widemann, D. Luz, J. Peralta, and D. L. Berry
New measurements of Venus winds with ground-based Doppler velocimetry at CFHT
- XY514 EGU2012-600
J. R. Dias Pinto, J. L. Mitchell, and R. P. da Rocha
Momentum and heat transports in a superrotating atmosphere
- XY515 EGU2012-10245
E. Marcq, F. Montmessin, J.L. Bertaux, D. Belyaev, and A. Fedorova
SO₂ monitoring above Venus' clouds using VEx/SPICAV-UV nadir observations

SM3.1/AS4.20 – Research and Development in Nuclear Explosion Monitoring (co-organized) – Orals

Convener: A. Becker | Co-Conveners: B. Kalinowski, L. Ceranna, D. BROWN, Y. Jia

Room: 26

Chairperson: Y. Jia

- 10:30–10:45 EGU2012-1366
S. J. Gibbons
The Applicability of Incoherent Array Processing to IMS Seismic Array Stations
- 10:45–11:00 EGU2012-6763
N. Arora and S. Russell
A model of seismic coda arrivals to suppress spurious events.
- 11:00–11:15 EGU2012-6817
S. Ballard, M. L. Begnaud, C. J. Young, J. R. Hipp, A. V. Encarnacao, E. P. Chael, W. S. Phillips, and L. K. Steck
Improving Event Locations Using a Global 3D P-Velocity Model of the Earth's Crust and Mantle
- 11:15–11:30 EGU2012-6831
T. J. Draelos, **S. Ballard**, C. J. Young, M. Gonzales, and R. Brogan
A Seismic Event Detection and Signal Association Algorithm
- 11:30–11:45 EGU2012-12700
S. myers, N. Simmons, G. Johannesson, and E. Matzel
Improved Seismic Event Location and Prediction of P-wave Travel Times using the LLNL_G3D Global Earth Model
- 11:45–12:00 EGU2012-5518
Y. Gitterman
Effects of charge design features on parameters of acoustic and seismic waves and cratering, for SMR chemical surface explosions

LUNCH BREAK

Chairperson: A. Becker, M. Kalinowski

- 13:30–13:45 EGU2012-12092
J. Lonzaga, R. Waxler, P. Blom, and J. Assink
Comparison of nonlinear infrasound propagation models with observations
- 13:45–14:00 EGU2012-13174
B. Sick and M. Joswig
Unsupervised clustering of seismic events in an On-Site-Inspection scenario
- 14:00–14:15 EGU2012-9463
G. Wotawa
Meteorological analysis of the spring-2010 radionuclide measurements in Eastern Asia
- 14:15–14:30 EGU2012-11845
O. Ross, C. Bönnemann, L. Ceranna, N. Gestermann, G. Hartmann, and T. Plenefisch
NPE 2010 results - Independent performance assessment by simulated CTBT violation scenarios
- 14:30–14:45 EGU2012-339
M. Yamauchi, M. Takeda, M. Makino, and T. Owada
Re-suspension of the radioactive fallout after the Fukushima accident: risk of internal dose during the first week and the first two months
- 14:45–15:00 EGU2012-13602
A. Yatagai, Y. Onda, and A. Watanabe
Quantitative analysis of precipitation over Fukushima to understand the wet deposition process in March 2011

SM3.1/AS4.20 – Research and Development in Nuclear Explosion Monitoring (co-organized) – Posters

Convener: A. Becker | Co-Conveners: B. Kalinowski, L. Ceranna, D. BROWN, Y. Jia

Hall XL | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: D. Brown, L. Ceranna

- XL339 EGU2012-1573
Y. Ben Horin and D. M. Steinberg
Scoring IDC SEL1 events for identifying miss-formed events

- XL340 EGU2012-4089
T. Kvaerna, F. Ringdal, and J. Given
Application of Detection Probabilities in the IDC Global Association Process
- XL341 EGU2012-5977
M. J. Yedlin, Y. Ben Horin, and J. D. Fraser
Seismological Applications of the Stockwell Transform
- XL342 EGU2012-10846
Y. Cano and Y. Ben-Horin
Integration of PMCC detector in seismic operational automatic processing chain. Validation on MMAI array.
- XL343 EGU2012-11702
J. H. Lee and J. Coyne
Time Series Analysis of the Seismic Events Worldwide
- XL344 EGU2012-5540
I. Kitov, D. Bobrov, J. Coyne, and G. Turyomurugyendo
On comprehensive recovery of an aftershock sequence with cross correlation
- XL345 EGU2012-4242
V. Pinsky, Y. Gitterman, Y. Ben-Horin, and S. Arrowsmith
Seismo-acoustic analysis for series of ammunition demolition explosions at Sayarim, Israel
- XL346 EGU2012-11204
J. Marty, P. Martysevich, A. Kramer, and G. Haralabus
Engineering and development projects for the sustainment and enhancement of the IMS infrasound network
- XL347 EGU2012-11860
P. Mialle, P. Bittner, D. Brown, and J. Given
IDC Infrasound Pipeline development
- XL348 EGU2012-6821
H.A. Kuzma, E. Arehart, J.N. Louie, and J.L. Witzleben
The ear, the eye, earthquakes and feature selection: listening to automatically generated seismic bulletins for clues as to the differences between true and false events.
- XL349 EGU2012-11993
M. Liebsch, J. Altmann, and **F. Gorschlüter**
Investigations of Periodic Disturbances on SAMS Recordings
- XL350 EGU2012-11672
N. Gestermann, C. Bönemann, L. Ceranna, O. Ross, and C. Schlosser
Scenario details of NPE 2012 - Independent performance assessment by simulated CTBT violation
- XL351 EGU2012-12019
M. Schoeppner, F. Postelt, M. Kalinowski, and W. Plastino
Categorisation of nuclear explosions from legitimate radioxenon sources with atmospheric transport modelling
- XL352 EGU2012-6034
D. Morton and M. Krysta
Analysis of FLEXPART performance in an operational atmospheric transport modeling environment at CTBTO
- XL353 EGU2012-7270
M. Krysta, J. Coyne, M. Nikkinen, A. Gheddou, and U. Stöhlker
Atmospheric Transport Modelling Activities at CTBTO in the Aftermath of the Fukushima Release
- XL354 EGU2012-6303
V. Simsek, T. Kindap, A. Unal, L. Pozzoli, and M. Karaca
Estimation Of ¹³⁷Cs Using Atmospheric Dispersion Models After A Nuclear Reactor Accident
- XL355 EGU2012-342
M. Takeda, **M. Yamauchi**, M. Makino, T. Owada, and I. Miyagi
Radioactive contamination processes during 14-21 March after the Fukushima accident: What does atmospheric electric field measurements tell us?
- XL356 EGU2012-11479
A. Becker, L. Ceranna, O. Ross, U. Schneider, A. Meyer-Christoffer, M. Ziese, K. Lehner, and B. Rudolf
Towards a new daily in-situ precipitation data set supporting parameterization of wet-deposition of CTBT relevant radionuclides

PS1.2/AS4.21/ST6.1 – Polarimetry as an invaluable tool to study the Solar System and beyond. (co-organized) –

Posters

Convener: M. Barthelemy | Co-Conveners: H. LAMY, C.L. Simon Wedlund, F. Snik, S. Bagnulo

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: F. Snik

- XY465 EGU2012-9215
M. Barthelemy, H. Lamy, J. Liliensten, and C. Simon-Wedlund
A spectropolarimeter to study the auroral polarisation spectrum.

- XY466 EGU2012-9300
J. Liliensten, M. Barthélémy, P.O. Amblard, J. Moen, H. Rothkaehl, C. Simon-Wedlund, and H. Lamy
Calibrated polarization parameters of the auroral red line in Hornsund
- XY467 EGU2012-7013
V. Bommier, J. Liliensten, M. Barthélémy, and C. Simon Wedlund
Theoretical value of the linear polarization of the Earth aurorae red line and possible diagnostics
- XY468 EGU2012-5567
S. Kochenova, C. Lerot, M. De Maziere, and V. Letocart
Importance of polarization for remote sensing of the Earth's atmosphere
- XY469 EGU2012-12974
F. Snik, S. Heikamp, J. de Boer, C. U. Keller, G. van Harten, J. M. Smit, J. H. H. Rietjens, O. Hasekamp, D. M. Stam, H. Volten, and iSPEX team
iSPEX: the creation of an aerosol sensor network of smartphone spectropolarimeters
- XY470 EGU2012-10571
T. Karalidi, D.M. Stam, F. Snik, C.U. Keller, W.B. Sparks, and S. Bagnulo
Observing the Earth as an exoplanet
- XY471 EGU2012-8103
H. Lamy, S. Ranvier, M. Anciaux, S. Calders, J. De Keyser, and E. Gamby
Radio polarisation measurements of meteor trail echoes with BRAMS
- XY472 EGU2012-8670
L. J. Einarsen, M. Rodenhuis., F. Snik, C. U. Keller, D. M. Stam, R. J. de Kok, M. Bianda, and R. Ramelli
Multiwavelength imaging polarimetry of Venus at various phase angles
- XY473 EGU2012-12843
A. C. Levasseur-Regourd, S. Bagnulo, I. Belskaya, J. Berthier, S. Fornasier, E. Hadamcik, J.-B. Renard, and G.-P. Tozzi
Polarization as a tool to study dust in small solar system bodies, in the context of future space missions
- XY474 EGU2012-8486
D. Guirado, D.M. Stam, and M. Smit
A Monte Carlo model for the reflection of polarized light on surfaces
- XY475 EGU2012-10778
E. Hadamcik, A.C. Levasseur-Regourd, J.-B. Renard, and J. Lasue
Observations and experimental simulations of cometary and interplanetary dust by imaging polarimetry
- XY476 EGU2012-12499
A. Virkki, K. Muinonen, and A. Penttilä
Circular-polarization ratios for aggregates of spherical particles
- XY477 EGU2012-1049
A. Cellino, R. Gil-Hutton, Ph. Bendjoya, A. Dell'Oro, M. Canada-Assandri, and M. Di Martino
Towards a new Calibration of the Polarization-Albedo Relation for the Asteroids.
- XY478 EGU2012-11671
G. P. Tozzi, S. Bagnulo, H. Boehnhardt, and L. Kolokolova
Polarimetry of Comet 9P/Tempel 1 around the epoch of the Deep Impact Event
- XY479 EGU2012-2002
I. Kulyk
Brightness and polarization opposition effects exhibited by Tethys, Dione, and Rhea at low phase angles
- XY480 EGU2012-5868
A. Stinson, I. Belskaya, S. Bagnulo, G.P. Tozzi, K. Muinonen, A. Barucci, and S. Fornasier
Polarimetry of the dwarf planet (136472) Makemake
- XY481 EGU2012-8343
J. Freimanis
Polarized radiative transfer equation in several astrophysically interesting coordinate systems
- XY482 EGU2012-13379
M. Faurobert and **I. Milic**
Hanle effect in C2 lines of the Solar spectrum: an inversion procedure for weak magnetic field measurement

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

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

Room: 16

Chairperson: James Baldini

- 15:30–15:45 EGU2012-5830
F. Bourges, D. Genty, P. Genthon, A. Mangin, and D. D'Hulst
South-France caves monitoring : present day cave air dynamics characterization, paleoclimatic and archaeological interests

- 15:45–16:00 EGU2012-13481
J.L. Banner, **E.W. James**, D. Breecker, R. Casteel, C. Wong, K. Meyer, W. Feng, and B. Cowan
Long-term cave monitoring on the Edwards Plateau of Texas (USA) to advance speleothem paleoclimate proxies
- 16:00–16:15 EGU2012-12117
P. Aliaga and J.P. Bernal
In-situ REE calibration as palaeohydrogeological proxies in stalagmites
- 16:15–16:30 EGU2012-6704
D.M. Tremaine, B.P. Kilgore, and P.N. Froelich
Calcite Farming at Hollow Ridge Cave: Calibrating Net Rainfall and Cave Microclimate to Dripwater and Calcite Chemical Variability
- 16:30–16:45 EGU2012-11697
T. Atkinson, D. Matthey, J-P. Latin, M. Ainsworth, and R. Durell
Generation and dispersal of carbon dioxide in the caves and karst of Gibraltar
- 16:45–17:00 EGU2012-10502
M. Luetscher and P.-Y. Jeannin
Monitoring cave drips in a (partly) controlled hydrological system, Milandre cave, Switzerland

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

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

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Christoph Spötl

- Z150 EGU2012-831
E. Garcia-Anton, S. Cuezva, A. Fernandez-Cortes, S. Sanchez-Moral, and J.C. Canaveras
Multiparametric surveillance of conservation measures at subterranean rock-art sites: case of Altamira cave
- Z151 EGU2012-874
S Sanchez-Moral, A Fernandez-Cortes, S Cuezva, E Garcia-Anton, and D Benavente
Balance of pCO₂ in the carbonate-bearing unsaturated zone controlling mineral precipitation: Implications for geo-environmental analyses in caves
- Z152 EGU2012-4775
S. Riechelmann, A. Schröder-Ritzrau, C. Spötl, D.F.C. Riechelmann, D.K. Richter, and A. Immenhauser
Water chemistry and isotope data from a five year monitoring programme of Bunker Cave, NW Germany
- Z153 EGU2012-13546
D. Matthey
Continuous multichannel monitoring of cave air carbon dioxide using a pumped non-dispersive infrared analyser
- Z154 EGU2012-861
A. Fernandez-Cortes, S Cuezva, M Garcia-Anton, M Alvarez-Gallego, JC Canaveras, E Porca, V Jurado, C Saiz-Jimenez, and S Sanchez-Moral
Assessment of aerodynamic processes on subsurface in karst terrains by rapid multi-parametric surveys (case of Castanar Cave, Spain)
- Z155 EGU2012-4209
S.F.M. Breitenbach, M.-J. Gilbert, O. Kwiecien, R. Seifert, and D. Fleitmann
Monitoring drip water isotope and element variability: A new device for automatic drip water collection
- Z156 EGU2012-4859
E. Garcia-Anton, S. Cuezva, A. Fernandez-Cortes, S. Sanchez-Moral, and D. Benavente
Daily variations of CO₂, δ¹³CO₂ and CH₄ of cave air controlled by external weather conditions: example of rapid survey in Altamira cave (north of Spain)
- Z157 EGU2012-6118
D. Tapete, F. Fratini, B. Mazzei, M. Camaiti, E. Cantisani, C. Riminesi, R. Manganelli Del Fà, O. Cuzman, and P. Tiano
Calcium carbonate crystallizations on hypogean mural paintings: a pilot study of monitoring and diagnostics in Roman catacombs
- Z158 EGU2012-7910
M. Gasirowski and H. Hercman
Monitoring of cave air temperature and humidity in the Niedzwiedzia Cave system (Sudetes, Poland) - a key to understanding tourists activity impact to cave environment
- Z159 EGU2012-9604
J.U.L. Baldini and C.M. Sherwin
Using high-resolution monitoring data to identify the effects of cave and surface conditions on cave drip water hydrochemistry

- Z160 EGU2012-10646
H. Ridley, J.U.L Baldini, and K.M Prufer
Monitoring tropical cave environmental parameters: Implications for palaeoclimate reconstruction
- Z161 EGU2012-10680
D. Ballesteros, M. Jiménez-Sánchez, J. García-Sansegundo, M. Borreguero, and G. Sendra
Quantitatively structural control of the karst based on speleological cave survey data: Cabeza Llerosos massif (Picos de Europa, Spain)
- Z162 EGU2012-11195
R. Kirk, D. Matthey, and C. Collister
Characteristics of annual laminae in speleothem from Grotte de Rolande, SW France and relationships to seasonal changes in the cave and surface environment.
- Z163 EGU2012-11463
C. Thrush, D. Matthey, D. Lowry, D. Hoffmann, and E. Anton-Garcia
Deciphering ENSO periodicity in an annually resolved speleothem from Fiji
- Z164 EGU2012-11604
D. Scholz, M. Hansen, and W. Dreybrodt
Stable carbon and oxygen isotope fractionation processes during speleothem growth: systematic investigation in novel laboratory experiments

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

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

Room: 16

Chairperson: C.Goodess

- 08:30–08:45 EGU2012-6637
P. Lionello, M. Gacic, G. Gomis, R. Garcia-Herrera, F. Giorgi, S. Planton, R. Trigo, A. Theocharis, M.N. Tsimplis, U. Ulbrich, and E. Xoplaki
The MedCLIVAR program and the climate of the Mediterranean region
- 08:45–09:00 **Young scientist poster presentations**
- 09:00–09:15 EGU2012-9847
M Rogerson, EJ Rohling, GR Bigg, and J Ramirez
Why does the Mediterranean Outflow vary through time?
- 09:15–09:30 EGU2012-8770
S. Alessio, C. Taricco, G. Vivaldo, and M. Ghil
Modern decrease of $\delta^{18}\text{O}$ in Mediterranean sediments over the last 150 y: anthropogenic forcing and natural variability
- 09:30–09:45 EGU2012-13625
J.-P. Savy, K.M. Yao, F. Touratier, and C Goyet
Temporal evolution of the anthropogenic CO_2 and acidification of the northwestern Mediterranean Sea, from the mid-1990s to the mid-2000s
- 09:45–10:00 EGU2012-2657
J. Llasses, G. Jordà, and D. Gomis
Optimal spatio-temporal design of an hydrographic sampling aimed to monitor climate change in the Mediterranean Sea

COFFEE BREAK

Chairperson: I.Bladé

- 10:30–10:45 EGU2012-1673
J. Romanski, A. Romanou, M. Bauer, and G. Tselioudis
Atmospheric Forcing of the Eastern Mediterranean Transient by Midlatitude Cyclones
- 10:45–11:00 EGU2012-10946
M. Gaetani and **M. Pasqui**
A synoptic characterization of the Saharan dust transport in the Mediterranean basin
- 11:00–11:15 EGU2012-4573
K. Schepanski and P. Knippertz
Soudano-Saharan Depressions and their Importance for Precipitation and Dust - a new Perspective on a classical synoptic Concept
- 11:15–11:30 EGU2012-3956
P. Nabat, F. Solmon, S. Somot, and M. Mallet
Implementation of a new emitted dust size distribution in a RCM over the Mediterranean region: application to the impact of aerosols on the Mediterranean climate

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

LUNCH BREAK

Chairperson: P.Lionello

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

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

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

Hall Z | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: P.Lionello

- Z106 EGU2012-9097
B. Wilhelm, F. Arnaud, P. Sabatier, C. Crouzet, E. Brisset, F. Guiter, J.L. Reyss, E. Chaumillon, K. Tachikawa, E. Bard, and J.J. Delannoy
 1.4 kyrs of flash flood events in the Southern European Alps: implications for extreme precipitation patterns and forcing over the north-western Mediterranean area
- Z107 EGU2012-13012
L. Vidal, A. Pothin, M. Revel, K. Tachikawa, M. Garcia, C. Sonzogni, and E. Bard
 Climate Variability in the Levant basin during the last deglaciation
- Z108 EGU2012-12500
R. Zech, M. Zech, S. Markovic, and Y. Huang
 Humid glacials, arid interglacials? Results from a multiproxy study of the loess-paleosol sequence Crvenka, Serbia
- Z109 EGU2012-234
B. Soumaya, K. Nejib, B. Franck, L. Laurent, D. Jean-Claude, C. Nicolas, and R. Hélène
 Constraints on Mg/Ca-paleothermometry in the western Mediterranean Sea

- Z110 EGU2012-4161
A. Stadnitskaia, V. Liebetrau, A. Eisenhauer, and J.S. Sinninghe Damsté
Past methane seepage and linked deep-water anoxia are logged in methane-derived carbonates
- Z111 EGU2012-7377
O. Peyron, M. Magny, N. Combourieu-nebout, S. Goring, S. Joannin, J.-L. de Beaulieu, E. Brugapaglia, I. Dormoy, R. Drescher-schneider, D. Galop, E. Ortu, and L. Sadori
Pollen-inferred quantitative reconstruction of the Holocene climate in the central Mediterranean area (Italy)
- Z112 EGU2012-3717
G. Jordà, J. Llasses, and D. Gomis
Can we trust Mediterranean hydrographic data products (MEDAR, EN3, Ishii) for climate studies?
- Z113 EGU2012-751
M. Gómez, L. Gimeno, R. Nieto, A. Drumond, and L. Prieto
Variability of the moisture sources around the Mediterranean Basin during 1980-2000
- Z114 EGU2012-1121
C.M. Goodess, M.D. Agnew, D. Hemming, C. Giannakopoulos and the CIRCE RL11 Team
Integrated assessment in the Mediterranean: the CIRCE case studies
- Z115 EGU2012-1557
JD Ruiz Sinoga, JF Martinez Murillo, MA Gabarron Galeote, and JM Senciales Gonzalez
Analysis of dry periods using the DDSLR index in the Mediterranean southern Spain
- Z116 EGU2012-3720
G. Jordà, M. Marcos, M. Gómez, and D. Gomis
Wind wave climate in the Western Mediterranean under climate change scenarios
- Z117 EGU2012-2465
A. Martínez-Asensio, M. Marcos, G. Jordà, D. Gomis, and M. Gómez
Calibration of a wind wave hindcast (1958-2008) in the Western Mediterranean using buoy data.
- Z118 EGU2012-2712
M. Tanarhte, P. Hadjinicolaou, and J. Lelieveld
Intercomparison of temperature and precipitation datasets based on observations in the Mediterranean and the Middle-East
- Z119 EGU2012-6008
M. Stéfanon
Dynamical effects of vegetation on the 2003 summer heat waves
- Z120 EGU2012-6166
M. Revel, **N. Combourieu Nebout**, E. Ducassou, S. Migeon, M. Ismail, S. Bernasconi, and O. Peyron
Temporal evolution of the Ethiopian monsoon intensity since the last 25,000 years from the Nile suspended discharges record.
- Z121 EGU2012-9538
E. Romano, E. Volpi, and F. Stefanucci
Analysis of temperature trends, heat and cold waves in Central Italy (1952-2008)
- Z122 EGU2012-6263
P. Pereira, A. Sanchez-Lorenzo, J.-A. Lopez-Bustins, and C.-J. Lolis
Trends in summer tropical nights on the Iberian Peninsula and their connection with large-scale atmospheric circulation patterns
- Z123 EGU2012-8804
C. Pizzigalli, P. Lionello, Ahmed Hassan Fahmi, Ghada Al-Naber, Muhammad Shatanawi, Khaldoun Shatanawi, Zohra Lili Chabaane, Mohamed Wael Hamed Al Askhar, Mohamed Magdy Abdel Wahab, and Haifa Goma Ben Mailod
Precipitation climatology for the North African and Middle East areas of the Mediterranean Region using a collection of in situ observation
- Z124 EGU2012-6605
P. Lionello
The climate of the Venetian and North Adriatic region: variability, trends and future change
- Z125 EGU2012-6582
M. Reale and **P. Lionello**
Climate change over Venetia (north-east Italy)
- Z126 EGU2012-7085
K.M. Nissen, **U. Ulbrich**, G.C. Leckebusch, and J.G. Pinto
Mediterranean cyclones and wind storms in a changing climate
- Z127 EGU2012-6361
A. Bleta, **P.T. Nastos**, and A. Matzarakis
Assessment of bioclimatic conditions in Crete Island, Greece
- Z128 EGU2012-8188
R. Marcos, M. Turco, M.C. Llasat, and P. Quintana-Seguí
Application of a statistical downscaling method to detect inhomogeneities in a temperature time series

- Z129 EGU2012-2599
J. Kysely, L. Gaal, S. Begueria, R. Beranova, and J. I. Lopez-Moreno
 Uncertainties of climate change scenarios of precipitation extremes in the Mediterranean based on ENSEMBLES RCMs
- Z130 EGU2012-9351
M. Dubrovsky, P. Duce, B. Arca, and G. Pellizzaro
 Multi-GCM Climate Projection for the Mediterranean and Related Impact on the Forest Fire Risk (with a stress on Sardinia)
- Z131 EGU2012-11833
C.M. Gouveia, R.M. Trigo, S.M. Begueria, and S. Vicente-Serrano
 Drought influence on vegetation behavior in Mediterranean basin
- Z132 EGU2012-12272
C. Oikonomou, M. El-Maayar, and M.A. Lange
 Investigating wheat yield response to climatic extremes in the Mediterranean region under current and projected future climatic conditions
- Z133 EGU2012-4442
 H. Feidas, **P. Zanis**, D. Melas, M. Vaitis, E. Anadranistakis, P. Symeonidis, and S. Pantelopoulou
 The Geographic Climate Information System Project (GEOCLIMA): Overview and preliminary results
- Z134 EGU2012-12999
 F. Appiotti, **M. Krzelj**, F. Marincioni, and A. Russo
 Climate change effects on environment (marine, atmospheric and terrestrial) and human perception in an Italian Region (Marche) and the nearby northern Adriatic Sea.
- Z135 EGU2012-13844
 Z. Bargaoui, **Y. Trambly**, E. Lawin, and E. Servat
 Precipitation variability and future projections for water resources management in Tunisia Northern Coastal basins

GI2.5 – Preparatory activities for the scientific utilisation of the GMES Sentinel satellites constellations including Cal/Val activities of their optical instruments. (co-listed) – Orals

Convener: M. Berger | Co-Conveners: J. Aschbacher, H. Mortimer, B. Bojkov

Room: 42

Chairperson: Michael Berger & Hugh Mortimer

- 08:30–08:45 EGU2012-7324
S.C. Wagner, T. Hewison, R.A. Roebeling, M. Koenig, J. Schulz, and P. Miu
 An Introduction to the Global Space-based Inter-Calibration System from a EUMETSAT Perspective
- 08:45–09:00 EGU2012-7966
E. Johansson and K.-G. Karlsson
 An Intercomparison of AVHRR, MERIS, AATSR and MODIS radiances using a SNO approach
- 09:00–09:15 EGU2012-3082
G. Zibordi, F. Mélin, and J.-F. Berthon
 Trends and Intra-annual variations of spectral biases in multi-mission remote sensing primary ocean color products at a coastal site
- 09:15–09:30 EGU2012-6112
D. Smith, B. G. Latter, and C. Poulsen
 Providing Consistent (A)ATSR Solar Channel Radiometry for Climate Studies
- 09:30–09:45 EGU2012-4704
H. Bonekamp, A. O'Carroll, E. Kwiatkowska, F. Montagner, H. Wilson, V. Fournier Sicre, V. Santacesaria, and C. Loddó
 EUMETSAT activities in preparation of the Sentinel-3 Marine Centre
- 09:45–10:00 EGU2012-7042
A. Bracher, T. Dinter, M. Altenburg Soppa, B. Taylor, and V. Rozanov
 Using OLCI/Sentinel-3 and Sentinel-5-P data synergistically for retrieving different phytoplankton groups from space

COFFEE BREAK

Room: 7

Chairperson: Josef Aschbacher & Michael Berger

- 10:30–10:45 EGU2012-4381
J. Aschbacher and M.P. Milagro-Perez
 GMES Space Component: Programme overview

- 10:45–11:00 EGU2012-13148
M.W. Hansen, J.A. Johannessen, B. Chapron, and K.-F. Dagestad
 Monitoring the surface inflow of Atlantic Water to the Norwegian Sea using Synthetic Aperture Radar
- 11:00–11:15 EGU2012-6569
P.F. Levelt, J.P. Veefkind, M. van Weele, E.A.A. Aben, C. Clerbaux, and T. Phulpin
 Exploiting Sentinel 5's synergy with IRS and 3MI on METOP-SG for Protocol Monitoring and Air Quality-Climate Interaction
- 11:15–11:30 EGU2012-7550
R. Engelen, V.-H. Peuch and the MACC-II Team
 The use of Sentinel satellite data in the MACC-II GMES pre-operational atmosphere service
- 11:30–11:45 EGU2012-4087
 J. A. Sobrino, J. C. Jimenez-Muñoz, A. Ruescas, C. Brockmann, **A. Heckel**, P.R.J. North, J.J. Remedios, G. Darren, C. Merchant, M. Berger, G. Soria, and O. Danne
 Land Surface Temperature retrieval from Sentinel 2 and 3 Missions: a conceptual framework
- 11:45–12:00 EGU2012-7619
 S. Bontemps, **P. Defourny**, J. Radoux, V. Kalogirou, and O. Arino
 Global land cover products tailored to the needs of the climate modeling community - Land Cover project of the ESA Climate Change Initiative

ML1 – Alfred Wegener Medal Lecture by Michael Ghil (co-listed) – Orals

Convener: D. B. Dingwell

Room: D

Chairperson: n.n.

- 12:15–13:15 EGU2012-14438
M. Ghil
 The Complex Physics of Climate Change and Climate Sensitivity: A Grand Unification (Alfred Wegener Medal Lecture)

ML4 – Vilhelm Bjerknes Medal Lecture by Adrian Simmons (co-listed) – Orals

Convener: O. Tarasova

Room: 14

Chairperson: Oksana Tarasova

- 19:00–20:00 EGU2012-14441
A.J. Simmons
 Vilhelm Bjerknes's "First task of theoretical meteorology": Assimilation of observational data for atmospheric monitoring and forecasting (Vilhelm Bjerknes Medal Lecture)

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

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

Room: 17

Chairperson: n.n.

- 08:30–08:45 EGU2012-7022
S.-W. Yeh, B. Dewitte, J.-Y. Yu, S.-I. An, and Y.-K. Lee
 Warming of warm pool sea surface temperature and changes in El Nino activity
- 08:45–09:00 EGU2012-8094
H. Bellenger, E. Guilyardi, M. Collins, S. Ferrett, W. Cai, and A. Wittenberg
 First assesement of ENSO in CMIP5
- 09:00–09:15 EGU2012-5039
M. Watanabe, J.-S. Kug, F.-F. Jin, M. Collins, M. Ohba, and A. Wittenberg
 Attributing varying ENSO amplitudes in climate model ensembles
- 09:15–09:30 EGU2012-3439
M. J. McPhaden
 A 21st Century Shift in the Relationship between ENSO SST Anomalies and Upper Ocean Heat Content
- 09:30–09:45 EGU2012-7414
W.H.G Roberts
 Investigating the different "flavours" of ENSO using the Linearised Ocean Atmosphere Model, LOAM
- 09:45–10:00 EGU2012-1457
D. Dommenges, T. Bayr, and C. Frauen
 Analysis of the Non-linearity in the Pattern and Time Evolution of El Nin?o Southern Oscillation

10:00–10:15 EGU2012-6697

T. Izumo, M. Lengaigne, J. Vialard, J.-J. Luo, T. Yamagata, and G. Madec

Influence of Indian Ocean Dipole and Pacific recharge on following year's El Niño: interdecadal robustness.

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

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

XY369 EGU2012-12211

S. Thual, B. Dewitte, S.-I. An, S. Illig, and N. Ayoub

Low frequency modulation of the stability in a conceptual model of the equatorial Pacific: an estimate of the most influential changes in ENSO parameters over the recent decades

XY370 EGU2012-1201

M. Ohba and M. Watanabe

Role of the Indo-Pacific Interbasin Coupling in Predicting Asymmetric ENSO Transition and Duration

XY371 EGU2012-11636

B. Vannière, E. Guilyardi, T. Toniazzo, and S. Woolnough

Understanding coupled model errors in the tropical Pacific using hindcasts

XY372 EGU2012-1718

m. zhao, h. hendon, y.h. yin, and o. Alves

Impact of Assimilating Salinity on ENSO Variability and Seasonal Forecast Skill in a Coupled Model

XY373 EGU2012-2586

A. S. von der Heydt and H. A. Dijkstra

El Niño dynamics in the warm Pliocene climate

XY374 EGU2012-2883

J. Stoll, K. Trachte, and J. Bendix

Analysis of ENSO related multi source SST for the east pacific Nino 1.2 region

XY375 EGU2012-3824

D. Chen and T. Lian

Effects of westerly wind bursts on El Niño: a new perspective

XY376 EGU2012-6728

W. Duan, Y. Yu, and H. Xu

Behaviors of nonlinearities modulating the El Nino events induced by optimal precursory disturbances

XY377 EGU2012-6874

H.-Y. Son, J.-Y. Park, and J.-S. Kug

Winter Precipitation variability over East Asia associated with ENSO

XY378 EGU2012-7035

M. Ohba, H. Shiogama, T. Yokohata, and M. Watanabe

Phase-dependent Impact of Strong Tropical Volcanic Eruption on predicting ENSO

XY379 EGU2012-8944

S. Ineson and T. Graham

ENSO in the HadGEM2-ES CMIP5 centennial simulations

XY380 EGU2012-10485

A. Babonneix, L. Gourdeau, F. Durand, C. E. Menkes, and N. Djath

Impact of ENSO variability on the Pacific Equatorial Undercurrent (EUC) sources: A modeling approach depending on the horizontal resolution

XY381 EGU2012-13576

B. Rodríguez de Fonseca, E. Mohino, T. Losada, M. Martin-Rey, and I. Polo

Multidecadal Modulation of Tropical Atlantic impact on ENSO

XY382 EGU2012-3088

H. Ding, N. Keenlyside, and M. Latif

Potential of Equatorial Atlantic Variability to Enhance El Niño Prediction

Thursday, 26 April

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

Convener: G. Rivière | Co-Conveners: O. Martius, V. Grubišić

Room: 11

Chairperson: n.n.

- 08:30–08:45 EGU2012-8276
M. Löffverström and H. Kornich
The impact of coupled moist eddy dynamics on the meridional energy transport
- 08:45–09:00 EGU2012-2305
G. Vaughan and the DIAMET Team
The DIAMET campaign
- 09:00–09:15 EGU2012-3155
A. Kirchgaessner
Orographic Flows across the Antarctic Peninsula: a comparison of AWS data and regional atmospheric model simulations.
- 09:15–09:30 EGU2012-12057
J. Chagnon, S. Gray, and J. Methven
Diabatic modification of potential vorticity in a north Atlantic cyclone
- 09:30–09:45 EGU2012-5758
S. Schemm, H. Wernli, and L. Papritz
Idealized warm conveyor belts in moist baroclinic waves: PV and energy diagnostics
- 09:45–10:00 EGU2012-6808
C.-C. Wang and Y.-H. Chen
Interaction among Typhoon track, Asymmetrical Rainfall, and Taiwan Topography: A Case Study of Fanapi (2010)

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

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

Room: 13

Chairperson: Andreas Philipp, Christoph Beck

- 10:30–10:45 EGU2012-11582
P. Bernardara, P. Brigode, J. Gailhard, F. Garavaglia, E. Paquet, and P. Ribstein
Comparison of a new rainfall-based weather patterns classification with 76 COST733 weather type classifications over Austria
- 10:45–11:00 EGU2012-4754
S. Radanovics, J.-P. Vidal, E. Sauquet, A. Ben Daoud, and G. Bontron
Optimising predictor domains for spatially coherent precipitation downscaling
- 11:00–11:15 EGU2012-3149
PM Sousa, R. Trigo, M.G. Pereira, D. Rasilla, and C. Gouveia
Modelling wildfire activity in Iberia with different Atmospheric Circulation WTs
- 11:15–11:30 EGU2012-217
N. Cortesi, R. Trigo, J.C. González-Hidalgo, and A. Ramos
High resolution reconstruction of monthly autumn and winter precipitation of Iberian Peninsula for last 150 years.
- 11:30–11:45 EGU2012-4492
M. Hofstätter and B. Chimani
Circulation Type Classifications and their nexus to Van Bebber's storm track Vb
- 11:45–12:00 EGU2012-3432
A. Martínez, **A. Baquero-Bernal**, and C. Abril
Weather regimes over Colombia, South America, during the JJA using Self-Organizing Maps

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

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Christoph Beck, Andreas Philipp

- XY229 EGU2012-12667
H. W. Rust, M. Vrac, M. Lengaigne, and B. Sultan
Circulation patterns and their differences - A probabilistic point of view
- XY230 EGU2012-6259
G. Masato and D. Brayshaw
Clustered GWL types: methodology and applications
- XY231 EGU2012-172
C. Lennard
Changes in the synoptic drivers of extreme rainfall in South Africa
- XY232 EGU2012-4171
H. Baltaci, T. Kindap, A. Unal, and M. Karaca
Analysis of Synoptic Weather Types and Its Influence on Precipitation in the Marmara Region (NW Turkey)
- XY233 EGU2012-1632
P. Froidevaux, O. Martius, and R. Weingartner
Characterisation of flood events in Switzerland based on weather patterns
- XY234 EGU2012-7680
C. S. Photiadou, B. J. J. M. van den Hurk, A. H. Weerts, and A. J. van Delden
Dominant circulation patterns for the Rhine basin determined by a high-resolution precipitation data set.
- XY235 EGU2012-8029
P. Brigode, Z. Micovic, P. Bernardara, J. Gailhard, E. Paquet, F. Garavaglia, and P. Ribstein
Link between rainfall-based weather patterns classification over British-Columbia and El Niño Southern Oscillations
- XY236 EGU2012-978
J.M. Arraut and P. Satyamurty
The Argentinean Col, Separatrices, Frontogenesis and Strong Rainfall in Subtropical South America
- XY237 EGU2012-3342
V. Stefanescu, S. Stefan, and F. Georgescu
GWT18 air circulation types linked to heavy precipitation in Romania between 1980 and 2009
- XY238 EGU2012-13428
L. Durán, B. Rodriguez-Fonseca, E. Sánchez-Sánchez, and C. Yagüe
Weather types and precipitation at the Iberian Central System
- XY239 EGU2012-2144
E. Tyrlis and J. Lelieveld
Aspects of a climatology and dynamics of the summer Etesians
- XY240 EGU2012-14227
M Menendez, P Camus, FJ Mendez, and IJ Losada
A weather type method to study surface ocean variables
- XY241 EGU2012-3472
S. Andrei and **S. Stefan**
Climatologically aspects of Bucharest's UHI in connection with synoptic scale atmospheric circulation patterns
- XY242 EGU2012-12971
C. Weitnauer, **C. Beck**, and J. Jacobeit
Local PM10 concentrations in Augsburg (Germany) and their connection to large scale circulation types
- XY243 EGU2012-6822
S. Parsons, **A. J. McDonald**, and J. Renwick
Future Weather Patterns in New Zealand using Synoptic Climatology: Kidson Types and a Simple Synoptic Classification System
- XY244 EGU2012-9170
A. Belleflamme, X. Fettweis, and M. Erpicum
Are the CMIP5 GCMs able to simulate atmospheric blocking situations over Europe ?
- XY245 EGU2012-13539
J. A. Añel, S. Jewson, M. R. Allen, C. Mitas, and C. Rye
Comparison of wind simulations in HadRM3P and WRF with ERA-Interim
- XY246 EGU2012-5682
H. Ries, C. Moseley, and A. Haensler
REMO poor man's reanalysis

AS1.5 – Clouds, Aerosols and Radiation (General Session)/High Resolution Cloud Models – Orals

Convener: A. Macke | Co-Conveners: A. I. Flossmann, P. Stier, S. Gao, D. Wang, Dr. Cui, S. Lolli

Room: 10

Chairperson: G. Feingold

- 10:30–10:45 EGU2012-2166
W.-K. Tao
Microphysics in Multi-scale Modeling System with Unified Physics

- 10:45–11:00 EGU2012-1594
C. Lacagnina and F. Selten
Cloud properties in the present-day tropical climate
- 11:00–11:15 EGU2012-3156
W. W. Grabowski, A. Wyszogrodzki, L.-P. Wang, and O. Ayala
Toward the assessment of the role of cloud turbulence in warm-rain processes
- 11:15–11:30 EGU2012-3159
K. Suselj and J. Teixeira
On the transition from stratocumulus to cumulus topped boundary layers
- 11:30–11:45 EGU2012-6488
K.N. Bower, T.W. Choulaton, J. Crosier, G. Lloyd, J.R. Dorsey, M.W. Gallagher, P. Connolly, C. Dearden, G. Vaughan and the DIAMET Team
The Microphysics of Cold Fronts measured during DIAMET
- 11:45–12:00 EGU2012-7896
F. Robinson, **S. Sherwood**, and M. Patterson
Exploring convective and sea-breeze dynamics using ensembles of idealised CRM simulations
- 12:00–12:15 EGU2012-8253
B. Rosa, A. Aliseda, C. Bateson, O. Ayala, H. Parishani, and L.P. Wang
Numerical and experimental investigation of cloud droplet collision-coalescence

LUNCH BREAK

Chairperson: W.-K. Tao

- 13:30–14:00 EGU2012-3697
G. Feingold, S. S. Lee, and P. Y. Chuang
Evidence for buffering of aerosol influences on trade cumulus cloud fields
- 14:00–14:15 EGU2012-12155
R. M. Forbes, **A. M. Tompkins**, and A. Untch
A new prognostic bulk microphysics scheme for the ECMWF forecast model
- 14:15–14:30 EGU2012-3803
A. Chrastansky and L.D. Rotstajn
Amplification of the direct and indirect radiative impact of Indonesian biomass-burning aerosols due to ENSO-related rainfall and circulation changes
- 14:30–14:45 EGU2012-5002
J. Tonttila, S. Romakkaniemi, P. Räisänen, H. Kokkola, and H. Järvinen
The effect of vertical velocity probability distribution shape on cloud activation of aerosols: off-line calculations
- 14:45–15:00 EGU2012-8923
J.-J. Morcrette, A. Benedetti, **J.W. Kaiser**, A. Ghelli, and A.M. Tompkins
Aerosol-Cloud-Radiation Interactions and their Impact on MACC/ECMWF Forecasts

Chairperson: A.M. Tompkins

- 15:30–15:45 EGU2012-11377
H. Tost, K. J. Pringle, and D.-Y. Chang
Ageing of organic aerosol and its impact on cloud properties
- 15:45–16:00 EGU2012-12533
V. Schemann, B. Stevens, V. Grützun, and J. Quaas
Towards a scale (in)dependency of statistical cloud cover parameterizations
- 16:00–16:15 EGU2012-3068
L. Klüser and T. Holzer-Popp
Satellite observation of aerosol - cloud interactions over semi-arid and arid land regions
- 16:15–16:30 EGU2012-3148
T. Wagner, B. Kremmling, and T. Deutschmann
Can 2D and 3D cloud effects be characterised from spectrally resolving UV/vis satellite observations?
- 16:30–16:45 EGU2012-13203
J. Jensen
On the Variability of Giant Sea-Salt Size Distributions as Observed from Aircraft during the VOCALS Campaign: Relationship to Marine Stratocumulus, Cold Pools and Implications for Drizzle Formation
- 16:45–17:00 EGU2012-13695
C. Hoareau, P. Keckhut, and J.I. Baray
Decadal cirrus climatology with lidar at midlatitude

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

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

Room: 7

Chairperson: n.n.

08:30–08:45 EGU2012-13510

A. O'Leary, D. Parker, J. Peakall, A. Ross, P. Knippertz, and J. Marsham
Interfacial waves generated by gravity currents in two-layer fluid.

08:45–09:00 EGU2012-13628

M. A. C. Teixeira, J. L. Argain, and **P. M. A. Miranda**
Orographic gravity wave drag amplification by parametric resonance

09:00–09:15 EGU2012-9418

H.-J. Choi and H.-Y. Chun
Impacts of Convective Gravity Wave Drag in the Southern Hemisphere Winter Stratosphere

09:15–09:30 EGU2012-4930

S. Remmler, M. D. Fruman, S. Hickel, and U. Achatz
3D DNS and LES of Breaking Inertia-Gravity Waves

09:30–09:45 EGU2012-13325

R. Sharman, S. Trier, and T. Lane
Convectively-generated gravity waves and clear-air turbulence (CAT)

09:45–10:00 EGU2012-5120

A. Schneider, A. Theuerkauf, M. Gerding, and F.-J. Lübken
In-situ turbulence observations in the stratospheric wind and temperature field with LITOS

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2012-10211

T. Gerkema and H. van Haren
Absence of internal tidal beams due to non-uniform stratification

10:45–11:00 EGU2012-11962

s. falahat and j. nycander
Comparison of computed tidally generated internal waves in the deep ocean with turbulence observation

11:00–11:15 EGU2012-6285

A.K. Kaminski and M.R. Flynn
Modal decomposition of tidally-forced internal waves

11:15–11:30 EGU2012-1589

A. Hertzog, M. J. Alexander, and R. Plougonven
Intermittency of gravity-wave momentum flux in the stratosphere

11:30–11:45 EGU2012-2766

S. Borchert, U. Achatz, F. Rieper, and M. D. Fruman
Gravity Wave Emission by Spontaneous Imbalance of Baroclinic Waves in the Continuously Stratified Rotating Annulus

11:45–12:00 EGU2012-13327

L. Strauss, S. Serafin, and V. Grubišić
Wave-induced boundary-layer separation: A case study comparing airborne observations and results from a mesoscale model

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

Conveners: P. Braesicke, P. Hoor | Co-Conveners: C. Schiller, H. Boenisch, T. Birner, U. Langematz, J.C. Laube

Room: 14

Chairperson: Peter Hoor

10:30–11:00 EGU2012-7466

A. Gettelman
Stratosphere-Troposphere Coupling in Climate and Circulation Changes: How the Tail Wags the Dog

11:00–11:15 EGU2012-2354

P. Reutter, B. Skerlak, M. Sprenger, and H. Wernli
Stratosphere-troposphere exchange (STE) in the vicinity of (extra-tropical) cyclones

11:15–11:30 EGU2012-558

L. Paulik and T. Birner
Quantifying the deep convective temperature signal within the Tropical Tropopause Layer (TTL)

- 11:30–11:45 EGU2012-6446
K. M. Grise and D. W. J. Thompson
 Contribution of equatorial planetary waves to the temperature structure near the tropical tropopause
- 11:45–12:00 EGU2012-3428
L. M. Polvani and S. Solomon
 The signature of stratospheric ozone on tropical temperature trends, as revealed by model integrations with single forcings

LUNCH BREAK

Chairperson: Peter Braesicke

- 13:30–13:45 EGU2012-889
M. J. Ashfold, N. R. P. Harris, E. L. Atlas, A. J. Manning, and J. A. Pyle
 Transport of short-lived species into the Tropical Tropopause Layer
- 13:45–14:00 EGU2012-9880
H. Ziereis, G. Stratmann, H. Schlager, K. Gottschaldt, U. Schumann, C. A. M. Brenninkmeijer, T. Schuck, A. Rauthe-Schoech, A. Zahn, and M. Hermann
 Seven years of observations from CARIBIC: On the way to an observational climatology of reactive nitrogen in the UTLS
- 14:00–14:15 EGU2012-12921
H. Schlager, F. Arnold, H. Aufmhoff, R. Baumann, L. Pirjola, A. Roiger, T. Sailer, M. Wirth, and U. Schumann
 HALO aircraft measurements of East Asian anthropogenic SO₂ import into the lower stratosphere by a warm conveyor belt uplift
- 14:15–14:30 EGU2012-9954
J. K. Nielsen, A. K. Heidinger, and M. J. Foster
 Tropical Stratospheric Cloud climatology from the PATMOS-x dataset - an assessment of convective contributions to stratospheric water
- 14:30–14:45 EGU2012-12910
M. Schoeberl, A. Dessler, and T. Wang
 Simulation of Stratospheric Water Vapor Using Three Re-analysis Data Sets
- 14:45–15:00 EGU2012-9068
T. Klostermann, C. Schiller, M. Krämer, N. Spelten, D. Fahey, J. Smith, R. Herman, D. Hurst, and H. Vömel
 Comparison of FISH total water measurements with other hygrometers

Chairperson: Harald Boenisch

- 15:30–15:45 EGU2012-3961
S. Lossow, J. Steinwagner, G. P. Stiller, T. von Clarmann, T. Röckmann, S. Kellmann, A. Linden, M. Kiefer, U. Grabowski, N. Glatthor, M. Höpfner, and K. A. Walker
 Global distributions and seasonality of HDO and D₂O in the upper troposphere and stratosphere derived from Envisat/MIPAS observations
- 15:45–16:00 EGU2012-4890
J. Langen, B. Carnicero-Dominguez, J. Caron, A. Gabriele, P. Jurado, V. Kangas, S. Kraft, H. Nett, D. Schuettmeyer, and the PREMIER Mission Advisory Group
 PREMIER - a candidate ESA mission for UTLS research
- 16:00–16:15 EGU2012-12440
F. Kolonjari, K. A. Walker, C. D. Boone, S. Strahan, C. A. McLinden, G. L. Manney, W. H. Daffer, and P. F. Bernath
 ACE-FTS measurements of HCFC-22
- 16:15–16:30 EGU2012-4375
G.P. Stiller, T. von Clarmann, F. Haenel, B. Funke, N. Glatthor, U. Grabowski, S. Kellmann, M. Kiefer, A. Linden, S. Lossow, and M. López-Puertas
 Observed temporal evolution of global mean age of stratospheric air for the 2002 to 2010 period
- 16:30–16:45 EGU2012-12110
B.M. Monge-Sanz, M.P. Chipperfield, D.P. Dee, A.J. Simmons, S.M. Uppala, and G.P. Stiller
 Stratospheric transport and age-of-air from CTM simulations with ERA-Interim: agreement with observational trends
- 16:45–17:00 EGU2012-7405
S. Oberländer, S. Meul, and U. Langematz
 Causes for Changes in the Brewer-Dobson Circulation derived from Chemistry-Climate Model Simulations

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

Conveners: P. Braesicke, P. Hoor | Co-Conveners: C. Schiller, H. Boenisch, T. Birner, U. Langematz, J.C. Laube

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Peter Braesicke

- XY1 EGU2012-3456
J.K Wang, X.Y Liu, and H.T Yin
Abnormal Vertical Structure of Water Vapor over Taklamakan Desert from COSMIC Observations
- XY2 EGU2012-2848
E. D. Rivière, J.-P. Pommerau, G. Held, N. Amarouche, M. Ghysels, S. Khaykin, J.-J. Berthelier, J.-B. Renard, F. Cairo, G. Durré, and G. Di Donfrancesco
First results from the TRO-pico campaign aiming at studying the impact of convective overshooting on the stratospheric water budget
- XY3 EGU2012-4331
M. Vicomte and J.-P. Pommereau
Investigation of convective transport in the tropical stratosphere using a lightweight uv-visible spectrometer sonde
- XY4 EGU2012-3333
F. Xie, W. Tian, and J. Li
The Effect of ENSO Activity on Lower Stratospheric Water Vapor and Circulation
- XY5 EGU2012-13501
J. M. Castanheira, T. R. Peevey, C. A. F. Marques, and M. A. Olsen
Relationships among Brewer-Dobson circulation, double tropopause, ozone and lower-stratospheric water vapor
- XY6 EGU2012-10594
S.-W. Son, N. F. Tandon, and L. M. Polvani
The fine-scale structure of the global tropopause derived from COSMIC GPS radio occultation measurements
- XY7 EGU2012-10911
M.Y. Kulikov, A.A. Krasil'nikov, A.A. Shvetsov, D.N. Mukhin, L.I. Fedoseev, V.G. Ryskin, M.V. Belikovich, D.A. Karashtin, L.M. Kukin, and A.M. Feigin
Simultaneous microwave measurements of middle atmospheric ozone and temperature during sudden stratospheric warming
- XY8 EGU2012-10153
J. Kim and **S.-W. Son**
Tropical Cold-Point Tropopause: Climatology, Seasonal Cycle and Intraseasonal Variability derived from COSMIC GPS Radio Occultation Measurements
- XY9 EGU2012-3057
S. Khaykin, A. Hauchecorne, and J.-P. Pommereau
Impact of land convection on the thermal structure of the lower stratosphere as inferred from COSMIC GPS/RO temperature measurements
- XY10 EGU2012-6778
P. Baron, D. Murtagh, J. Urban, S. Ochiai, H. Sagawa, K. Kikuchi, and Y. Kasai
Measurement of horizontal wind in the middle atmosphere (30-80 km) by the submillimeter limb sounder SMILES.
- XY11 EGU2012-9038
J. Puente, S. Kühl, S. Dörner, and T. Wagner
Detection of tropical stratospheric transport barriers from the long term NO₂ data set measured by SCIAMACHY
- XY12 EGU2012-11924
S.S. Asanov, C.A.M. Brenninkmeijer, and T. J. Schuck
On the use of N₂O as a tracer of stratosphere to troposphere flux of long-lived trace gases based on CARIBIC data.
- XY13 EGU2012-7401
F. Khosrawi, R. Mueller, M. H. Proffitt, J. Urban, G. Stiller, M. Kiefer, L. Froidevaux, A. Lambert, D. Kinnison, M. Riese, and D. Murtagh
Possible impact of QBO and upwelling on satellite measurements of N₂O in the tropical lower stratosphere
- XY14 EGU2012-5628
H. Boenisch and A. Engel
Can we estimate lifetimes from observed stratospheric trace-gas distributions?
- XY15 EGU2012-6703
J.C. Laube, A. Engel, A. Keil, H. Böenisch, M.J. Bolder, T. Röckmann, and W.T. Sturges
Halogenated trace gases in stratospheric air samples: Implications for atmospheric lifetimes

- XY16 EGU2012-12622
S. Tegtmeier, H. Bieligk, K. Krüger, E. Atlas, S. Fuhlbrügge, H. Hepach, R. Hossaini, F. Wittke, and B. Quack
 Oceanic VSLS contribution to the stratosphere: Comparing tropical East Atlantic with tropical West Pacific emissions
- XY17 EGU2012-8563
K. Krüger, B. Quack, S. Fuhlbrügge, S. Tegtmeier, and the SHIVA SONNE team
 First results from the SHIVA SONNE expedition to the tropical Western Pacific during November 2011
- XY18 EGU2012-3529
A. Feigin, A. Shvetsov, L. Fedoseev, D. Karashtin, O. Bolshakov, D. Mukhin, and N. Skalyga
 Novel Ground-Based Instrument For Day-And-Night Monitoring Of The Stratosphere And The Upper Troposphere Temperature Profile
- XY19 EGU2012-12437
I.I. Bruchkousky, V.S. Demin, A.G. Svetashev, L.N. Turishev, and A.M. Krasouski
 The characteristic properties of DOAS technique for retrieval of trace gases
- XY20 EGU2012-9599
 A. Rauthe-Schöch, **K.-P. Heue**, A. K. Baker, T. J. Schuck, C. A. M. Brenninkmeijer, G. Stratmann, and P. F. J. van Velthoven
 Tracking air parcels with the flying atmospheric laboratory CARIBIC
- XY21 EGU2012-1887
A.M. Batenburg, T.J. Schuck, A.K. Baker, A. Zahn, C.A.M. Brenninkmeijer, and T. Röckmann
 The stable isotopic composition of molecular hydrogen in the tropopause region probed by the CARIBIC aircraft
- XY22 EGU2012-7448
J. Friberg, B. G. Martinsson, S. M. Andersson, C. A. M. Brenninkmeijer, M. Hermann, P. F. J. van Velthoven, and A. Zahn
 Volcanic influence on background sulfurous and carbonaceous aerosol in the Lowermost Stratosphere
- XY23 EGU2012-11391
 K. M. Emmerson, **G. W. Mann**, K. S. Carslaw, S. S. Dhomse, N. L. Abraham, P. J. Telford, P. Braesicke, M. Dalvi, and N. Bellouin
 Whole-atmosphere aerosol-microphysics simulations of the Mt Pinatubo eruption: evaluation of simulated aerosol properties
- XY24 EGU2012-11544
P. Hoor and H. Wernli
 Dehydration and Lagrangian Cold Point in the extratropical Tropopause region
- XY25 EGU2012-5693
 L. Gimeno, L. de la Torre, and **J.A. Añel**
 On the origin of the air between multiple tropopauses in mid-latitudes
- XY26 EGU2012-10963
T. Reddmann, R. Ruhnke, and W. Kouker
 Mean Age of Air in the KASIMA model using ERA-Interim analyses
- XY27 EGU2012-7321
S. Meul, S. Oberländer, J. Abalichin, A. Kubin, and U. Langematz
 Stratospheric Ozone and Temperature Changes in the Past: The Impact of Increased Concentrations of CFCs in Simulations with a Chemistry-Climate Model
- XY28 EGU2012-7514
 O. Kirner and **R. Ruhnke**
 The development of ozone in the Stratosphere and Mesosphere performed in EMAC-long term simulations with different boundary conditions for CO₂, CH₄, N₂O and ODS
- XY29 EGU2012-6109
P.A.G. Watson, L.J. Gray, D.G. Andrews, S.M. Osprey, N. Butchart, and S.C. Hardiman
 The Combined Influence of the QBO and ENSO on the Arctic Polar Vortex
- XY30 EGU2012-11010
H. Lu, D. Pancheva, P. Mukhtarov, and I. Cnossen
 QBO Modulation of Transient Planetary Waves during Northern Winter
- XY31 EGU2012-3441
K. Kodera, H. Mukougawa, Y. Kuroda, and N. Eguchi
 Impact of stratospheric sudden warming event on tropical circulation and convection
- XY32 EGU2012-3544
N. Eguchi, K. Kodera, and T. Nasuno
 Stratospheric sudden warming impact on the tropical troposphere seen in NICAM - a global non-hydrostatic model
- XY33 EGU2012-1249
B. Skerlak, M. Sprenger, S. Pfahl, H. Sodemann, and H. Wernli
 A global ERA-interim Climatology of Stratosphere-Troposphere Exchange and High-Resolution Model Case Studies

- XY34 EGU2012-8354
M. Kozubek, N. Harris, and P. Braesicke
 Change of Brewer -Dobson circulation and its impact on total ozone in the middle and high latitude stratosphere
- XY35 EGU2012-8672
F. Bunzel and H. Schmidt
 The Brewer-Dobson Circulation in a changing climate: Impact of the model configuration
- XY36 EGU2012-9839
C. Hoppe, R. Müller, G. Günther, and L. Hoffmann
 Lagrangian Transport in a coupled Chemistry Climate Model

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

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

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Roberto Deidda

- A104 EGU2012-1147
G. Naumann, P. Barbosa, H. Carrao, A. Singleton, and J. Vogt
 Monitoring drought conditions and their uncertainties in areas with sparse precipitation data. Evaluation of different precipitation datasets in Africa.
- A105 EGU2012-2934
R.A.I. Wilcke, T.M. Mendlik, and A.G. Gobiet
 Physical Consistency of Multi-Parameter Error-Correction and Downscaling of Regional Climate Models
- A106 EGU2012-3421
M. Siam, M. Nour, and A. Wagdy
 A Comparison of Statistical Downscaling Approaches to study the Impacts of Climate Change on the Hydrological Cycle of Upper Blue Nile basin
- A107 EGU2012-3465
R. Remesan and T. Bellerby
 Sensitivity and dependence of mesoscale downscaled prediction results on different parameterizations of convection and cloud microphysics
- A108 EGU2012-3680
H. Sharif, C. Furl, and M. Al-Zahrani
 Rainfall Climatology over Asir Region, Saudi Arabia
- A109 EGU2012-3922
J. B. Gilmore, J. P. Evans, and S. C. Sherwood
 The influence of physics parameterizations on precipitation extremes in the Newcastle east coast low of 2007
- A110 EGU2012-4010
E. Maeda, J. Arevalo, and C. Carmona-Moreno
 Effects of time-series length and gauge network density on rainfall climatology estimates in Latin America
- A111 EGU2012-4231
C. Nyunt, H. Yamamoto, A. Yamamoto, T. Nemoto, M. Kitsuregawa, L. Wang, and T. Koike
 Bias correction and Downscaling of GCM for basin scale simulation
- A112 EGU2012-4665
E. Mair, G. Bertoldi, S. Della Chiesa, G. Niedrist, L. Egarter Vigl, and U. Tappeiner
 An approach to improve precipitation estimation to model the water budget in Alpine catchments
- A113 EGU2012-5087
L. Dobor, Z. Barcza, Á. Havasi, and N. Fodor
 Preparation of high resolution climate scenarios for agricultural impact analysis in Hungary
- A114 EGU2012-5859
C. Dobler
 Downscaling precipitation extremes in a complex Alpine catchment
- A115 EGU2012-6448
S. Thober, L. Samaniego, and R. Kumar
 Evaluation of Regional Climate Models: Extremes important for Hydrological Projections
- A116 EGU2012-6891
N. Ohara, M.L. Kavvas, S. Kure, Z.Q. Chen, and S. Jang
 Model-based Estimation of Maximum Precipitation for the 1997 Storm Event Over American River Watershed, California, USA
- A117 EGU2012-7420
S.D. Blazkova, K.J. Beven, and M. Martinkova
 Hazard and vulnerability to climate change of the Skalka dam in Czech Republic

- A118 EGU2012-7612
R. Deidda, G. Mascaro, M. Hellies, L. Baldini, and S. Sebastianelli
A systematic analysis of precipitation retrieved by a Polarimetric Doppler ground radar in Central Italy
- A119 EGU2012-7755
A. Langousis and V. Kaleris
A statistical approach to resolve incompatibilities between measured runoff data and daily estimates of spatially averaged rainfall
- A120 EGU2012-8266
Q. Zhang, H. Körnich, and K. Holmgren
How well do reanalyses represent the southern African precipitation?
- A121 EGU2012-8952
I. Anders and K. Haslinger
Varying trends in precipitation and temperature at different elevations in the European Alps? - A regional climate modelling perspective with COSMO-CLM
- A122 EGU2012-9087
R. Sasse, G. Schädler, H. Feldmann, and Ch. Kottmeier
Generation of Regional Climate Ensembles Using Atmospheric Forcing Shifting
- A123 EGU2012-9432
R. Haas, K. Born, A. Georgiadis, M. K. Karremann, and J. G. Pinto
Statistical Downscaling of Large-Scale Wind Signatures Using a Two-Step Approach
- A124 EGU2012-9736
H.L. Cloke, F. Pappenberger, T. Eckel, R. Buizza, and K. Bogner
The probabilistic Forecast Convergence Score (pFCS)
- A125 EGU2012-10021
P-E. Mellander, S.G. Gebrehiwot, A.I. Gärdenäs, W. Bewket, and K. Bishop
Summer Rains in the Upper Blue Nile Basin: half a century of past and future spatiotemporal patterns
- A126 EGU2012-10836
N. Salzmänn, M. Rohrer, D. Acuna, P. Calanca, and C. Hugger
Assessment of future regional precipitation pattern for an Andes region in Southern Peru
- A127 EGU2012-11128
M. Piazza, J. Boe, C. Page, E. Sanchez-Gomez, and L. Terray
21st century snowfall changes over the French Alps : the role of temperature
- A128 EGU2012-11725
M. Gosset and **R. Roca**
Propagation of Rainfall Products uncertainties in hydrological applications : Studies in the framework of the Megha-Tropiques Satellite Mission
- A129 EGU2012-11754
D. D'Onofrio, V. Artale, S. Calmanti, J. von Hardenberg, E. Palazzi, and A. Provenzale
Stochastic rainfall downscaling of the PROTHEUS regional climate model
- A130 EGU2012-11831
M. Giorgio and R. Greco
Modelling of external and internal intermittence of rainfall data via a simple event based stochastic model
- A131 EGU2012-12028
L.G. Lanza, **M. Colli**, and P. La Barbera
On the influence of rain gauge performance on extreme events statistics: the case of weighing gauges
- A132 EGU2012-12045
M. Muerth, B. Gauvin St-Denis, R. Ludwig, and D. Chaumont
Analysis of the effects of correcting biases in RCM precipitation fields with the local intensity scaling method for a small alpine catchment
- A133 EGU2012-13381
S Samadi, C. Wilson, H. Moradkhani, and S. Gummeneni
Uncertainty analysis of statistically downscaled temperature and precipitation regimes in a semi arid catchment
- A134 EGU2012-13397
E. Tan
An Investigation of Extreme Precipitation in Turkey
- A135 EGU2012-13458
M.A. Campo, **J.J. Lopez**, and J.P. Rebole
Rainfall Stochastic models
- A136 EGU2012-13562
J C Soto-Sandoval and A P Jacquin
Problems with the interpolation of precipitation amounts in mountainous catchments using traditional techniques

- A137 EGU2012-13611
A. Maire, C. Fouchier, P. Arnaud, and Y. Aubert
 Assessment of the daily areal reduction factor of precipitations with distributed rainfall data: a means of improvement of a prediction method of extremes events in France.
- A138 EGU2012-14167
R. Deidda, G.N. Caroletti, V. Luccarini, M. Marrocu, M. Puliga, G. Pusceddu, and A. Speranza
 An intercomparison and verification of outputs of several climate models on representative Mediterranean catchments

NP6.3/AS2.4 – Turbulence in the Atmosphere (co-organized) – Orals

Convener: C. Yagüe | Co-Conveners: F. Tampieri, J Cuxart

Room: 17

Chairperson: Francesco Tampieri

- 13:30–13:45 EGU2012-206
D. Pino, M. Lothon, F. Lohou and the BLLAST campaign Team
 Boundary Layer Late Afternoon and Sunset Turbulence: the BLLAST 2011 experiment
- 13:45–14:00 EGU2012-11170
S. Martin, J. Bange, and F. Beyrich
 Observing of entrainment using small UAS
- 14:00–14:15 EGU2012-13748
 AB Nunes, **HF Campos Velho**, and P. Satyamurty
 Different parameterizations for wind variance applied to the convective boundary layer growth modeling
- 14:15–14:30 EGU2012-13056
S. Serafin, L. Strauss, and V. Grubišić
 Mesoscale and Large-Eddy Simulations of Wave-Induced Boundary-Layer Separation
- 14:30–14:45 EGU2012-7302
M. A. Jimenez and J. Cuxart
 The contribution of the surface heterogeneities in the generation of elevated turbulence above the Low-Level Jets
- 14:45–15:00 EGU2012-1127
 L. Caporaso, A. Riccio, **F. Di Giuseppe**, and F. Tampieri
 The structure of the stable boundary layer as from radiosounding profiles and eddy correlation measurements
- 15:00–15:15 EGU2012-3256
A. A. Grachev, E. L. Andreas, C. W. Fairall, P. S. Guest, and P. O. G. Persson
 Upper limit of applicability of the local similarity theory in the stable atmospheric boundary layer

NP6.3/AS2.4 – Turbulence in the Atmosphere (co-organized) – Posters

Convener: C. Yagüe | Co-Conveners: F. Tampieri, J Cuxart

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Carlos Yagüe

- XY670 EGU2012-6033
 M. Tijera, **G. Maqueda**, C. Yagüe, and J.L. Cano
 Daily variation of the fractal dimension of the velocity components in the turbulent surface layer
- XY671 EGU2012-646
C. Román-Cascón, C. Yagüe, M. Sastre, and G. Maqueda
 Pressure fluctuations associated to rainy days during BLLAST campaign
- XY672 EGU2012-657
M. Sastre, C. Yagüe, C. Román-Cascón, G. Maqueda, and S. Viana
 Characterization of evening atmospheric boundary layer transitions from a sonic anemometer and an array of microbarometers during the BLLAST field campaign
- XY673 EGU2012-9490
D. Martinez, F. Molinos, and J. Cuxart
 Evolution of the temperature profile within the surface layer under stable conditions during the BLLAST campaign
- XY674 EGU2012-12872
J. Reuder, M.O. Jonassen, and H. Ólafsson
 The Small Unmanned Meteorological Observer SUMO: Recent developments and applications of a Micro-UAS for atmospheric boundary layer research

- XY675 EGU2012-4077
F. Tampieri, C. Yagüe, and S. Viana
Similarity scales in the stable boundary layer: a test against data.
- XY676 EGU2012-8174
I. Pietroni, S. Argentini, R. Sozzi, P. Martano, A. Bolignano, and I. Petenko
Estimate of the roughness length and displacement height from sonic anemometers
- XY677 EGU2012-3153
C. Dall'Ozzo, B. Carissimo, L. Musson-Genon, E. Dupont, and M. Milliez
Intercomparison of different subgrid-scale models for the Large Eddy Simulation of the diurnal evolution of the atmospheric boundary layer during the Wangara experiment
- XY678 EGU2012-2338
U. Rizza, G.A. Degrazia, and M.M. Miglietta
LES investigation of a baroclinic PBL for the sunset decay of convective turbulence
- XY679 EGU2012-3161
K. Suselj and J. Teixeira
Eddy-diffusivity/Mass-flux parameterization for boundary layer and shallow convection in the global NASA GEOS5 model
- XY680 EGU2012-6390
J.R. Garcia and J.P. Mellado
Direct Numerical Simulation of a Dry Shear-free Convective Boundary Layer
- XY681 EGU2012-7857
D. Hertwig, R. Nguyen van yen, G. Patnaik, and B. Leiti
Atmospheric turbulence in urban environments: large-eddy simulation and experiment
- XY682 EGU2012-653
K. Babi? and Z. Benceti? Klai?
Vertical profiles of TKE in suburban, stable, ground-based layer
- XY683 EGU2012-12784
J. Pinel, S. Lovejoy, and D. Schertzer
TAMDAR aircraft data, anisotropic scaling and spurious scale breaks in wind statistics

AS3.1 – Gas Phase Composition and Reactivity (including HOx, NOx) – Orals

Convener: H. Harder | Co-Conveners: L. Vereecken, T.J. Dillon

Room: 10

Chairperson: H. Harder

- 08:30–08:45 EGU2012-5889
H Su, YF Cheng, R Oswald, T Behrendt, I Trebs, FX Meixner, MO Andreae, P Cheng, YH Zhang, and U Pöschl
Soil Nitrite as a Source of Atmospheric HONO and OH Radicals
- 08:45–09:00 EGU2012-4765
Y. Kanaya, A. Hofzumahaus, H.-P. Dorn, T. Brauers, H. Fuchs, F. Holland, F. Rohrer, B. Bohn, R. Tillmann, R. Wegener, A. Wahner, Y. Kajii, K. Miyamoto, S. Nishida, K. Watanabe, A. Yoshino, D. Kubistin, M. Martinez, M. Rudolf, H. Harder and the HOxComp team, H. Berresheim(7,8), T. Elste(7), C. Plass-Dülmer(7), G. Stange(7), J. Kleffmann(9), Y. Elshorbany(9,10), and U. Schurath(11) as Team
Comparisons of observed and modeled OH and HO₂ concentrations during the ambient measurement period of the HOxComp field campaign
- 09:00–09:15 EGU2012-602
G. M. Wolfe, J. D. Crounse, J. Parrish, J. M. St Clair, T. Yoon, P. O. Wennberg, and F. N. Keutsch
Photolysis and OH reactivity of a Proxy for Isoprene-derived Hydroperoxyenals
- 09:15–09:30 EGU2012-4123
K. D. Lu, F. Rohrer, A. Hofzumahaus, F. Holland, H. Fuchs, T. Brauers, R. Dlugi, X. Li, S. R. Lou, M. Shao, T. Zhu, A. Wahner, and Y. H. Zhang
Nighttime HOx chemistry in the Pearl River Delta and Beijing in summer 2006: intense oxidation without sunlight
- 09:30–09:45 EGU2012-2484
L. Vereecken
Theoretical studies of the isomerisation of peroxy radicals by H-migration
- 09:45–10:00 EGU2012-8656
A.S. Mahajan, **C. Prados-Roman**, T.D. Hay, J.C. Gomez Martin, C. Ordoñez, S. MacDonald, J.M.C. Plane, and A. Saiz-Lopez
Long-term observations of glyoxal and formaldehyde over the Eastern Pacific Ocean

AS3.1 – Gas Phase Composition and Reactivity (including HOx, NOx) – Posters

Convener: H. Harder | Co-Conveners: L. Vereecken, T.J. Dillon

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: L. Vereecken, H. Harder

- XY37 EGU2012-13358
V. L. Orkin
Laboratory measurements of Photochemical Properties of Atmospheric Pollutants.
- XY38 EGU2012-4030
A. Perrin and JM Flaud
A new spectroscopic linelist for the ν_3 and ν_4 bands of nitric acid (HNO_3) in the 7.6 microns region
- XY39 EGU2012-12026
M. Neumaier, F. Geiger, E. Christner, R. Ruhnke, C. A. M. Brenninkmeijer, and A. Zahn
CARIBIC passenger aircraft measurements in the UTLS: Distribution and seasonal variation of acetone and its impact on the production of HOx
- XY40 EGU2012-5629
D. Walter, K.-P. Heue, A. Rauthe-Schöch, C. A. M. Brenninkmeijer, L. N. Lamsal, N. A. Krotkov, and U. Platt
Flux calculation using CARIBIC DOAS aircraft measurements - SO_2 emission of Norilsk
- XY41 EGU2012-6330
W.J. Bloss, M.S. Alam, J.D. Lee, M. Vazquez, A. Munoz, and M. Rodenas
 NO_x analyser interference from alkenes
- XY42 EGU2012-5621
M. Baeza Romero, A. Rickard, S. Peppe, A. Muñoz, S. Ball, M. Ródenas, P. Sánchez, M. Daniels, R. Volkamer, R. Thalman, F. Keutsch, S. Henry, P. Monks, I. Goodall, E. Borrás, and M. Vázquez
Measurements of Alpha-dicarbonyl Compounds: A Detailed Instrument Intercomparison at the European Photoreactor (EUPHORE)
- XY43 EGU2012-11663
A. Colomb, J. Fleuret, C. Gaimoz, and L. Deguillaume
New method to quantify volatile organic compounds (VOCs) in cloud droplets sampled at the puy de Dôme research station.
- XY44 EGU2012-5979
R. Lozano, M.A. Hernández-Ceballos, **J. A. Adame**, M. Casas-Ruiz, M. Sorribas, E.G. San Miguel, and J.P. Bolívar
Pathway of the Fukushima radioactive plume for reaching the Iberian Peninsula
- XY45 EGU2012-6944
R. T. Lidster, J. F. Hamilton, A. C. Lewis, J. D. Lee, J. R. Hopkins, and S. Punjabi
Using Comprehensive Two-dimensional Gas Chromatography (GCxGC) for the Analysis of Volatile Organic Compounds (VOCs)
- XY46 EGU2012-4539
C. Breuninger, F.X. Meixner, A. Thielmann, U. Kuhn, T. Dindorf, and J. Kesselmeier
Exchange of nitrogen dioxide (NO_2) between plants and the atmosphere under laboratory and field conditions
- XY47 EGU2012-11379
Y. F. Elshorbany, B. Steil, and J. Lelieveld
 HONO/NO_x ratio as a tool for the estimation of HONO levels in global models: Field Measurements Comparison and Global Impact
- XY48 EGU2012-11352
M. Sörgel and A. Held
Near surface profiles of HONO : The vegetated surface as source and sink
- XY49 EGU2012-3313
A. Notario, I. Bravo, **J.A. Adame**, Y. Díaz-de-Mera, A. Aranda, A. Rodríguez, and D. Rodríguez
Local and regional oxidant levels ($\text{OX} = \text{O}_3 + \text{NO}_2$) measured in a polluted area in central-southern of Iberian Peninsula
- XY50 EGU2012-505
J B A Muller, M Le Breton, S O'Shea, S Bauguitte, M W Gallagher, A Bacak, and C J Percival
Airborne measurements of HCN , CO_2 and CH_4 associated with emissions from boreal biomass burning
- XY51 EGU2012-5831
Y. F. Elshorbany, J. Kleffmann, A. Hofzumahaus, R. Kurtenbach, P. Wiesen, T. Brauers, B. Bohn, H.-P. Dorn, H. Fuchs, F. Holland, F. Rohrer, R. Tillmann, R. Wegener, A. Wahner, Y. Kanaya, A. Yoshino, S. Nishida, Y. Kajii, M. Martinez, D. Kubistin, H. Harder, J. Lelieveld, T. Elste, C. Plass-Dülmer, G. Stange, H. Berresheim, and U. Schurath
 HOx Budgets during HOxComp : a Case Study of HOx Chemistry under NO_x limited Conditions
- XY52 EGU2012-9491
A. Novelli, H. Harder and the HUMPPA-COPEC 2010 (1,2,4) and IPI (1,3,4) Team
Assessment of the role of stabilized Criegee Intermediates in OH radical measurements by LIF.
- XY53 EGU2012-14333
M Cain, J Pyle, R Jones, B Ouyang, M McLeod, and G Carver
Nighttime chemistry: observations and modelling from RONOCO

- XY54 EGU2012-4028
H. Hellén, T. Tykkä, and H. Hakola
 Monoterpenes and isoprene in urban air in Helsinki, Finland
- XY55 EGU2012-10442
B. Bonn, S. Bourtsoukidis, W. Haunold, R. Sitals, and S. Jacobi
 Ozone, OH and NO₃ sink terms at a coniferous forest site in Central Germany: Role of biogenic VOCs

AS4.5/BG2.17/CL2.6 – Vegetation-Atmosphere Interactions: From Emission to Atmospheric Particles and Climate (co-organized) – Orals

Convener: B. Bonn | Co-Conveners: M. Boy, S. M. Noe

Room: 14

Chairperson: Boris Bonn, Steffen M. Noe

- 08:30–08:45 EGU2012-12992
A.M. Trowbridge, H.D. Adams, D.D. Breshears, and R.K. Monson
 Untangling the primary drivers of pinyon monoterpene production and emissions under predicted drought
- 08:45–09:00 EGU2012-754
M.H.A. van Geel, K.F. Boersma, J.E. Williams, V. Huijnen, T.P.C. van Noije, J. Vilà-Guerau de Arellano, D.J. Parker, C.E. Reeves, H. Schlager, M. Lichtenstern, J.G. Murphy, G. Mills, D.E. Heard, T. Ingham, and R. Commane
 Towards a better understanding of isoprene emissions and chemistry above tropical forests with the TM5 model
- 09:00–09:15 EGU2012-4410
S. Bourtsoukidis, A. Dittmann, S. Jacobi, and B. Bonn
 Driving forces of individual BVOC emissions from a spruce tree in Central Germany; results from a dynamic enclosure study.
- 09:15–09:30 EGU2012-7949
I. Bamberger, L. Hörtnagl, T. Ruuskanen, R. Schnitzhofer, M. Müller, M. Graus, T. Karl, G. Wohlfahrt, and A. Hansel
 Deposition of terpenes to vegetation - a paradigm shift towards bidirectional VOC exchange?
- 09:30–09:45 EGU2012-847
G. Salque-moreton, Y. Liu, D. Voisin, F. Siekmann, P. Renard, A. Monod, and R. Thissen
 A HRMS study of oligomer formation through aqueous phase photooxidation of methylvinyl-ketone and methacrolein
- 09:45–10:00 EGU2012-3934
H. G. Takahashi, H.-J. Kim, K. Tanaka, K. Takata, K. Saito, and T. Yasunari
 Sensitivity study on the impacts of biogenic VOC on the Asian monsoon climate in dry and wet seasons using MIROC5

AS4.5/BG2.17/CL2.6 – Vegetation-Atmosphere Interactions: From Emission to Atmospheric Particles and Climate (co-organized) – Posters

Convener: B. Bonn | Co-Conveners: M. Boy, S. M. Noe

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 10:30–12:00

Chairperson: Steffen M. Noe, Boris Bonn

- XY56 EGU2012-8889
M. Beck and T. Hoffmann
 Formation and characterization of dimeric compounds in Secondary Organic Aerosol
- XY57 EGU2012-1073
T. Rusu, P. I. Moraru, M. L. Soptorean, A. I. Pop, and H. Cacovean
 Climate Monitoring and Recommendations on the Optimum Sowing Period for the Main Crops in the Transylvanian Plain, Romania
- XY58 EGU2012-1198
M. Li, X. Huang, J. Li, and Y. Song
 Estimation of biogenic volatile organic compound (BVOC) emissions from the terrestrial ecosystem in China using real-time remote sensing data
- XY59 EGU2012-1944
E. Chalaya, V. Slepnyh, A. Babyakin, and N. Povolotckaia
 The seasonal dynamics of bacteriostatic character of oak forests
- XY60 EGU2012-2783
B. Illes and A. Anda
 Field effects of cadmium contamination in the radiation characteristics of maize

- XY61 EGU2012-7186
J. Regnery, T Dindorf, L Hacker, S Andres, E Kleist, J Wildt, and J Kesselmeier
 Development and application of an analytical method for the determination of total atmospheric biogenic non-methane organic carbon
- XY62 EGU2012-8678
R. J. Jakob and T. Hoffmann
 Development of a chiral separation method for the enantiomers of two atmospheric oxidation products of α -pinene
- XY63 EGU2012-9247
M. J. D. Mann, M. Kundel, and T. Hoffmann
 Online Quantification of gaseous Amines via Aerosol Mass Spectrometry
- XY64 EGU2012-10196
P. Veres, J. Auld, and J. Williams
 Tropical Greenhouse Measurements of Volatile Organic Compounds Using Switchable Reagent Ion Proton-Transfer-Reaction Time-of-Flight Mass Spectrometry (PTR-TOF-MS)
- XY65 EGU2012-10376
M. Walser, I. Bamberger, L. Hörtnagl, G. Wohlfahrt, and A. Hansel
 Drought induced methanol emission from grassland
- XY66 EGU2012-10544
 R. Kohl, **B. Bonn**, S. Bourtsoukidis, H. Wex, F. Stratmann, H. Bingemer, W. Haunold, and S. Jacobi
 Aerosol and cloud condensation nuclei formation at Mt. Kleiner Feldberg, Germany
- XY67 EGU2012-2771
 B. Illes and **A. Anda**
 Changes in radiative properties of soot contaminated maize canopy

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

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

Room: 11

Chairperson: n.n.

- 10:30–10:45 EGU2012-10844
N. Huneus and the AeroCom Team
 Global dust model intercomparison in AeroCom phase I
- 10:45–11:00 EGU2012-2213
M. Astitha, M. Abdel Kader, A. Pozzer, and J. Lelieveld
 Assessment of two physical parameterization schemes for desert dust emissions in an atmospheric chemistry general circulation model
- 11:00–11:15 EGU2012-7176
I. Tegen, K. Schepanski, and B. Heinold
 Saharan dust source activation: Comparing two years regional modelling results and satellite observations
- 11:15–11:30 EGU2012-10359
B. Heinold, P. Knippertz, S. Fiedler, J. H. Marsham, and I. Tegen
 The Role of Deep Convection and Low-Level Jets Forcing Dust Emissions in West Africa: A High-Resolution Regional Dust Modelling Study
- 11:30–11:45 EGU2012-11125
C. Filizzola, F. Sannazzaro, P. Di Girolamo, F. Marchese, G. Mazzeo, D. Summa, R. Paciello, N. Pergola, and V. Tramutoli
 A Robust Satellite Technique (RST) for detection and monitoring of dust storms
- 11:45–12:00 EGU2012-4552
K. Schepanski, F. Marnas, C. Flamant, J.-P. Chaboureau, C. Kocha, J. Pelon, C. Lavaysse, T. J. Wright, and P. Knippertz
 A multi-observational Characterisation of Dust Emission from Sources within complex Terrain

LUNCH BREAK

Chairperson: n.n.

- 13:30–14:00 EGU2012-1498
A. Ansmann
 Lessons learned from the SAMUM-1 and SAMUM-2 field campaigns and future activities

- 14:00–14:15 EGU2012-11975
R Washington, D.J. Parker, J.H. Marsham, J. McQuaid, H. Brindley, M.C. Todd, E.J. Highwood, C Flamant, J-P. Chaboureaud, C Kocha, A Saci, and M Bechir
 Fennec - The Saharan Climate System: an overview
- 14:15–14:30 EGU2012-4424
J. H. Marsham, C. Allen, M. Bart, B. J. Brooks, C. Cavazos-Guerra, S. Engelstaedter, M. Gascoyne, M. Hobby, J. B. McQuaid, A. O'Leary, A. Lima, V. Martins, B. Ouchene, A. Ouladichir, D. J. Parker, A. Saci, M. Salah-Ferroudj, M. C. Todd, and R. Washington
 An overview of the June 2011 Fennec surface-based observations in the central Sahara: New insights into dust uplift and transport
- 14:30–14:45 EGU2012-8488
C. Kocha, C. Flamant, F. Marnas, J.P. Chaboureaud, D. Parker, J. Marsham, P. Knippertz, and L. Garcia-Carreras
 How a dusty cold pool can change the diurnal evolution of the Saharan Atmospheric Boundary Layer
- 14:45–15:00 EGU2012-5922
CL Ryder, EJ Highwood, P Rosenberg, J Trembath, M Bart, J Brooke, J Dorsey, K Turnbull, A Dean, I Crawford, R Cotton, J McQuaid, and R Washington
 Microphysical and Optical Properties of Saharan Dust from Airborne Measurements during the Fennec 2011 Campaign
- Chairperson: n.n.
- 15:30–15:45 EGU2012-7055
H. Zheng
 Production of Asian dust: tectonics vs climate
- 15:45–16:00 EGU2012-2674
A. Bird, T Stevens, A Carter, T P Watson, P Vermeesch, H Lu, S Andò, E Garzanti, M A Cottam, I Sevastjanova, and M Rittner
 Genetic linkage between the Yellow River and the Chinese Loess Plateau
- 16:00–16:15 EGU2012-11026
A. Bory, W. Abouchami, S. Galer, A. Svensson, and P. Biscaye
 Chinese mineral dust and anthropogenic aerosol inter-continental transport: a Greenland perspective
- 16:15–16:30 EGU2012-6899
P. De Deckker
 Multidisciplinary studies of the dust storm that affected Sydney in September 2009
- 16:30–16:45 EGU2012-9676
S. Cowie, P. Knippertz, and K. Schepanski
 A Climatology of Dust-Emission Events over North Africa Based on 27 Years of Surface Observations
- 16:45–17:00 EGU2012-4094
F. Lambert, J.S. Kug, R.J. Park, N. Mahowald, A. Abe-Ouchi, R. O'Ishi, G. Winckler, and T. Takemura
 Reconstruction of Holocene and LGM atmospheric dust aerosol concentrations from paleoclimatic archives

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

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

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- XY68 EGU2012-9691
I. Vlastelic, K. Sellegri, A. Colomb, K. Suchroski, L. Bouvier, and F. Nauret
 Inorganic trace element content of aerosols at puy de Dôme, France
- XY69 EGU2012-9477
N. Meskhidze and M.S. Johnson
 Updated dust-iron dissolution mechanism: Effects of organic acids, photolysis, and dust mineralogy
- XY70 EGU2012-641
M. Abdel Kader, M. Astitha, and J. Lelieveld
 Evaluation of a Mineral Dust Simulation in the Atmospheric-Chemistry General Circulation Model-EMAC
- XY71 EGU2012-183
Dr. P. Kishcha, C. Carnevale, G. Finzi, E. Pisoni, M. Volta, S. Nickovic, and P. Alpert
 Improving Air Pollution Modeling Over The Po Valley Using Saharan Dust Transport Forecasts
- XY72 EGU2012-9398
G.P. Gobbi, H. Wille, R. Sozzi, F. Angelini, F. Barnaba, F. Costabile, S. Frey, A. Bolignano, and A. Di Giosa
 Saharan dust contribution to PM levels: The EC LIFE+ DIAPASON project

- XY73 EGU2012-13543
C. Pio, T. Nunes, J. Cardoso, A. Caseiro, **D. Custódio**, M. Cerqueira, D. Patoilo, S. M. Almeida, and M. C. Freitas
CV-Dust: Atmospheric aerosol in the Cape Verde region: carbon and soluble fractions of PM10
- XY74 EGU2012-13643
C. Pio, T. Nunes, **J. Cardoso**, A. Caseiro, M. Cerqueira, D. Custodio, M. C. Freitas, and S. M. Almeida
Size distribution of PM at Cape Verde - Santiago Island
- XY75 EGU2012-10381
F. Guarnieri, F. Calastrini, C. Busillo, and M. Pasqui
An analysis of Saharan desert dust over Mediterranean Basin
- XY76 EGU2012-6461
H. V. Nguyen, R. Yokota, G. Stenchikov, and G. Kocurek
A parallel direct numerical simulation of dust particles in a turbulent flow
- XY77 EGU2012-5443
C. Tsamalis and A. Chédin
Vertical distribution of the Saharan Air Layer from 5 years of CALIPSO observations
- XY78 EGU2012-3073
L. Klüser, D. Martynenko, and T. Holzer-Popp
Towards the ability to retrieve dust mineral composition from space
- XY79 EGU2012-4565
K. Schepanski, I. Tegen, and A. Macke
Satellite based Observations of Saharan Dust Source Areas - Comparison and Variability
- XY80 EGU2012-3762
P. Knippertz, J. H. Marsham, K. Schepanski, B. Heinold, S. Cowie, S. Fiedler, and A. J. Roberts
The Desert Storms Project - Towards an Improved Representation of Meteorological Processes in Models of Mineral Dust Emission
- XY81 EGU2012-9812
S. Cowie, P. Knippertz, and J. Marsham
Is a change in roughness length the cause of the recent decrease in Sahelian dust emission?
- XY82 EGU2012-4529
S. Fiedler, K. Schepanski, B. Heinold, P. Knippertz, and I. Tegen
A climatology of Nocturnal Low-level Jets over North-Africa and implications for simulating mineral dust emission
- XY83 EGU2012-8314
K. Schepanski and P. Knippertz
The Representation of Nocturnal Low-Level Jets in Meso-Scale Atmospheric Models and its Relevance for Dust Emission
- XY84 EGU2012-10533
B. Heinold, P. Knippertz, S. Cowie, S. Fiedler, and K. Schepanski
The Low-Level Jet Phenomenon in North-African Deserts: An Idealized Large Eddy Simulation Study
- XY85 EGU2012-5742
A. Roberts and P. Knippertz
The Formation and Behaviour of a large Saharan Haboob
- XY86 EGU2012-8306
C. Flamant, J.-P. Chaboureaud, C. Kocha, C. Lavaysse, K. Schepanski, P. Chazette, O. Bock, B. Marticorena, P. Tulet, J. Pelon, F. Marnas, M. Mokhtari, J.-P. Lafore, R. Roehrig, A. Koulali Idrissi, C. Tsamalis, and A. Chedin
The French component of the FENNEC Saharan Climate project 2011 Special Observing Period
- XY87 EGU2012-7847
J.-P. Chaboureaud, **C. Flamant**, C. C. Kocha, J.-P. Lafore, C. Lavaysse, F. Marnas, M. Mokhtari, J. Pelon, K. Schepanski, and P. Tulet
Verification of mesoscale dust forecasts over the Sahara during FENNEC 2011
- XY88 EGU2012-5252
P. Chazette, P. Royer, F. Marnas, C. Flamant, P. Doira, C. Grenier, and J. Sanak
N2-Raman lidar for dust aerosol survey over the southern Spain within the frame of FENNEC
- XY89 EGU2012-7951
F. Marnas, P. Chazette, C. Flamant, P. Royer, H. Sodemman, and Y. Derimian
Characterization of Saharan dust properties transported towards Europe in the frame of the FENNEC project: a case study
- XY90 EGU2012-10639
H. Sodemmann, **M. Lai**, P. Knippertz, M. Bart, F. Marengo, J.B. McQuaid, P. Rosenberg, and C. Ryder
Validation of a Lagrangian dust transport model with data from the Fennec/LADUNEX field campaign
- XY91 EGU2012-4198
C. E. Birch, **J. H. Marsham**, D. J. Parker, and G. M. Devine
The effect of orography and surface albedo on stratification in the summertime Saharan boundary layer: Dynamics and implications for dust transport

- XY92 EGU2012-10185
C. Cavazos-Guerra, M.C. Todd, C. Allen, M. Bart, B. Brooks, S. Engelstaedter, L. Garcia-Carreras, M. Hobby, J.H. Marsham, J. McQuaid, D. Parker, A. Saci, and R. Washington
 WRF sensitivity analysis of the diurnal cycle of Saharan planetary boundary layer
- XY93 EGU2012-9906
C. Cavazos-Guerra, M.C. Todd, J. Pelon, C. Flamant, C. Allen, R. Washington, S. Engelstaedter, J. Marsham, and D. Parker
 Understanding the central west Saharan summertime dust hotspot: Identification and classification of active dust emissions and associated processes from Calip analysis
- XY94 EGU2012-720
C.J.T. Allen, J.H. Marsham, S. Engelstaedter, and R. Washington
 Atmospheric dust emission mechanisms at the summer global dust maximum: observations from Bordj Mokhtar, Algeria
- XY95 EGU2012-13105
S. Engelstaedter, R. Washington, C. Allen, C. Flamant, J.-P. Chaboureaud, C. Kocha, and C. Lavaysse
 Understanding the Role of the Saharan Heat Low in Modifying Atmospheric Dust Distributions - Observations From Two Research Aircraft Flying Simultaneously Over Western Africa
- XY96 EGU2012-2285
J. Brooke, M. Bart, J. Trembath, J.B. McQuaid, B.J. Brooks, and S. Osborne
 Coarse mode aerosol measurement using a Low Turbulence Inlet
- XY97 EGU2012-13672
B. Weinzierl, D. Sauer, M. Esselborn, A. Petzold, A. Veira, M. Rose, S. Mund, M. Wirth, A. Ansmann, M. Tesche, S. Groß, and V. Freudenthaler
 Aging of mineral dust during transport from the Sahara into the Cape Verde area - results from airborne measurements during SAMUM
- XY98 EGU2012-7665
C. Flamant, F. Abdi Vishkaee, J. Cuesta, H. Khalesifard, L. Oolman, and P. Flamant
 Observation of dust emission and transport over Iraq and northwest Iran associated with winter Shamal
- XY99 EGU2012-13374
H. Ágústsson and H. Ólafsson
 The 13 September 2011 storm of resuspended volcanic ash
- XY100 EGU2012-13713
S. Jónsson and H. Ólafsson
 The Reykjavík storm of resuspended ash
- XY101 EGU2012-3511
Z. Svir?ev, S.B. Markovi?, T. Stevens, I.J. Smalley, U. Hambach, I. Obreht, T. Luki?, and Dj.A. Vasiljevi?
 Importance of Biological Loess Crusts for Loess Formation in Semi-Arid Environments
- XY102 EGU2012-6147
M. Shahgedanova, S. Kutuzov, K. White, G. Nosenko, and M. Woodage
 Climatology of dust deposition events on Garabashi Glacier, Mt Elbrus, Caucasus, developed from snow pits using remote sensing, climate models and sedimentological analysis
- XY103 EGU2012-5677
J.E. Bullard, J.M. Prospero, and R. Hodgkins
 High latitude dust over the North Atlantic: inputs from Icelandic proglacial dust storms
- XY104 EGU2012-12041
J. Párraga, M. Sanchez-Maranon, J. Calero, R. Delgado, G. Delgado, J. Martín-García, J. Díaz, and V. Aranda
 Iberulites deposition on soils of Granada (South Spain)
- XY105 EGU2012-7491
G. Stauch, F. Lehmkuhl, A. Hilgers, and H. Zhao
 Holocene aeolian sediments on the NE Tibetan Plateau
- XY106 EGU2012-1293
B. Delmonte, P.S. Andersson, C. Baroni, B. Narcisi, J.R. Petit, M.C. Salvatore, S. Albani, and V. Maggi
 Holocene regional gradients of dust provenance and flux between Talos Dome and Dome C, East Antarctica.
- XY107 EGU2012-2030
D.-D. Rousseau, P. Antoine, M. Fuchs, C. Hatté, F. Lacroix, G. Kukla, A. Sima, and M. Ghil
 Major dust events in Europe during the last interglacial s. l. period.
- XY108 EGU2012-10630
J.-B. Stuut, F. Temmesfeld, D. Hebbeln, and P. Dedekker
 Late Quaternary aridity changes in the winter-rain areas on the Southern Hemisphere: inferences from the marine sediment archive
- XY109 EGU2012-10291
C. Skonieczny, A. Bory, V. Bout-Roumazeilles, F. Grousset, B. Malaizé, P. Martinez, I. Billy, E. Caron, L. Debeauvais, and J. Carrons
 A 1.2 Ma unique record of the aeolian terrigenous signal off West Africa

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

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

Room: 33

Chairperson: n.n.

- 13:30–13:45 EGU2012-14002
Z. W. Kundzewicz
Changes in flood risk in Europe - Holistic perspective
- 13:45–14:00 EGU2012-698
C. Chaudhuri, R. Srivastava, and S N Tripathi
Development of a Dynamic Downscaling strategy for Ganga Basin and Investigation of the Hydrological Pattern
- 14:00–14:15 EGU2012-10854
J. Dahne, Dr. C. Donnelly, Dr. D. Gustavsson, and J. Södling
Using Discharge data and hydrological modelling to evaluate precipitation data
- 14:15–14:30 EGU2012-14357
M. Kallache
Assessing extreme values for water management purposes in the context of climate change
- 14:30–14:45 EGU2012-11319
A. Jobst, J. Schmid, R. Ludwig, and M. Muerth
Impacts of climate change on the water management system on the alpine Upper Isar river with regards to hydro power potential and residual flow
- 14:45–15:00 EGU2012-984
C. Arregoitia and M.P Mesa
Impact of climatic conditions on the design of a water treatment plant
- Chairperson: n.n.
- 15:30–15:45 EGU2012-4377
R.P. Allan, D.A. Lavers, C.L. Liu, and M. Zahn
Current and future changes in precipitation and its extremes
- 15:45–16:00 EGU2012-11871
S.B. Guerreiro, C.G. Kilsby, and F. Serinaldi
Analysis of Rainfall Changes in Transnational Basins in Portugal and Spain
- 16:00–16:15 EGU2012-5270
R. J. van der Ent and H. H. G. Savenije
Oceanic versus continental sources of precipitation
- 16:15–16:30 EGU2012-8261
Y. Guo
Long-term Free-Atmosphere absolute Humidity Trends in China Derived from Homogenized In situ Radiosonde Dew Point Temperature Series
- 16:30–16:45 EGU2012-956
E. Steirou and D. Koutsoyiannis
Investigation of methods for hydroclimatic data homogenization
- 16:45–17:00 EGU2012-4731
F. Johnson and **A. Sharma**
On long-term persistence in GCM rainfall simulations: Implications for water resources planning and design

PS2.5/AS4.18 – Atmospheres of Terrestrial Planets (co-organized) – Orals

Convener: W.J. Markiewicz | Co-Conveners: E. Marcq, A. Määttänen

Room: 32

Chairperson: Wojciech J Markiewicz

- 13:30–13:45 EGU2012-829
S. Curry, M. Liemohn, X. Fang, and Y. Ma
Low energy ion loss at Mars
- 13:45–14:00 EGU2012-12666
M.-E. Gagné, J.-L. Bertaux, S.M.L. Melo, F. Montmessin, and K. Strong
Observations of the ultraviolet nitric oxide nightglow emission with SPICAM/MEx in the stellar occultation mode
- 14:00–14:15 EGU2012-12444
G. Gronoff, C. Simon Wedlund, C. J. Mertens, **M. Barthelemy**, and R. Lillis
Modeling and observation of the CO Cameron bands in the upper atmosphere of Mars

- 14:15–14:30 EGU2012-9800
B. Gondet, J.P. Bibring, and M. Vincendon
Monitoring the mesospheric CO₂ ice clouds by OMEGA/MEx
- 14:30–14:45 EGU2012-9003
A. Määttänen, C. Listowski, A. Reberac, B. Rougerie, L. Maltagliati, F. Lefèvre, J.-L. Bertaux, and F. Montmessin
Atmospheric profiles from the MEX/SPICAM solar occultations in the UV
- 14:45–15:00 EGU2012-13324
L. F. A. Teodoro, R. C. Elphic, J. L. Hollingsworth, R. M. Haberle, M. A. Kahre, V. R. Eke, T. L. Roush, G. A. Marzo, A. J. Brown, W. C. Feldman, and S. Maurice
Observational constraints of Polar Ice Deposits on Mars Atmospheric GCMs
- Chairperson: Anni Määttänen
- 15:30–15:45 EGU2012-12657
S. Rafkin and **A. Rothchild**
Methane and Energy Fluxes Above Titan's Lakes
- 15:45–16:00 EGU2012-3098
S. Chamberlain and J. Bailey
Water Vapour Abundance and Distribution in the Lower Venusian Atmosphere
- 16:00–16:15 EGU2012-5867
T. Encrenaz, T. K. Greathouse, H. Roe, J. H. Lacy, M. J. Richter, B. Bézard, T. Fouchet, and T. Widemann
Mapping of SO₂ and HDO on Venus using thermal infrared imaging spectroscopy
- 16:15–16:30 EGU2012-12398
D. Belyaev, O. Korablev, A. Fedorova, J.-L. Bertaux, F. Montmessin, E. Marcq, A. Mahieux, and X. Zhang
Sulfur oxides above Venus' clouds from SPICAV/SOIR VEX occultations
- 16:30–16:45 EGU2012-6455
D. Grassi, A. Migliorini, R. Politi, L. Montabone, G. Piccioni, and P. Drossart
Time-series analysis of temperature profiles from VIRTIS Venus Express data
- 16:45–17:00 EGU2012-12994
S.S. Limaye, R.J. Krauss, N. Ignatiev, and W.J. Markiewicz
Cloud-top altitude from limb views acquired by the Venus Monitoring Camera (VMC) on Venus Express
- 17:00–17:15 EGU2012-3049
W.J. Markiewicz, E. Petrova, O. Shalygina, M. Almeida, D.V. Titov, S.S. Limaye, and N. Ignatiev
Venus glory and the unknown uv absorber

PS1.2/AS4.21/ST6.1 – Polarimetry as an invaluable tool to study the Solar System and beyond. (co-organized) – Orals

Convener: M. Barthelemy | Co-Conveners: H. LAMY, C.L. Simon Wedlund, F. Snik, S. Bagnulo

Room: 28

Chairperson: Mathieu Barthelemy

- 15:30–15:45 EGU2012-14166
J.M. Smit, J.H.H. Rietjens, O. Hasekamp, D.M. Stam, F. Snik, G. van Harten, C.U. Keller, O. van der Togt, A.L. Verlaan, K. Moddemeijer, M. Beijersbergen, R. Voors, K. Wielinga, and B.-J. Vollmuller
SPEX2Earth, a novel spectropolarimeter for remote sensing of aerosols and clouds
- 15:45–16:00 EGU2012-12260
K. Muinonen, J. Tyynelä, and O. Wilkman
Theoretical interpretation of light scattered by the surfaces of atmosphereless Solar-System bodies
- 16:00–16:15 EGU2012-3171
L. Kolokolova, L. Nagdimunov, and W. Sparks
Combining Linear and Circular Polarization in Remote Sensing of Cosmic Dust and Planetary Aerosols
- 16:15–16:30 EGU2012-6273
M. Snow, G. Holsclaw, and W. McClintock
Disk-Integrated Polarization of the Moon in the Ultraviolet from SOLSTICE
- 16:30–16:45 EGU2012-2539
R. West
Polarisation measurements with Voyager and Cassini
- 16:45–17:00 EGU2012-5584
H.M. Schmid
Polarimetric investigation of extra-solar planets and planets in the solar system
- 17:00–17:15 EGU2012-12224
S. Bagnulo, M.F. Sterzik, and E. Palle
The Earth as a benchmark: spectro-polarimetry unveils strong bio-signatures

CL2.3 – Urban climate, urban heat island and urban biometeorology (co-listed) – Orals

Convener: K. Kourtidis | Co-Conveners: K. de Ridder, T. Prieto-Lopez

Room: 13

Chairperson: Koen DeRidder

08:30–08:45 EGU2012-149

M. Demuzere, A. Coutts, N.P.M. van Lipzig, and K. Oleson

Offline evaluation of the Community Land Model - Urban for Toulouse (France) and Melbourne (Australia)

08:45–09:00 EGU2012-11473

N. Blond, M. Kohler, D. Mauree, S. H. Sajjad, and A. Clappier

Development of a new canopy model to improve urban meteorology modeling

09:00–09:15 EGU2012-14394

M. Wattenbach, J.M. Delgado, S. Roessner, M. Bochow, A. Güntner, J. Kropp, A.G. Cantu Ros, F. Hattermann, T. Kolbe, S. Sodoudi, U. Ulrich Cubasch, J. Zeitz, L. Ross, K. Böckel, C. Fang, L. Bo, and G. Pan

A combined remote sensing and modeling based approach to identify sustainable pathways for urban and peri-urban agriculture in China

09:15–09:30 EGU2012-5429

N. Müller and W. Kuttler

Assessment of human thermal comfort and mitigation measures in different urban climatotypes

09:30–09:45 EGU2012-4042

L. Järvi, A. Nordbo, S. Haapanala, J. Moilanen, and T. Vesala

Spatial and temporal variability of turbulent vertical fluxes in Helsinki, Finland

09:45–10:00 EGU2012-6591

T.-C. Chen, M.-C. Yen, and J.-D. Tsay

Synoptic Development of the Afternoon Thunderstorm Activity in An Over-Urbanized Valley: Taipei (Taiwan)

CL2.3 – Urban climate, urban heat island and urban biometeorology (co-listed) – Posters

Convener: K. Kourtidis | Co-Conveners: K. de Ridder, T. Prieto-Lopez

Hall X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Tatiana Prieto-Lopez

XY145 EGU2012-1773

E. Plavcová, H. Davídková, and J. Kyselý

Do sudden air temperature and pressure changes affect cardiovascular morbidity and mortality?

XY146 EGU2012-2006

I. Keramitsoglou and C. T. Kiranoudis

Fully automated extraction and analysis of surface Urban Heat Island patterns from moderate resolution satellite images

XY147 EGU2012-2228

Y. Ezber, Z. Boybeyi, O.L. Sen, and M. Karaca

INVESTIGATION of LOCAL FLOW FEATURES in ISTANBUL via HIGH RESOLUTION ATMOSPHERIC SIMULATIONS

XY148 EGU2012-2684

M. Zuvela-Aloise, J. Nemec, B. Frueh, and R. Boehm

Future climate scenarios of urban heat stress in Vienna

XY149 EGU2012-9854

S. Sodoudi, I. Langer, and U. Cubasch

Micro Climate Simulation in new Town 'Hashtgerd'

XY150 EGU2012-10546

M. Xie and Y. G. Li

Understanding of urban thermal environment in Hong Kong by data analysis and modeling

XY151 EGU2012-11498

D. Founda, A. Saliverou, **D. Rizou**, and H. Flocas

Long term variability of sunshine hours in Athens and its relationship with air temperature

XY152 EGU2012-11904

A. Hammerle, M. Heinl, and G. Leitinger

Cooling Town - a hot topic

XY153 EGU2012-11937

M. Madelin, **G. Beltrando**, and A. Sakhy

Intensity and delimitation of the night Urban Surface Heat Island over the Paris metropolitan area

- XY154 EGU2012-12021
D. Founda, F. Pierros, **P.T. Nastos**, and M. Petrakis
Evolution of the urban heat island at a large coastal urban area of Mediterranean
- XY155 EGU2012-12458
R. Pongracz, J. Bartholy, E. Lelovics, ZS. Dezso, and I. Dobi
Differences between satellite- and ground-based urban heat island effect - Case study for the Budapest agglomeration area
- XY156 EGU2012-12835
C. Ceppi, P. Balena, P. Loconte, and F. Mancini
Urban Heat Island in the city of Bari (Italy) and its relationship with morphological features
- XY157 EGU2012-12880
J. Nemec, **M. Zuvella-Aloise**, and M. Kossmann
Application of an urban climate model to several Austrian cities located in complex topography
- XY158 EGU2012-5403
S. Cohen, L. Shashua-Bar, O. Potchter, Y. Yaakov, P. Bar-Kutiel, and J. Tanny
Sap flow measurement in a street and park of a hot and arid city
- XY159 EGU2012-14143
A. Bokwa
Urban heat island in Krakow, Poland: Land use versus land form interaction
- XY160 EGU2012-4165
P. Dobrovolný, L. ?ezní?ková, and L. Krahula
Spatial and temporal variability of urban heat island intensity in Brno (Czech Republic)
- XY161 EGU2012-5396
A. Goldbach and W. Kuttler
Influence of evapotranspiration on thermal comfort in central European cities
- XY162 EGU2012-9772
K. Menberg, P. Blum, K. Zhu, and P. Bayer
Urban heat islands in the subsurface of German cities
- XY163 EGU2012-2543
P. H. Lin, K. C. Mei, and Y. C. Chen
Preliminary observation result of urban boundary layer at Taipei 101 Skyscraper
- XY164 EGU2012-7869
M. Bakkali, M. Davies, and JP. Steadman
Developing an Integrated Approach for Local Urban Climate Models in London from Neighbourhood to Street Scale

OS1.2 – The North Atlantic: natural variability and global change (co-listed) – Orals

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

Room: 12

Chairperson: Richard Greatbatch

- 08:30–08:45 EGU2012-1770
M. Rhein, D. Kieke, and R. Steinfeldt
The Circulation of Newly Formed Deep Water in the Atlantic
- 08:45–09:00 EGU2012-4891
C. Mertens, M. Rhein, and F. R. Karbe
Transport variability in the western subpolar North Atlantic at 47°N
- 09:00–09:15 EGU2012-3096
C. S. Meinen and S. L. Garzoli
Physical mechanisms involved in Deep Western Boundary Current variability at 26.5°N
- 09:15–09:30 EGU2012-4160
D. Kieke, M. Rhein, I. Yashayaev, and B. Klein
Spreading of Labrador Sea Water in the vicinity of the Mid-Atlantic Ridge in the central subpolar North Atlantic
- 09:30–09:45 EGU2012-4879
F. Richter, D. Sidorenko, and **J. Schroeter**
On estimating the circulation in the North Atlantic from altimetry and ARGO data
- 09:45–10:00 EGU2012-13143
M. G. Magaldi, **T. W. N. Haine**, and R. S. Pickart
On the nature and variability of the East Greenland Spill Jet

COFFEE BREAK

Chairperson: Monika Rhein

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

LUNCH BREAK

Chairperson: Dagmar Kieke

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

Chairperson: Richard Greatbatch

- 15:30–15:45 EGU2012-2117
X. Zhai, H.L. Johnson, D.P. Marshall, and O.A. Saenko
 Significant sink of ocean eddy energy near western boundaries and its potential influence on the large scale ocean circulation
- 15:45–16:00 EGU2012-7086
M. Walter, C. Mertens, M. Dengler, and M. Rhein
 North Atlantic Current variability and associated mixing at the Mid-Atlantic Ridge
- 16:00–16:15 EGU2012-8752
S. Gregorio, T. Penduff, B. Barnier, J.-M. Molines, and J. Le Sommer
 Low-frequency variability of the Atlantic MOC in the eddying regime : the intrinsic component.
- 16:15–16:30 EGU2012-9248
M. Li, C. Mertens, M. Walter, and M. Rhein
 Spatial variation of diapycnal mixing from hydrographic surveys in the subpolar North Atlantic

16:30–16:45 EGU2012-2818

A. Marzocchi, J. J.-M. Hirschi, N. P. Holliday, S. A. Cunningham, S. Masina, and A. C. Coward
Establishment of the North Atlantic subpolar circulation in an eddy-resolving ocean model

16:45–17:00 EGU2012-1714

A.V. Fedorov and F. Sevellec

The leading, interdecadal mode of the Atlantic meridional overturning circulation in a hierarchy of ocean and coupled models

Friday, 27 April

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

Convener: H. Ólafsson | Co-Conveners: J.-W. Bao

Room: 14

Chairperson: Haraldur Ólafsson

- 08:30–08:45 EGU2012-1324
X.-Y. Huang
WRFDA 2012 Overview
- 08:45–09:00 EGU2012-13154
M.O. Jonassen, H. Ólafsson, H. Ágústsson, Ó. Rögnvaldsson, and J. Reuder
Assimilating data from an unmanned aircraft into a local-scale numerical weather forecast
- 09:00–09:15 EGU2012-8839
E. Fagiolini, T. Schmidt, G. Schwarz, and L. Zenner
Detailed Analysis of ECMWF Surface Pressure Data
- 09:15–09:30 EGU2012-8926
s. sbii, n. semane, y. michel, p. arbogast, and m. zazoui
Using METOP/GOME-2 data and MSG ozone data as Potential Vorticity pseudo-observations
- 09:30–09:45 EGU2012-10649
Y. Liu, J.S. Xue, and L. Zhang
Recent Progress of Chinese New Generation Global Data Assimilation System GRAPES-GDAS
- 09:45–10:00 EGU2012-8249
L. Garcies and V. Homar
Guidance for targeting campaigns of Mediterranean High-impact weather

COFFEE BREAK

Chairperson: Jian-Wen Bao

- 10:30–10:45 EGU2012-1511
R N Hoffman, D Gombos, and B K Woods
Worst case forecasting of Hurricane Irene (2011)
- 10:45–11:00 EGU2012-4140
T.-C. Yeh, D.-S. Chen, L.-F. Hsiao, C.-H. Li, M.-H. Cheng, and K.-N. Huang
A Simulation Study on the Torrential Rainfall over Plain Area of Southwestern Taiwan During the Invasion of Typhoon Fanapi (2010)
- 11:00–11:15 EGU2012-3971
D.-S. Chen, L.-F. Hsiao, T.-C. Yeh, and Y.-R. Guo
Testing of Typhoon WRF (TWRF) Initial Field and Its Application to Operational Typhoon Prediction at Taiwan
- 11:15–11:30 EGU2012-2527
R. Hodur and B. Jakubiak
Impact of a Land Surface Model (LSM) in a Mesoscale Model on the Prediction of Heavy Precipitation Events
- 11:30–11:45 EGU2012-11911
F. Mesinger and K. Veljovic
Limited area NWP and regional climate modeling: A test of the relaxation vs Eta lateral boundary condition schemes
- 11:45–12:00 EGU2012-5315
L.S.R. Froude and L. Bengtsson
Atmospheric Predictability Revisited

LUNCH BREAK

Chairperson: Haraldur Ólafsson

- 13:30–13:45 EGU2012-5018
Z. Janjic and R. Vasic
Further development of NCEP's Multi-scale Eulerian NMMB model

- 13:45–14:00 EGU2012-6090
PD Williams
A method for improving time-stepping numerics
- 14:00–14:15 EGU2012-5168
I. Kavcic and J. Thuburn
Development of Lagrangian vertical coordinate for UM ENDGame dynamical core
- 14:15–14:30 EGU2012-6043
A. Hally, S. Fresnay, E. Richard, and D. Lambert
Ensemble simulations with perturbed physical parametrisations: Pre-HyMeX case studies
- 14:30–14:45 EGU2012-2740
H. Järvinen, P. Ollinaho, M. Laine, A. Solonen, and H. Haario
NWP model forecast skill optimization via closure parameter variations
- 14:45–15:00 EGU2012-14389
P. Hiemstra and F. Selten
Using synchronization in multi-model ensembles to improve prediction

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

Convener: H. Ólafsson | Co-Conveners: J.-W. Bao

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Haraldur Ólafsson and Jian-Wen Bao

- XY1 EGU2012-12787
P. Lorenz, T. Kruschke, R. Osinski, M. Voigt, U. Ulbrich, G.C. Leckebusch, H. Frank, J.-P. Schulz, and G. Zängl
High resolution dynamical downscaling of historical and potential extreme European winter storms
- XY2 EGU2012-966
F. Çağlar, M. Acar, C. Ball, E. Tan, and Y. Unal
Verification of 24 hours wind field forecast generated by WRF_ARW for January and July of 2009
- XY3 EGU2012-1971
Y. Zhang and Z. Liao
Simulation of the Persistent Snow Storm in January 2008 over Southern China with a Regional Air-Sea Coupled Model
- XY4 EGU2012-2569
H.-G. Kang, H.-B. Cheong, and J.-R. Park
Typhoon prediction with SABV method and the effect of asymmetric components
- XY5 EGU2012-3746
P. Knippertz, J. Davis, and A. H. Fink
The Predictability of Dry-Season Precipitation in Tropical West Africa
- XY6 EGU2012-3315
M.A. Hernández-Ceballos, **J. A. Adame**, B.A. De la Morena, and J.P. Bolívar
Modelling the sea-land breeze patterns by using the WRF-ARW model in South-western Iberian Peninsula
- XY7 EGU2012-3476
S.-H. Jung, E.-S. Im, S.-R. In, and S.-O. Han
The effect of orography and sea surface temperature on the heavy snowfall for the eastern region of Korea : A case study with high resolution WRF simulation
- XY8 EGU2012-6766
J.-B. Ahn, **H.-J. Kim**, and K.-M. Shim
One-Month Lead Predictability of Arctic Oscillation Using a CGCM
- XY9 EGU2012-6163
R. Yamamoto and R. Porfirio da Rocha
An observed database to characterize the weather conditions associated with subtropical cyclogenesis over southern-southeastern Brazil
- XY10 EGU2012-2577
J.-R. Park, H.-B. Cheong, and H.-G. Kang
Application of Spectral Filtering scheme for Spherical Limited-Area domain to Regional forecast model
- XY11 EGU2012-6191
Y. Zhang
Evaluation of East Asia Summer Climate in NCEP Climate Forecast System Version 2 (CFSv2) Retrospective Forecast
- XY12 EGU2012-8961
J. Kwun, H.J. Song, and J. Kim
The application of different regression coefficients between land and sea in control variable transform for the background error covariance modeling

- XY13 EGU2012-7020
E. Jin
Impact of Increased Resolution and Process-resolving on Forecast Skill of Extreme Events
- XY14 EGU2012-9273
S. C. Lundholm
Description and Verification of a Short-range Ensemble Prediction System
- XY15 EGU2012-8583
M. Acar, C. Balli, F. Caglar, E. Tan, B. Onol, H. Karan, and Y. Unal
Cluster Analysis of the Trajectories for Forecasted Transport of Air Pollutants using WRF and HYSPLIT Models over Istanbul for January and July, 2009
- XY16 EGU2012-9649
N. Hoareau and J. Ballabrera
Parameter perturbation and model error parameterization in an Ensemble Kalman Filter
- XY17 EGU2012-9662
E B Suckling and L A Smith
Gradient descent assimilation for the point-vortex model
- XY18 EGU2012-9909
J. L. Gomes, S. C. Chou, and S. M. Yaguchi
Evaluation of predicted diurnal cycle of precipitation after tests with convection and microphysics schemes in the Eta Model
- XY19 EGU2012-10177
A. Valved, J. Reuder, M.O. Jonassen, and H. Olafsson
Local variability of winds in the complex terrain of the Bergen area during the great windstorms of November and December 2011
- XY20 EGU2012-10645
B. Rosa, M.J. Kurowski, D. Wójcik, and M.Z. Ziemia?ski
Towards NWP with the anelastic nonhydrostatic model EULAG - mountain flows
- XY21 EGU2012-11592
J. A. Adame, M. Yela, M. Navarro, M.C. Parrondo, and M. Gil
A methodology study to define pathways and heights to calculate backtrajectories at near coastal Continental Antarctica station (Belgrano)
- XY22 EGU2012-11705
J. A. Adame, M. Yela, M.C. Parrondo, H. Ochoa, and M. Gil
Meteorological profiles comparison from global models and experimental radiosoundings at the Antarctica station of Belgrano
- XY23 EGU2012-11594
P. Toropov and K. Silvestrova
Numerical simulation of a meteorological regime of Pontic region
- XY24 EGU2012-11750
S. A. Michelson and **J.-W. Bao**
Comparison and Evaluation of Two Types of PBL Schemes in Tropical Cyclone Boundary Layer Simulations
- XY25 EGU2012-11910
C. Ball?, M. Acar, F. Caglar, E. Tan, B. Onol, H. Karan, and Y. S. Unal
The Figure of Merit in Space (FMS) and Probability Analyses of the Concentrations for Forecasted Transport of Particles using the WRF and HYSPLIT Models over Istanbul for January and July, 2009.
- XY26 EGU2012-12409
P. A. Kucera, B. G Brown, L. Nance, and C. Williams
Evaluation of Experimental Models for Tropical Cyclone Forecasting in Support of the NOAA Hurricane Forecast Improvement Project (HFIP)
- XY27 EGU2012-13290
H. Ólafsson, O.E. Grov, J.A. Olseth, Ø. Berentsen, Ó. Rögnvaldsson, H. Ágústsson, A. Valved, J. Reuder, and I. Ezau
Progress in Fine-scale Observations and Simulations of the Atmosphere over the complex terrain of the Bergen region in Western-Norway
- XY28 EGU2012-11718
J.-W. Bao, E. D. Grell, J. S. Whitaker, G. A. Grell, and T. Hamill
Sampling of Errors in the Parameterization of Subgrid Convection
- XY29 EGU2012-671
S. Romanskiy and E. Verbitskaya
Application of WRF-ARW Model to Short-Range Prediction of Squalls in Transbaikalia Region of Russia
- XY30 EGU2012-985
A.B.H. Burgess, A. R. Erler, and T. G. Shepherd
Vertical variation of spectra, nonlinear interactions, and fluxes in ECMWF meteorological analyses
- XY31 EGU2012-2835
S. C. Chou, M.M. Zolino, J.L. Gomes, J.F. Bustamante, and P.P. Lima-e-Silva
High resolution simulations of orographic flow over a complex terrain on the Southeast coast of Brazil

- XY32 EGU2012-6048
C. Rendina, A. Buzzi, P. Malguzzi, D. Mastrangelo, and O. Drofa
The impact of a new simple SST slab model on a monthly forecasting system.
- XY33 EGU2012-7286
J. Tödter and B. Ahrens
Generalization of information-based concepts in forecast verification
- XY34 EGU2012-9220
K. Law
Filtering the Navier-Stokes Equation
- XY35 EGU2012-9817
S. Sperka and G. Spreitzhofer
Estimating 2m Temperature Boundaries from Ensemble Forecasts
- XY36 EGU2012-10783
D. Mayer, R. Steinacker, and A. Steiner
Objective high Resolution Analysis over Complex Terrain with VERA
- XY37 EGU2012-11063
M. Lange
Global Soil Moisture Analysis at DWD
- XY38 EGU2012-11196
A. Steiner, D. Mayer, and R. Steinacker
VERA-QC, an approved Data Quality Control based on Self-Consistency
- XY39 EGU2012-11653
V. Klüpfel, N. Kalthoff, and L. Gantner
Convection-permitting ensemble forecasts for West Africa
- XY40 EGU2012-11776
M. Khodamorad poor and P. Irannejad
Implementation of new sub-grid runoff parameterization within the Weather Research and Forecasting (WRF) modeling system
- XY41 EGU2012-12093
E. Hörnqvist and **H. Körnich**
Tropospheric predictability around stratospheric warming events examined with an idealized forecast ensemble
- XY42 EGU2012-12512
C. Abril and A. Baquero-Bernal
Evaluation of water and energy balances over the Colombian Orinoco Catchment Basin
- XY43 EGU2012-12965
PH Lauritzen, WC Skamarock, MJ Prather, MA Taylor, and C Jablonowski
Assessing accuracy of transport schemes in global climate-weather models

AS1.5 – Clouds, Aerosols and Radiation (General Session)/High Resolution Cloud Models – Posters

Convener: A. Macke | Co-Conveners: A. I. Flossmann, P. Stier, S. Gao, D. Wang, Dr. Cui, S. Lolli

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: A. Macke, P. Stier

- XY44 EGU2012-1220
J. Sun
The impacts of diurnal variation on the precipitation east of the Tibetan Plateau during Mei-yu season
- XY45 EGU2012-1337
Z. Yu
Observational Rainfall change analysis of tropical cyclones making landfall in Zhejiang of China
- XY46 EGU2012-1461
Dr. Cui
A Cloud-Resolving Modeling Study of Diurnal Variations of Tropical Convective and Stratiform Rainfall
- XY47 EGU2012-1526
X. Shen, T. Qing, C. Guo, and X. Li
Pre-Summer Heavy Rainfall Responses to Radiative Effects of Water Clouds: A Rainfall Partitioning Analysis
- XY48 EGU2012-1932
S. Gao and X. Li
Tropical Rainfall Responses to the Large-Scale Forcing During TOGA COARE
- XY49 EGU2012-2315
M. Spada, O. Jorba, C. Pérez, Z. Janjic, and J.M. Baldasano
Implementation of a sea-salt module within the NMMB/BSC Chemical Transport Model: global simulations and comparisons with observations

- XY50 EGU2012-3064
N. Weigum, P. Stier, J. P. Schwarz, J. R. Spackman, and D. W. Fahey
Scales of variability of black carbon plumes
- XY51 EGU2012-3067
B. Kremmling, M. Penning de Vries, and T. Wagner
Investigation of atmospheric light path distributions using GOSAT satellite observations
- XY52 EGU2012-3290
Y. Li and N. Wei
A Numerical Study of Inland Water Effects on the Reinforcement of Rainfall Associated with Typhoon Rananim(2004)
- XY53 EGU2012-3786
H. Hassanzadeh, J. Schmidli, L. Schlemmer, and C. Schär
Influence of topography and wind speed on the diurnal cycle of moist convection in an Idealized framework
- XY54 EGU2012-3849
J. B. Gilmore, J. P. Evans, and S. C. Sherwood
Precipitation extremes on the sub-daily time scale: Temperature dependence in idealized simulations
- XY55 EGU2012-4371
N. Ban, J. Schmidli, and C. Schär
Evaluation of the Cloud-resolving climate simulation driven by the ERA-Interim
- XY56 EGU2012-5384
M. Tesche, P. Glantz, C. Johansson, M. Norman, A. Hiebsch, A. Ansmann, D. Althausen, R. Engelmann, and P. Seifert
Volcanic ash over Scandinavia originating from the Grímsvötn eruptions in May 2011
- XY57 EGU2012-5436
K. Pringle, **K. Carslaw**, T. Fan, G Mann, A Hill, P Stier, and K. Zhang
Exploring efficiency of sea spray geo-engineering
- XY58 EGU2012-5851
J. Yin, D. Wang, and G. Zhai
Cloud Microphysical Characteristics over East Asia
- XY59 EGU2012-5955
D. Wang, X. Li, and W. -K. Tao
Cloud radiative effects on responses of rainfall to large-scale forcing during a landfall of severe tropical storm Bilis (2006)
- XY60 EGU2012-6074
G. Biavati, R. Kretschmer, C. Gerbig, and D. G. Feist
Impact of mixing height estimation on heterogeneous terrains with different algorithms and instruments on atmospheric transport models.
- XY61 EGU2012-6383
V. Pappas, N. Hatzianastassiou, C. Matsoukas, and I. Vardavas
Vertical distributions of aerosols and clouds over the greater Mediterranean basin using CALIOP observations
- XY62 EGU2012-6491
N. Renno, E. Williams, D. Rosenfeld, D. Fischer, J. Fischer, T. Kremling, A. Agrawal, M. Andreae, R. Bierbaum, R. Blakeslee, A. Boerner, N. Bowles, H. Christian, J. Dunion, A. Horvath, X. Huang, A. Khain, S. Kinne, M.-C. Lemos, J. Penner and the other members of the CHASER Team
CHASER: An Innovative Satellite Mission Concept to Measure the Effects of Aerosols on Clouds and Climate
- XY63 EGU2012-6999
E. Brocard, R. Philipona, A. Haeferle, D. Ruffieux, V. Simeonov, and B. Calpini
Raman Lidar Water Vapor Measurement Validation Using a One-Year Radiosonde Dataset in Payerne
- XY64 EGU2012-7214
A. Sanchez, J. Calbó, and J.A. González
On the relationship between cardboard burning in a sunshine recorder and the direct solar irradiance.
- XY65 EGU2012-7470
M. Costa-Surós, J. Calbó, J.A. González, and J. Martin-Vide
How ceilometer detects some specific meteorological conditions?
- XY66 EGU2012-7722
K. Kourtidis, A. Georgoulas, and G. Alexandri
Aerosol and cloud relations and weekly cycles over Central Europe
- XY67 EGU2012-8355
S. Stefan, I Ungureanu, and C Grigoras
Cloud fraction and cloud radiative properties in Magurele, Romania
- XY68 EGU2012-8408
L.R. Dmitireva-Arrago, M.V. Shatunova, and A.S. Kharin
The evolution of the radiative energetic of the Earth - atmosphere system under the cloud cover and cloud microphysical properties change

- XY69 EGU2012-8500
D. Taima-Hernández, J.P. Diaz, F.J. Exposito, A. González, and J.C. Pérez
 Long-term measurements of microphysical properties of marine stratocumulus and aerosols in a new ground-based station located at Tenerife Island (Friolera Peak Lab, 28.6°N, 16.2°W). First results.
- XY70 EGU2012-8896
P. Royer, M. Renaudier, L. Sauvage, M. Boquet, L. Thobois, and A. Bizard
 Continuous and automatic measurement of atmospheric structures and aerosols optical properties with R-Man510 nitrogen Raman lidar
- XY71 EGU2012-9488
H. Pearce, K. Pringle, A. Schmidt, and K. S. Carslaw
 The Impact of Hawaiian Volcanoes on Climate
- XY72 EGU2012-10305
O. Schuessler, D. Loyola, A. Doicu, and R. Spurr
 Assessment of Independent Macrophysical Cloud Properties in the Oxygen A-Band
- XY73 EGU2012-10665
P. Stier, S. Kinne, N. Bellouin, G. Myhre, T. Takemura, H. Yu, C. Randles, and C.E. Chung
 Host Model Uncertainty in Aerosol Radiative Forcing Estimates - The AeroCom Prescribed Experiment
- XY74 EGU2012-12376
P. A. Kucera, C. Weeks, B. G. Brown, and R. Bullock
 Evaluation of NWP Cloud Properties using A-Train Satellite Observations
- XY75 EGU2012-12682
Z. Kipling, P. Stier, J. P. Schwarz, D. W. Fahey, J. R. Spackman, and C. E. Johnson
 Constraints from vertically-resolved aircraft observations on aerosol processes in climate models
- XY76 EGU2012-13914
B. Pospichal, V. Wolf, Y. Zoll, and A. Macke
 Five years of ship-based remote sensing observations of clouds, water vapor and radiation over the Atlantic Ocean
- XY77 EGU2012-14408
E. Gryspeerd and P. Stier
 Regime based investigation of aerosol-cloud interactions
- XY78 EGU2012-10683
P. Zieger, R. Fierz-Schmidhauser, E. Weingartner, and U. Baltensperger
 Effects of relative humidity on aerosol light scattering: Results from different European sites

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

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

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: n.n.

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

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

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

Convener: T. Reichler | Co-Conveners: B. Christiansen, S.-W. Son

Room: 11

Chairperson: Dr. Seok-Woo Son

- 13:30–13:45 EGU2012-7081
S. Schimanke
Variability and trends of major stratospheric warmings in simulations under constant and increasing GHG concentrations
- 13:45–14:00 EGU2012-1958
Y. Kuroda
Effect of stratospheric sudden warmings on the predictability of the tropospheric NAM
- 14:00–14:15 EGU2012-13233
R. Sharman and J. McHugh
Deceleration of mean flows and production of turbulence near the tropopause induced by mountain waves
- 14:15–14:30 EGU2012-3423
U. Anber, L. M. Polvani, and A.H. Sobel
Precipitation anomalies in the deep tropics following stratospheric sudden warming events
- 14:30–14:45 EGU2012-6269
K. L. Smith and P. J. Kushner
Linear Interference in Extratropical Stratosphere-Troposphere Interactions
- 14:45–15:00 EGU2012-3862
K. Nishii, H. Nakamura, and Y.J. Orsolini
Geographical dependence observed in blocking high influence on the stratospheric variability through enhancement and suppression of upward planetary-wave propagation
- Chairperson: Dr. Seok-Woo Son
- 15:30–15:45 EGU2012-868
T. Flannaghan and S. Fueglistaler
Kelvin wave propagation and climatology in the tropical tropopause layer

- 15:45–16:00 EGU2012-1386
I. R. Simpson, P. Hitchcock, T. G. Shepherd, and J. F. Scinocca
 Stratospheric variability and tropospheric annular mode timescales.
- 16:00–16:15 EGU2012-2520
L. L. Hood, T. Spanghel, S. Schimanke, S. Bal, and U. Cubasch
 The Sea Level Pressure Response to 11-Year Solar Forcing: Observational Analyses and Comparisons With a Recent Model Simulation
- 16:15–16:30 EGU2012-12677
J. Gille, S. Karol, D. Kinnison, and V. Yudin
 Winter Descent and Mixing in the Northern Hemisphere Illustrated by HIRDLS Ozone Data
- 16:30–16:45 EGU2012-12763
N. Calvo, D.R. Marsh, R.R. Garcia, M.J. Mills, and D.E. Kinnison
 The impact of ozone recovery on Southern Hemisphere climate under different climate change scenarios
- 16:45–17:00 EGU2012-7073
H.-Y. Chun and J.-Y. Kim
 Changes in the Brewer-Dobson Circulation During 1980-2009 Revealed in the MERRA Reanalysis Data

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

Convener: T. Reichler | Co-Conveners: B. Christiansen, S.-W. Son

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Dr. Seok-Woo Son

- XY79 EGU2012-440
I. Zubiaurre and N. Calvo
 Impact of El Niño Modoki signal from the stratosphere to the troposphere
- XY80 EGU2012-1003
M. Gómez-Escobar, S. Fueglistaler, T. Flannaghan, and N. Calvo
 Multidecadal variability in intraseasonal Sudden Stratospheric Warming Occurrence
- XY81 EGU2012-1608
Y. Xia and Y. Hu
 SST forced Stratospheric warming over Southern-Hemisphere high latitudes
- XY82 EGU2012-2205
L. Shi and Z. Fu
 Winter 2010-2011: a case study of the impact of La Nina on Arctic Vortex
- XY83 EGU2012-2310
A. Badia, O. Jorba, and A. Voulgarakis
 Intercomparison of the impact of stratospheric ozone handling on tropospheric composition using the global NMMB/BSC-CTM model
- XY84 EGU2012-3048
P. Maury, F. Lott, L. Guez, and J.P. Duvel
 Tropical variability and stratospheric equatorial waves in the IPSLCM5 model
- XY85 EGU2012-3857
K. Nishii, H. Nakamura, and Y.J. Orsolini
 Stratospheric cooling and downward planetary-wave propagation in the lowermost stratosphere during the 2010-11 winter
- XY86 EGU2012-3884
J. Pan and L. Li
 Relationship between stratospheric polar vortex and SST Anomaly in the north Pacific in winter
- XY87 EGU2012-7522
 S. Yang and **B. Christiansen**
 Downward propagation of anomalies from the stratosphere to the troposphere in high top/low top versions of three climate models
- XY88 EGU2012-8597
G. Angot and P. Keckhut
 Contribution of stratospheric warmings to temperature trends in the middle atmosphere as revealed by the lidar series obtained at Observatory of Haute-Provence (44°N)
- XY89 EGU2012-9344
E. Blanc, T. Farges, A. Le Pichon, and L. Ceranna
 Contribution of infrasound network to the study of the dynamics of the atmosphere
- XY90 EGU2012-10407
S.-W. Son, H.-S. Kim, and K.-H. Seo
 Tropical-extratropical teleconnection associated with stratospheric QBO

XY91 EGU2012-10532
S.-W. Son, A. Purich, H. Hendon, and B. Kim
 Weather from the ozone hole

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

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

Room: 16

Chairperson: Fred Kucharski and Belen Rodríguez

- 13:30–13:45 EGU2012-1524
H. Tatebe, Y. Imada, M. Kimoto, and H. Hasumi
 South Pacific Ocean controls the phase reversal and periodicity of the decadal and bi-decadal ENSO-like variabilities
- 13:45–14:00 EGU2012-1875
H. Dayan, J. Vialard, T. Izumo, M. Lengaigne, and P. Terray
 External interannual ENSO forcing : which regions outside equatorial Pacific may influence the evolution of ENSO ?
- 14:00–14:15 EGU2012-2177
C. Frauen and D. Dommenges
 Influences of the tropical Indian and Atlantic Oceans on the predictability of ENSO
- 14:15–14:30 EGU2012-12977
I. Polo, B. W. Dong, and R. T. Sutton
 Tropical Interannual Variability Changes from a Substantial Weakening of the Atlantic Meridional Overturning Circulation
- 14:30–14:45 EGU2012-533
J. Lopez-Parages and B. Rodriguez-Fonseca
 Multidecadal modulation of El Niño influence on the Euro-Mediterranean rainfall
- 14:45–15:00 EGU2012-6146
L. Terray
 Modes of forced and internal decadal variability in the Tropics and ExtraTropics from CMIP5 models
- Chairperson: Belén Rodríguez and Irene Polo
- 15:30–15:45 EGU2012-10239
B.-M. Joseph
 Predictability of rainy season onset and cessation in east Africa
- 15:45–16:00 EGU2012-10340
PA. Monerie, B. Fontaine, and P. Roucou
 Future changes in the African monsoon through a pool of CMIP5 models
- 16:00–16:15 EGU2012-12365
B. Dieppois, A. Durand, M. Fournier, A. Diedhiou, B. Fontaine, N. Massei, Z. Nouaceur, and D. Sebag
 Low-frequency Sahel rainfall variability and Atlantic Sea Surface Temperatures during the last century
- 16:15–16:30 EGU2012-12670
 B. Cook, J. Yoon, and **N. Zeng**
 Future Drying of the Southern Amazon Projected by IPCC Climate Models
- 16:30–16:45 EGU2012-7225
B. Scherllin-Pirscher, C. Deser, S.-P. Ho, C. Chou, W. Randel, and Y.-W. Kuo
 Upper tropospheric and lower stratospheric ENSO signal derived from GPS radio occultation temperature
- 16:45–17:00 EGU2012-3869
E. Lim, H. Hendon, and H. Rashid
 Dynamical forecast of low-frequency variability of the Southern Annular Mode

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

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

Hall Z | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Fred Kucharski and Irene Polo

- Z81 EGU2012-980
A. Fischel, M.-S. Seidenkrantz, M. Kucera, and A. Kujipers
 Holocene climate variability in the tropics - high resolution records from the Anegada-Jungfern Passage, NE-Caribbean

- Z82 EGU2012-5528
V. Khon, W. Park, M. Latif, I. Mokhov, and B. Schneider
The Hadley and Walker circulations and changes of the hydrological cycle during the Holocene and Eemian from climate model simulations
- Z83 EGU2012-4574
H.-G. Lim and S.-W Yeh
Volcanic effect on the tropical sea surface temperature in a millennium coupled model simulation
- Z84 EGU2012-4297
N.S. Fuckar, **R. Farneti**, S.P. Xie, E. Maroon, and D.M.W. Frierson
Could changes in the extratropical ocean circulation modify the mean tropical climate and ITCZ?
- Z85 EGU2012-4380
M. Fujita, M. Hara, and H. G. Takahashi
Diurnal cycle of precipitation over the eastern Indian Ocean off Sumatra Island during different IOD phases
- Z86 EGU2012-9584
R. Farneti, F. Kucharski, and F. Molteni
On the mechanisms of Interdecadal Pacific Oscillation-type variability
- Z87 EGU2012-12885
I. Polo, M. Martin-Rey, B. Rodriguez-Fonseca, C. R. Mechoso, and F. Kucharski
Processes in the Influence of Tropical Atlantic Sea Surface Temperatures on Pacific la Nina Onset
- Z88 EGU2012-13488
B. Rodríguez de Fonseca, I. Polo, T. Losada, **E. Mohino**, and R. Mechoso
Non stationary impact of the Equatorial Atlantic on the El Niño Southern Oscillation
- Z89 EGU2012-13050
T. Losada and B. Rodríguez-Fonseca
Atmospheric Response to Changes in the Atlantic Equatorial Mode and in the Background State of SST.
- Z90 EGU2012-8144
A G Turner, B M Harris, and E J Highwood
Monsoon collapse following tropical super-volcanic eruptions
- Z91 EGU2012-1362
T. Bayr and D. Dommenges
The Land-Sea Warming Contrast as the Driver of Tropical Sea Level Pressure Changes
- Z92 EGU2012-2633
F. Kucharski, N. Zeng, and E. Kalnay
A further assessment of vegetation feedback on decadal Sahel rainfall variability
- Z93 EGU2012-5207
D. Folini, D. Baumgartner, and M. Wild
20th century precipitation changes in the Sahel region: sensitivity studies with ECHAM5-HAM
- Z94 EGU2012-7561
C. Seiler
Climate Variability and Trends in Bolivia
- Z95 EGU2012-8305
A G Turner, M Joshi, E S Robertson, and S J Woolnough
The effect of Arabian Sea optical properties on SST biases and the South Asian summer monsoon in a coupled GCM
- Z96 EGU2012-10406
C. Williams, R. Allan, and D. Kniveton
Comparing atmosphere-land surface feedbacks from models within the tropics (CALM). Part 1: Evaluation of CMIP5 GCMs to simulate the land surface-atmosphere feedback
- Z97 EGU2012-10729
S. Wild, J.M. Eden, M. Widmann, and G.C. Leckebusch
Spatial structure and potential predictability of summer precipitation in Ethiopia
- Z98 EGU2012-13841
F.S. Syed, **H. Körnich**, and M. Tjernström
On the fog variability over south Asia
- Z99 EGU2012-313
V. Platonov, E. Semenov, and E. Sokolikhina
Extreme La-Nina 2010/11 and the vigorous flood at the north-east of Australia.
- Z100 EGU2012-1929
J. Collins, D. Roache, and J. Yoo
Assessment of the 2011 Atlantic Hurricane Season
- Z101 EGU2012-2426
e. scoccimarro, s. gualdi, and a. navarra
Hurricanes interaction with the Arctic Climate
- Z102 EGU2012-3177
P. Braesicke, S. H. Ooi, and A. A. Samah
Borneo Vortices: A case study and its relation to climatology

- Z103 EGU2012-5669
J. Runge and J. Kurths
A model-free definition of coupling strength for assessing the influence between climatic processes
- Z104 EGU2012-6320
M. Jacques-Coper and S. Brönnimann
Summertime Climate Variability and Teleconnections over Southern South America during the 20th Century
- Z105 EGU2012-6428
I. Herceg Bulic
ENSO impact on North Atlantic/European region in a changing climate
- Z106 EGU2012-6698
E.-C. Chang, S.-W. Yeh, S.-Y. Hong, J.-E. Kim, and R. Wu
Analysis on a teleconnection patterns between tropical ocean SSTs and extratropics by using a global downscaled precipitation dataset
- Z107 EGU2012-4590
S.-M. Lim and S.-W. Yeh
Possible link the tropical SST anomalies and Arctic Oscillation on the low-frequency timescales during the boreal winter
- Z108 EGU2012-58
A.A. Ekaykin, A.V. Kozachek, V.Ya. Lipenkov, Yu.A. Shibaev, and R. Vaikmae
On the relationship between the climate variability in middle-low latitudes of the Southern Hemisphere and central Antarctica over the past 350 years

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

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

Room: 33

Chairperson: Roberto Deidda

- 08:30–08:45 EGU2012-1181
E. Morin
To know what we cannot know: Global mapping of minimal detectable absolute trends in annual precipitation
- 08:45–09:00 EGU2012-7261
H. J. D. Sørup, M. Sunyer, O. B. Christensen, K. Arnbjerg-Nielsen, and P. S. Mikkelsen
Extreme and mean rainfall differences in observational data used as reference in climate studies
- 09:00–09:15 EGU2012-4866
V. Thiemeig, R. Rojas, V. Levizzani, and A. De Roo
Validation of satellite-based precipitation estimates over different African River Basins
- 09:15–09:30 EGU2012-8989
R. Roca, P. Chambon, I. Jobard, and N. Viltard
Investigating the error budget of tropical rainfall accumulations derived from combined passive microwave and infrared satellite measurements
- 09:30–09:45 EGU2012-9730
T. Bellerby
Ensemble conditional precipitation simulation from spatiotemporally heterogeneous multiplatform satellite data sets.
- 09:45–10:00 EGU2012-1400
S. Dance and A. Seed
Characterizing Radar Rain gauge Errors for NWP Assimilation

COFFEE BREAK

Chairperson: Tim Bellerby

- 10:30–10:45 EGU2012-8146
M.A. Sunyer, H.J.D. Sørup, H. Madsen, D. Rosbjerg, and K. Arnbjerg-Nielsen
Comparing Regional Climate Model output to observational data sets for extreme rainfall
- 10:45–11:00 EGU2012-8780
S.C. van Pelt, J.J. Beersma, T.A. Buishand, B.J.J.M. van den Hurk, and P. Kabat
Evaluation of the probability distribution of the future change in extreme precipitation

- 11:00–11:15 EGU2012-2728
G.G.S. Pegram and A. Bárdossy
Multiscale spatial recorrelation of RCM precipitation downscaling to correct predictions over large areas and small
- 11:15–11:30 EGU2012-1280
J. Chen, F. Brissette, and D. Chaumont
Uncertainty of empirical downscaling methods in quantifying the hydrological impact of climate change
- 11:30–11:45 EGU2012-13756
F.S. Mpelasoka, S. Charles, F.H. Chiew, G. Fu, and S. Beecham
Assessment of CMIP5 GCM daily predictor variables for statistical downscaling
- 11:45–12:00 EGU2012-8150
G. Mascaro, R. Deidda, and M. Hellies
Robust characterization of rainfall intermittency in Sardinia and identification of physical controls

LUNCH BREAK

Chairperson: Andreas Langousis

- 13:30–13:45 EGU2012-8190
G.T. Diro, A.M. Tompkins, and X. Bi
Dynamical downscaling of ECMWF ensemble seasonal forecast over East Africa with RegCM3
- 13:45–14:00 EGU2012-8417
A. Champion, K. Hodges, and L. Bengtsson
Dynamically Downscaling Precipitation from Extra-Tropical Cyclones
- 14:00–14:15 EGU2012-13440
E. Brisson, N.P.M. van Lipzig, and M. Demuzere
Downscaling precipitation at convection resolving scale using COSMO-CLM.
- 14:15–14:30 EGU2012-4684
A. Sharma, F. Woldemeskel, R. Mehrotra, and B. Sivakumar
An error model for GCM precipitation and temperature simulations
- 14:30–14:45 EGU2012-13531
F Wetterhall, H. L. Cloke, Y He, J Freer, and F Pappenberger
Modelling climate impact on floods under future emission scenarios using an ensemble of climate model projections
- 14:45–15:00 EGU2012-2478
P. Horton, M. Jaboyedoff, and C. Obled
Calibration of the analogue method for precipitation forecasting by means of genetic algorithms

Chairperson: Stefanie Vogl

- 15:30–15:45 EGU2012-12765
H. W. Rust, M. Vrac, M. Lengaigne, and B. Sultan
Towards downscaling precipitation for Senegal - An approach based on generalized linear models and weather types
- 15:45–16:00 EGU2012-5863
M. Milan and C. Simmer
A Sequential Ensemble Prediction System at Convection Permitting Scales
- 16:00–16:15 EGU2012-10486
A. F. Prein, A. Gobiet, M. Suklitsch, H. Truhetz, N. K. Awan, K. Keuler, and G. Georgievski
Added Value of Convection Resolving Climate Simulations
- 16:15–16:30 EGU2012-2843
D. Cane, S. Barbarino, L. Renier, and C. Ronchi
Regional Climate Models Downscaling in the Alpine Area with Multimodel SuperEnsemble
- 16:30–16:45 EGU2012-9829
S. Vogl, P. Laux, **W. Qiu**, G. Mao, and H. Kunstmann
Copula-based assimilation of radar and gauge information to derive bias corrected precipitation fields
- 16:45–17:00 EGU2012-10864
N. Addor, N. Salzmänn, T. Ewen, and J. Seibert
Bias-correction conditioned on circulation patterns for ENSEMBLES precipitation simulations in mountainous regions

AS3.4 – Cloud-Aerosol-Precipitation Interactions – Orals

Convener: A. Ekman | Co-Conveners: S. van den Heever, W.-K. Tao

Room: 10

Chairperson: Sue Van den Heever

- 13:30–13:45 EGU2012-1452
C. Wang
Impact of aerosols on precipitation: A review of large-scale modeling and model-observation comparison studies
- 13:45–14:00 EGU2012-6449
H. Morrison and W. W. Grabowski
Large-scale thermodynamic and dynamic controls on aerosol-induced invigoration of tropical deep convection
- 14:00–14:15 EGU2012-3147
D. Jarecka, W. W. Grabowski, H. Pawlowska, and H. Morrison
Homogeneity of subgrid-scale turbulent mixing in a large-eddy simulation of boundary-layer clouds
- 14:15–14:30 EGU2012-3105
H. Vogel, M. Bangert, B. Vogel, D. Barahona, A. Nenes, and J. Foerstner
Impact of the Eyjafjallajökull plume on cloud formation
- 14:30–14:45 EGU2012-7941
D. Rosenfeld and H. Wang
The roles of cloud drop effective radius and LWP in determining rain properties
- 14:45–15:00 EGU2012-10215
D. G. Partridge, P. Tunved, J. A. Vrugt, A. Sorooshian, A. M. L. Ekman, G.-J. Roelofs, and H. Jonsson
A study of marine stratocumulus clouds using an inverse modelling approach
- Chairperson: Wei-Kuo Tao
- 15:30–15:45 EGU2012-11642
R. E. L. West, P. Stier, A. Jones, C. E. Johnson, G. W. Mann, Z. Kipling, N. Bellouin, and R. G. Grainger
The impact of vertical velocity variability on indirect aerosol radiative effects in the HadGEM-UKCA aerosol-chemistry climate model
- 15:45–16:00 EGU2012-12288
Z Li
Impact of Aerosols on Cloud and Precipitation: A Review of Observational Evidences
- 16:00–16:15 EGU2012-9682
Ø. Seland, T. Iversen, and A. Kirkevåg
Aerosols-cloud-climate -interactions in the Norwegian Earth System Model (NorESM). Importance of biogenic particles for cloud properties and anthropogenic indirect effect.
- 16:15–16:30 EGU2012-9403
L. Riuttanen, M. Bister, V. John, M. Dal Maso, G. de Leeuw, and M. Kulmala
Effect of aerosol particles on relative humidity in the upper troposphere
- 16:30–16:45 EGU2012-9548
M. Komppula, S. Romakkaniemi, H. Portin, A. Leskinen, D. Brus, K. Neitola, A.-P. Hyvärinen, A. Kortelainen, L.Q. Hao, P. Miettinen, A. Jaatinen, I. Ahmad, H. Lihavainen, A. Laaksonen, and K.E.J. Lehtinen
Aerosol-Cloud Interactions During Puijo Cloud Experiments
- 16:45–17:00 EGU2012-13316
M. Khairoutdinov and C.-E. Yang
Cloud-Resolving Modeling Study of Aerosol Indirect Effects in Radiative Convective Equilibrium with Interactive and Fixed Sea Surface Temperature

AS3.4 – Cloud-Aerosol-Precipitation Interactions – Posters

Convener: A. Ekman | Co-Conveners: S. van den Heever, W.-K. Tao

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Annica Ekman

- XY92 EGU2012-763
D. Santos, M. J. Costa, A. M. Silva, and R. Salgado
Cloud and Saharan Desert Dust Aerosol Radiative Effects - A comparison between regional modelling and remote sensing measurements
- XY93 EGU2012-2964
E. M. Zubler, U. Lohmann, D. Lüthi, and C. Schär
Intercomparison of aerosol climatologies for use in a regional climate model over Europe
- XY94 EGU2012-3349
S. Y. Bae, R. J. Park, K.-S. Lim, and S.-Y. Hong
Simulated weekly variability of precipitation with the effect of aerosols on cloud microphysics

- XY95 EGU2012-3788
M.-A. Courty, M. Vaillant, and R. Benoit
Possible interaction of meteor explosion with stratospheric aerosols on cloud nucleation based on 2011 observations.
- XY96 EGU2012-4271
C. Planche, **J. H. Marsham**, D. J. Parker, K. Carslaw, G. Mann, A. M. Blyth, P. Field, B. Shipway, A. Hill, M. Salvi, and J. Wilkinson
AeroSol Cloud Interactions in UK weather (ASCI)
- XY97 EGU2012-4540
K.-S. S. Lim and S.-Y. Hong
Investigation of aerosol indirect effects on simulated moist convections using the double-moment bulk microphysics scheme
- XY98 EGU2012-5078
S. K. Das and J. P. Chen
Investigation of aerosol effects on rain drop size distribution
- XY99 EGU2012-6544
R. Mashayekhi and J. J. Sloan
Investigation of aerosol-precipitation interactions in North-Eastern North America
- XY100 EGU2012-7365
A. Lewinschal, **A.M.L. Ekman**, and H. Körnich
The role of precipitation in aerosol-induced changes in northern hemisphere wintertime stationary waves
- XY101 EGU2012-7983
M. K. Sporre, E. Swietlicki, P. Glantz, and M. Kulmala
A study of how aerosols affect low-level clouds over the Nordic Countries using MODIS, ground-based, ECMWF and weather radar data.
- XY102 EGU2012-8392
A. Chatterjee, S.K. Das, S.K. Ghosh, and S. Raha
Wet scavenging of black carbon and sulphate depends on the nature of the rain; effect on the climate and global change
- XY103 EGU2012-5340
V. Sant, A. Seifert, R. Posselt, and U. Lohmann
Towards improving the formation of drizzle in marine stratiform clouds
- XY104 EGU2012-8946
K. Lonitz and B. Stevens
Aerosol influences on the radar signature of shallow maritime cumulus convection
- XY105 EGU2012-9208
T. Bergman, H. Korhonen, M. Zubair, S. Romakkaniemi, K. Lehtinen, and H. Kokkola
Aerosol cloud processing with the global model ECHAM5-HAM-SALSA
- XY106 EGU2012-10616
N. Zikova and V. Zdimal
Relative humidity, precipitation and fog influence on SMPS spectra
- XY107 EGU2012-2164
W.-K. Tao, J.-P. Chen, Z. Li, C. Wang, and C. Zhang
Impact of Aerosols on Convective Clouds and Precipitation
- XY108 EGU2012-11626
S.C. van den Heever
Aerosol Indirect Forcing of Deep Convective Storm Dynamics
- XY109 EGU2012-5639
YF Cheng, C Wei, P Marrupu, P Saide, S Kulkarni, Q Zhang, DG Streets, H Su, A Wiedensohler, and GR Carmichael
Impacts of Emission Controls and Perturbations on an Intense Convective Precipitation Event during the 2008 Beijing Olympic Games

AS3.7 – Air Pollution Modelling – Orals

Convener: J. Brandt | Co-Conveners: J.D. Silver, H. Fagerli

Room: 10

Chairperson: J. Brandt, J. D. Silver, H. Fagerli

- 08:30–08:45 EGU2012-3093
P. Messina, S. Turquety, S. Stromatas, L. Menut, A. Anav, P-F. Coheur, Y. R'honi, B. Bessagnet, and C. Clerbaux
Fire emissions in Euro-Mediterranean area: evaluation of the impact on trace gases composition using satellite and surface observations

- 08:45–09:00 EGU2012-11591
N. Blond, B. Q. Ho, and A. Clappier
 Fast and optimized methodology to generate road traffic emission inventories and their uncertainties
- 09:00–09:15 EGU2012-59
C. Fountoukis, I. Riipinen, H. Denier van der Gon, P.E. Charalampidis, C. Pilinis, and S.N. Pandis
 Simulating ultrafine particle formation in Europe using a regional CTM: Contribution of primary emissions versus secondary formation to aerosol number concentrations
- 09:15–09:30 EGU2012-11271
M. Schaap, C. Hendriks, R. Kranenburg, J. Kuenen, and H. Denier van der Gon
 Establishing the origin of particulate matter in the Netherlands using LOTOS-EUROS
- 09:30–09:45 EGU2012-12915
A. Hodzic and D. gochis
 WRF/Chem model analyses of the BEACHON-ROMBAS 2011 field study
- 09:45–10:00 EGU2012-1157
A. Stohl, P. Seibert, G. Wotawa, D. Arnold, J. F. Burkhart, S. Eckhardt, C. Tapia, A. Vargas, and T. J. Yasunari
 Xenon-133 and caesium-137 releases into the atmosphere from the Fukushima Dai-ichi nuclear power plant: determination of the source term, atmospheric dispersion, and deposition

COFFEE BREAK

Chairperson: J. D. Silver, J. Brandt, H. Fagerli

- 10:30–10:45 EGU2012-2701
L. Campo, S. Salvadori, and S. Maltagliati
 Enhanced numerical simulation of high resolution wind field and pollutants dispersion
- 10:45–11:00 EGU2012-12095
C. Bergemann, J. Meyer-Arnek, and T. Erbertseder
 Which boundary species are required? An evolutionary evaluation
- 11:00–11:15 EGU2012-8637
R. Schrödner, R. Wolke, and A. Tilgner
 Regional modelling of the tropospheric multiphase system using COSMO-MUSCAT
- 11:15–11:30 EGU2012-1161
L. P. Nieradzik and H. Elbern
 Four dimensional variational assimilation of in-situ and remote-sensing aerosol data
- 11:30–11:45 EGU2012-12805
H. Eskes, L. Curier, and A. Segers
 Assimilation of surface and satellite observations with the Lotos-Euros air quality model and the ensemble Kalman filter technique
- 11:45–12:00 EGU2012-6692
E. Kaas, B. Sørensen, A. B. Hansen, J. H. Christensen, J. Brandt, P. H. Lauritzen, and P. Tarning-Andersen
 Recent numerical developments for solving continuity equations in ACT models

AS3.7 – Air Pollution Modelling – Posters

Convener: J. Brandt | Co-Conveners: J.D. Silver, H. Fagerli

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: J. Brandt, J. D. Silver, H. Fagerli

- XY110 EGU2012-4
X. Tang, J. Zhu, Z. F. Wang, and A. Gbaguidi
 Improvement of ozone forecast over Beijing based on ensemble Kalman filter with simultaneous adjustment of initial conditions and emissions
- XY111 EGU2012-60
C. Fountoukis, A. Megaritis, P.E. Charalampidis, H.D. van der Gon, C. Pilinis, and S.N. Pandis
 Simulating Organic Aerosol over Europe: Concentration, Chemical Composition and Sources
- XY112 EGU2012-478
A. Revokatova, G. Surkova, A. Kirsanov, and G. Rivin
 Possibilities of short-term forecast of air pollutants' concentrations over the Moscow region
- XY113 EGU2012-798
R. P. Fernandez, P. G. Cremades, G. Lakkis, D. G. Allende, R. Santos, and S. E. Puliafito
 Modelling of a Zonda wind event in a complex terrain region using WRF

- XY114 EGU2012-1406
Y. Wang, K.N. Sartelet, M. Bocquet, and P. Chazette
Assimilation of surface versus lidar observations for PM10 forecasting
- XY115 EGU2012-2256
V. Sicardi, G. Arevalo, S. Gassó, and JM Baldasano
Spatial and temporal bias correction to enhance air quality forecast over Spain
- XY116 EGU2012-2732
R. Pilon and **P. Heinrich**
Transport and scavenging in deep convective clouds: feedback on parameterization
- XY117 EGU2012-3140
C. Wainwright, **J.R Pierce**, J. Liggio, K. Strawbridge, A.M. Macdonald, and R. Leaitch
The effect of model spatial resolution on Secondary Organic Aerosol predictions
- XY118 EGU2012-4065
N. Veldeman, P. Viaene, K. De Ridder, W. Peelaerts, D. Lauwaet, N. Muhammad, and L. Blyth
Urban Air Quality Modelling with AURORA: Prague and Bratislava
- XY119 EGU2012-4922
S. Massart, **J. Flemming**, and D. Cariolle
Global modelling of the carbon monoxide at a regional scale resolution with the ECWMF's Integrated Forecast System
- XY120 EGU2012-5697
T. Klein, J. Langner, M. Engardt, S. Andersson, and L. Robertson
Operational air quality forecasting in Sweden - recent developments
- XY121 EGU2012-6136
A. Waked, C. Afif, and C. Seigneur
A modelling study of air pollution in Beirut city for the summer of 2011.
- XY122 EGU2012-7065
D. Kunkel, J. Lelieveld, and M.G. Lawrence
Global risk of radioactive fallout after nuclear reactor accidents
- XY123 EGU2012-7253
J. Brandt, J. D. Silver, L. M. Frohn, C. Geels, A. Gross, A. B. Hansen, K. M. Hansen, G. B. Hedegaard, C. A. Skjøth, H. Villadsen, A. Zare, and J. H. Christensen
An integrated model study for Europe and North America using the Danish Eulerian Hemispheric Model with focus on intercontinental transport of air pollution
- XY124 EGU2012-7254
O. Stein, M.G. Schultz, I. Bouarar, H. Clark, E. Katragkou, J. Leitao, and A. Heil
Model sensitivity to MACC anthropogenic and biogenic emissions: Global simulations and evaluation for reactive gases
- XY125 EGU2012-7370
I.B. Konovalov, M. Beekmann, B. D'Anna, and C. George
Heterogeneous reactions on biomass burning aerosol: the case study of the 2010 mega fire event in Russia
- XY126 EGU2012-7749
J. Struzewska, J.W. Kaminski, and P. Durka
Operational evaluation of a high resolution air quality forecast over Southern Poland
- XY127 EGU2012-9022
R Baró, JA García Valero, JJ Gómez-Navarro, R Lorente-Plazas, JP Montávez, and P Jiménez-Guerrero
Characterizing extreme air pollution events over the Iberian Peninsula by establishing the Circulation Types
- XY128 EGU2012-10494
G. Wotawa and P. Skomorowski
Long-range transport of particulate radionuclides from the Fukushima NPP accident: sensitivity analysis for wet deposition
- XY129 EGU2012-10838
A.M. Blechschmidt, J.E. Kristjánsson, **H. Ólafsson**, J.F. Burkhart, and Ø. Hodnebrog
Aircraft-based observations and high-resolution simulations of a dust storm in Iceland
- XY130 EGU2012-11464
A. Pauling, K. Zink, H. Vogel, and B. Vogel
The numerical pollen dispersion model COSMO-ART: model design and operational use at MeteoSwiss
- XY131 EGU2012-11467
L. Smoydzin and J. Lelieveld
Ozone pollution over the Arabian Gulf - impact of meteorological condition
- XY132 EGU2012-11751
L. Girault, Y. Roustan, and C. Seigneur
Air quality modelling : effects of emission reductions on concentrations of particulate matter
- XY133 EGU2012-11925
Á. Leelössy, I. Lagzi, and R. Mészáros
Sensitivity study of OpenFOAM model for local scale atmospheric dispersion simulations

- XY134 EGU2012-12068
Z. Radonjic, D Chambers, B Telenta, and Z Janjic
 Real Time Air Quality Forecasting System for a Large Industrial Facility
- XY135 EGU2012-12103
J.D. Silver, J. Brandt, and J.H. Christensen
 Initial results of an ensemble data assimilation system for a hemispheric air quality model
- XY136 EGU2012-12171
J. Browse, K.S. Carslaw, S. Arnold, K. Pringle, and O. Boucher
 The scavenging processes controlling the seasonal cycle in Arctic sulphate and black carbon aerosol
- XY137 EGU2012-13448
R. Duro and M. J. Pereira
 MLP based models to predict PM10, O3 concentrations, in Sines industrial area
- XY138 EGU2012-13540
U. Kumar, K. De Ridder, W. Lefebvre, and S Janssen
 A Stochastic Deterministic Air Quality Forecasting System : Combining Time Series Models with Data-Assimilation

AS3.9 – Polar Ozone and Polar Stratospheric Clouds – Orals

Convener: G. O. Braathen | Co-Conveners: F. Khosrawi, B.-M. Sinnhuber, M. von Hobe, M. C. Pitts

Room: 11

Chairperson: Michael Pitts, Farahnaz Khosrawi

- 08:30–08:45 EGU2012-12125
M. C. Pitts, L. R. Poole, M. Höpfner, L. W. Thomason, S. Kellmann, and T. von Clarmann
 Investigation of PSC Processes During the 2010-2011 Arctic Winter
- 08:45–09:00 EGU2012-4382
J.-P. Pommereau, A. Pazmino, F. Goutail, and A. Garnier
 Temperature of Polar Stratospheric Clouds formation in the Arctic and Antarctic
- 09:00–09:15 EGU2012-11490
W. Woiwode, H. Oelhaf, T. Gulde, C. Piesch, A. Ebersoldt, and J. Orphal
 FTIR Limb-Sounding in the Arctic UTLS under Cloudy Conditions: The MIPAS-STR PSC Flights during RECONCILE and ESSenCe
- 09:15–09:30 EGU2012-6893
H. Nakajima, Y. Takahashi, and M. C. Pitts
 Relationship between PSC types and ozone destruction quantified from CALIPSO and MLS data
- 09:30–09:45 EGU2012-10279
S. Viscardi, Q. Errera, M. C. Pitts, and F. Daerden
 A 3D-CTM with detailed online PSC microphysics: Heterogeneous chemistry and comparison with CALIPSO satellite observations during Antarctic winters
- 09:45–10:00 EGU2012-706
I. Fiorucci, G. Muscari, P. P. Bertagnolio, C. Di Biagio, P. Eriksen, and R. L. de Zafra
 Polar vortex dynamics observed by means of stratospheric and mesospheric CO ground-based measurements carried out at Thule (76.5°N, 68.8°W), Greenland

COFFEE BREAK

Chairperson: Geir Braathen, Bjoern-Martin Sinnhuber

- 10:30–10:45 EGU2012-6148
G. Milinevsky, O. Evtushevsky, and V. Kravchenko
 Antarctic spring total ozone response to the sea surface temperature variations in the Tropical Pacific
- 10:45–11:00 EGU2012-9838
U. Cortesi, S. Del Bianco, B.M. Dinelli, E. Castelli, D. Gerber, H. Oelhaf, and W. Woiwode
 Investigation of the Arctic upper troposphere and lower stratosphere by mm-wave and infrared limb sounding during the PremierEx campaign
- 11:00–11:15 EGU2012-8030
M. von Hobe, O. Sumi?ska-Ebersoldt, C. Emde, and F. Stroh
 How well can we quantify the actinic flux driving catalytic ozone chemistry at high solar zenith angles?
- 11:15–11:30 EGU2012-4179
G. Wetzel, H. Oelhaf, F. Friedl-Vallon, O. Kirner, A. Kleinert, G. Maucher, H. Nordmeyer, J. Orphal, and R. Ruhnke
 Diurnal variations of reactive chlorine and nitrogen oxides observed by MIPAS-B in the Arctic in January 2010 and March 2011

- 11:30–11:45 EGU2012-689
PP Bertagnolio, G. Muscari, I. Fiorucci, and M. Mari
 Introducing VESPA-22: a ground-based microwave spectrometer for measuring middle atmospheric water vapour at polar latitudes
- 11:45–12:00 EGU2012-9626
E. Hösen, C.M. Volk, M. vom Scheidt, J. Wintel, A. Ulanovsky, F. Ravegnani, J.U. Grooß, G. Günther, and K.A. Walker
 Transport, mixing and ozone loss in the 2010 Arctic vortex region from in-situ tracer observations during RECONCILE

AS3.9 – Polar Ozone and Polar Stratospheric Clouds – Posters

Convener: G. O. Braathen | Co-Conveners: F. Khosrawi, B.-M. Sinnhuber, M. von Hobe, M. C. Pitts

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Marc von Hobe

- XY139 EGU2012-1419
P. Krizan and W. Gengchen
 Vertical dependence of yearly course of ozone concentration at the European and Asian ozonsonde stations.
- XY140 EGU2012-3151
S. Kühl, J. Pukite, S. Dörner, P. Jöckel, O. Kirner, and T. Wagner
 Satellite observations of OCIO from 1995 to 2011 in comparison to ECMWF data and EMAC simulations
- XY141 EGU2012-3589
P. Achtert, F. Khosrawi, and J. Gumbel
 Comparison of PSC classification schemes from lidar measurements
- XY142 EGU2012-4168
F. Khosrawi, J. Urban, M. C. Pitts, P. Voelger, P. Achtert, M. L. Santee, G. L. Manney, and D. Murtagh
 Arctic winter 2009/2010 and 2010/2011 in comparison: Denitrification and polar stratospheric cloud formation
- XY143 EGU2012-4781
D. Shepelev, V. Dorokhov, V. Yushkov, A. Makshtas, F. Goutail, J.-P. Pommereau, and A. Pazmino
 Total ozone and NO₂ observations in Anadyr (64.5N, 177.3E), Russia in 2011
- XY144 EGU2012-5212
G. O. Braathen and the O3-Hole-Team Team
 Observations of the Antarctic Ozone Hole from 2003 to 2011
- XY145 EGU2012-6478
H.E. Rieder and L.M. Polvani
 Recent, unprecedented, arctic ozone losses: climate change or large interannual variability?
- XY146 EGU2012-7618
P E Huck, G E Bodeker, S Kremser, M Rex, M L Santee, M Meinshausen, and A J McDonald
 When will the global ozone layer recover? A semi-empirical approach
- XY147 EGU2012-8769
M. Gu, C.-F. Enell, J. Pukite, S. Kühl, U. Platt, U. Raffalski, and T. Wagner
 Seasonal variation of stratospheric BrO and NO₂ derived from ground based measurements during 1997-2009 in Kiruna, Sweden
- XY148 EGU2012-8918
S. Bötzel, M. Weber, A. Rozanov, and J.P. Burrows
 SCIAMACHY nadir ozone profiles over Antarctica in comparison with limb measurements
- XY149 EGU2012-10152
 J. Ungermann, T. Guggenmoser, C. Kalicinsky, and **M. Riese**
 CRISTA-NF measurements with unprecedented vertical resolution made during the RECONCILE aircraft campaign
- XY150 EGU2012-12752
T. Wegner, S. Solomon, D. Kinnison, R. Garcia, and S. Madronich
 Polar Stratospheric Clouds in SD-WACCM4
- XY151 EGU2012-1674
F. Goutail, F. Lefevre, J.P. Pommereau, A. Pazmino, M. Chipperfield, W. Feng, M. Van Roozendaal, P. Eriksen, K. Stebel, V. Dorokhov, E. Kyrö, X. Zhao, and K. Strong
 Total ozone loss during the 2011/12 Arctic winter and comparison to previous years
- XY152 EGU2012-9721
J. Jumelet, P. Keckhut, S. Bekki, and J.P. Vernier
 Coupling groundbased ALOMAR lidar measurements to high resolution global modelling and CALIPSO backscatter assimilation to characterize aerosol properties in the Arctic.

- XY153 EGU2012-5804
R Hommel, K-U Eichmann, C von Savigny, M Weber, A Rozanov, A Richter, K Bramstedt, F Wittrock, S Noel, J Aschmann, J P Burrows, H F Graf, and F Khosrawi
 The Arctic winter 2010/11 as observed by GOME-2 and SCIAMACHY and its relation to dominant modes of interannual climate variability
- XY154 EGU2012-9423
F. Heinecke, A. Afchine, M. von Hobe, A. Richter, A. Schönfeld, C. Steinert, O. Suminska, V. Tan, and F. Stroh
 In-Situ Measurements of BrO in the early 2011/2012 Arctic Polar Vortex

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

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

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

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

- A191 EGU2012-5644
D. Long and M. Collins
 Hydrological Response Under CO2 Forcing: A Process Based Assessment of CMIP5 models.
- A192 EGU2012-1015
R. Payano Almánzar
 The Influence of Climate Change on the Hydraulic Heritage
- A193 EGU2012-1798
K. Haslinger, B. Chimani, and R. Böhm
 200 years of liquid and solid precipitation in major river systems originating in the Greater Alpine Region
- A194 EGU2012-6485
I. Mares, C. Mares, A. Stanciu, and M. Mihailescu
 On the changes in the precipitation in the middle and lower Danube basin under the NAO influence
- A195 EGU2012-4680
 S. Giannoulis, **C. Ioannou**, E. Karantinos, L. Malatesta, G. Theodoropoulos, G. Tsekouras, A. Venediki, P. Dimitriadis, S.M. Papalexiou, and D. Koutsoyiannis
 Long term properties of monthly atmospheric pressure fields
- A196 EGU2012-4037
E. Maeda and G. Naumann
 Relationship between monthly temperature anomalies and drought frequency
- A197 EGU2012-7566
M. Biabanaki, S.S. Eslamian, J. Abedi-Koupai, J. Cañón, and G. Boni
 The SPI index in west Iran associated to PDO signal
- A198 EGU2012-7758
V. Potop, C. Boronean?, P. Stepanek, P. Skalak, and M. Mozný
 Projected changes in the evolution of drought assessed with the SPEI over the Czech Republic
- A199 EGU2012-9937
A. Bichet, M. Wild, D. Folini, and C. Schär
 Causes for the late 19th century European floods, as simulated in ECHAM5-HAM
- A200 EGU2012-11089
J. Liebert, D. Duthmann, P. Berg, H. Feldmann, J. Ihringer, H. Kunstmann, B. Merz, I. Ott, G. Schädler, and S. Wagner
 Uncertainties in discharge projections in consequence of climate change
- A201 EGU2012-12181
Y. Markonis, P. Kossieris, A. Lykou, and D. Koutsoyiannis
 Effects of Medieval Warm Period and Little Ice Age on the hydrology of Mediterranean region
- A202 EGU2012-14354
A.A. Carsteanu, I.A. Berdeja-Sotelo, and J.J. Castro
 Hydrological aspects of climatic-scale variations in Mexico
- A203 EGU2012-2434
C. L. Liu and R.P. Allan
 Precipitation changes from dynamic and thermodynamic processes
- A204 EGU2012-2436
M. Zahn and R.P. Allan
 Past and future changes of the tropical atmospheric circulation and associated moisture transports
- A205 EGU2012-10300
M. Naranjo and C. Tortajada
 Climate change and its impact on water infrastructure: the case of Alcala de Henares (Spain) and Mexico City (Mexico)

- A206 EGU2012-2079
L. Wang, P.H.A.J.M. Van Gelder, and J.K. Vrijling
A preliminary analysis of climate change effect on long-term risk-based design of flood defense
- A207 EGU2012-72
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Rainfall water and climatic changes in Syria-remote sensing applications
- A208 EGU2012-14399
M. Siena, A. Guadagnini, **M. Riva**, and S.P. Neuman
A Theoretical Model of Extended Power-Law Scaling
- A209 EGU2012-9606
A. Christofides and D. Koutsoyiannis
A toy model of a climate system with multiyear temperature variability produced by constant radiation forcing
- A210 EGU2012-1556
T Leon Gross and JD Ruiz Sinoga
Social perception of droughts in the mass media (southern Spain)
- A211 EGU2012-5309
M. E. Topa, F. De Paola, M. Giugni, W. Kombe, and H. Touré
Probability density function (Pdf) of daily rainfall depths by means of superstatistics of hydro-climatic fluctuations for African test cities
- A212 EGU2012-9360
M. M. Kvalevag, B. H. Samset, and G. Myhre
Hydrological sensitivity and global temperature change to greenhouse gases and aerosols in CESM

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

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

Room: 13

Chairperson: n.n.

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

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

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

Hall Z | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: n.n.

- Z64 EGU2012-187
S. Polanski, F. Hanf, D. Befort, F. Menzel, U. Cubasch, and G.C. Leckebusch
Indian Summer Monsoon Variability and its Physical Mechanisms in the last Millennium
- Z65 EGU2012-2480
J. Schewe, A. Levermann, and H. Cheng
A critical humidity threshold for monsoon transitions

- Z66 EGU2012-5777
K. Rehfeld, N. Marwan, S. Breitenbach, and J. Kurths
Holocene monsoon variability as resolved in small complex networks from palaeodata
- Z67 EGU2012-9974
S. Wild, G.C. Leckebusch, D.J. Befort, and U. Cubasch
South Asian Monsoon Variability and its Relation to Midlatitude Teleconnections
- Z68 EGU2012-13093
M. P. Karami, A. Berger, N. Herold, and Q. Z. Yin
A climate model study of an intense Asian Monsoon in a La Niña-like climate of MIS-13
- Z69 EGU2012-227
S. P. Prizomwala, N. Bhatt, A. M. Hirt, and W. Winkler
High Resolution Mid to Late Holocene Paleoclimatic Reconstruction from the Mudflats of Gulf of Kachchh Coast, Western India
- Z70 EGU2012-701
F. A. Lechleitner, S. F. M. Breitenbach, H. Cheng, J. F. Adkins, B. Plessen, and G. H. Haug
The last deglaciation in NE India reconstructed from a stalagmite from Mawmluh cave
- Z71 EGU2012-927
Y Dixit, DA Hodell, and CA Petrie
Holocene monsoon variability inferred from palaeolake sediments in NW India.
- Z72 EGU2012-2018
S. Prasad, N Basavaiah, A Anoop, B Plessen, P Menzel, B Gaye, A Brauer, M Wiesner, R Naumann, and N Nowaczyk
Holocene climate variability inferred from geochemical proxies in monsoonal Central India
- Z73 EGU2012-4170
A. Böll and B. Gaye
A high resolution 2000 year record of monsoon variability in the Arabian Sea
- Z74 EGU2012-4206
P. Menzel, B. Gaye, M. Wiesner, S. Prasad, N. Basavaiah, M. Stebich, A. Anoop, N. Riedel, and A. Brauer
Indications of human activity from amino acid and amino sugar analyses on Holocene sediments from lake Lonar, central India
- Z75 EGU2012-4831
A. Dallmeyer, M. Claussen, Y. Wang, and U. Herzschuh
Spatial differences in the Holocene precipitation change within the Asian monsoon region - a model data comparison
- Z76 EGU2012-5238
A.T. Gurlan, C. Chauvel, and C. Voisin
ÉNd IN SEAWATER RECORDS OCEAN TEMPERATURE CHANGES WITH A TIME DELAY
- Z77 EGU2012-6648
A. Anoop, S. Prasad, R. Krishnan, R. Naumann, P. Dulski, S. Gärber, N. Basavaiah, K. Deenadayalan, and A. Brauer
Extreme events and spatiotemporal changes in the westerlies and Indian summer monsoon during the early-mid Holocene in NW Himalayas
- Z78 EGU2012-6660
X. Huang, H. Oberhänsli, M. Mathis, **S. Prasad**, and H. von Suchodoletz
A Holocene lacustrine record of Lake Sonkul: hydro-climatic changes in central Asia and possible interactions between westerlies and Asian monsoon
- Z79 EGU2012-8116
W.E. Piller, M. Reuter, A.K. Kern, and M. Harzhauser
Miocene climate seasonality in southern India - first direct evidence for a weak Indian monsoon during the Middle Miocene Climate Optimum
- Z80 EGU2012-12692
M. Zech, M. Tuthorn, R. Zech, F. Schlütz, W. Zech, and B. Glaser
A 16 ka lacustrine 18O record from High Himalaya reflecting the Indian Monsoon variability

OS1.2 – The North Atlantic: natural variability and global change (co-listed) – Posters

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

Hall X/Y | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: Reiner Steinfeldt

- XY311 EGU2012-1052
L.I. Carracedo, M. García, H. Mercier, P. Conde, P. Lherminier, F.F. Pérez, and M. Gilcoto
Interannual variability of water masses transports across A25-OVIDE section (subpolar atlantic gyre)

- XY312 EGU2012-1069
A.E. Vyazilova and A.V. Smirnov
Links between thermohaline anomalies in Northwest Atlantic and Nordic Seas
- XY313 EGU2012-5128
C. Denker, D. Kieke, B. Klein, H. Klein, and M. Rhein
Water mass properties on their way over the Mid-Atlantic-Ridge through the Faraday Fracture Zone
- XY314 EGU2012-4363
A. Smirnov and A. Korablev
Structure and long-term variability of oceanographic characteristics in the Nordic Seas derived from observed and gridded (DIVA software) datasets
- XY315 EGU2012-5810
A. Rubchenia, A. Popov, A. Fedorova, and N. Lebedev
Interpretation of time series (salinity and temperature) layers in North Atlantic from 1950 to 2011
- XY316 EGU2012-5570
E. Tzortzi, C.P. Gommenginger, S. Josey, and M.A. Srokosz
How does surface salinity and rain affect the North Atlantic ocean circulation?
- XY317 EGU2012-4967
C. Mielke, E. Frajka-Williams, and J Baehr
Observed and simulated seasonal variability of the AMOC at 26°N and 41°N
- XY318 EGU2012-6122
O. Khmel'nitskaya
Using the optimum multiparameter analysis to study the water masses of the North Atlantic
- XY319 EGU2012-9770
E. Burrillon, S.S. Drijfhout, and H.A. Dijkstra
Cause and effect of variations in the sinking of deep water in the MOC
- XY320 EGU2012-12738
M.-j. Messias, A. J. Watson, P. J. Brown, and B.A. King
Evidence of Greenland Sea Water at 24 degrees N from the Greenland Sea Tracer Experiment
- XY321 EGU2012-13372
M. G. Magaldi and T. W. N. Haine
Hydrostatic and non-hydrostatic simulations of the East Greenland Spill Jet
- XY322 EGU2012-6282
L. Schneider, D. Kieke, K. Jochumsen, M. Rhein, D. Quadfasel, E. Varotsu, N. Serra, E. Colbourne, and I. Yashayaev
Export of Labrador Sea Water through Flemish Pass
- XY323 EGU2012-4708
M. Korhonen, B. Rudels, U. Schauer, S. Pisarev, B. Rabe, and A Wisotzki
Reduction of salinity and temperature observed in the Atlantic layer in the eastern Eurasian Basin of the Arctic Ocean in summer 2011
- XY324 EGU2012-5218
C. Troupin and F. Machín
Negative wind anomalies generated a diminution of productivity in the North Atlantic in 2010
- XY325 EGU2012-1953
A. Nummelin
Convection in the Greenland Sea in winter 2010-2011: Comparison between model and observations
- XY326 EGU2012-5900
N. C. Wells
MOC, Heat Storage and Surface Heat Flux in 2009/2010.
- XY327 EGU2012-2127
N. Danialt, H. Mercier, P. Lherminier, A. Sarafanov, and A. Falina
The 2002-2010 mean circulation across the Greenland to Portugal A25-OVIDE section
- XY328 EGU2012-1399
X. Zhao and J. Li
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