
EGU 2008 Meeting Programme

Nonlinear Processes in Geophysics

Monday

NP2.03 Nonlinear Dynamics of the Ocean Circulation (co-listed in OS)

Convener: Weijer, W.
Co-Convener(s): HUCK, T.
Lecture Room 25
Chairperson: HUCK, T. AND WEIJER, W.

17:30–17:45; EGU2008-A-02266; NP2.03-1MO5O-001

Dijkstra, H. A.

A normal mode perspective on ocean circulation variability (solicited)

17:45–18:00; EGU2008-A-02907; NP2.03-1MO5O-002

Hogg, A.; Berloff, P.; Dewar, W

The Turbulent Oscillator: A mechanism of low-frequency variability of the wind-driven ocean gyres (solicited)

18:00–18:15; EGU2008-A-01940; NP2.03-1MO5O-003

Chhak, K.C.; **Moore, A.M.**; Milliff, R.F.

Stochastic Forcing of Ocean Variability by the North Atlantic Oscillation

18:15–18:30; EGU2008-A-12388; NP2.03-1MO5O-004

Pierini, S.; Dijkstra, H.A.; Riccio, A.

Low-frequency variability of the Kuroshio Extension

18:30–18:45; EGU2008-A-03147; NP2.03-1MO5O-005

Frankcombe, L.; Dijkstra, H.; von der Heydt, A.

Noise induced multidecadal variability in the North Atlantic

18:45–19:00; EGU2008-A-00550; NP2.03-1MO5O-006

Waterman, S.N.; Jayne, S.R.; Hogg, N.G.

Eddy-mean flow interactions in western boundary current jets

19:00 END OF SESSION

NP2.04 Nonlinear Low-frequency Variability in Atmosphere, Ocean and the Climate System

Convener: Dethloff, K.
Co-Convener(s): Raible, C., Dijkstra, H.
Lecture Room 25
Chairperson: DIJKSTRA, H.

15:30–15:45; EGU2008-A-03398; NP2.04-1MO4O-001

Blender, R.; Fraedrich, K.

Climate variability scaling on decadal to millennial time scales in observations and simulations (solicited)

15:45–16:00; EGU2008-A-02623; NP2.04-1MO4O-002

Stendel, M.; Christensen, J.H.

Decadal-Scale Variability in Coupled AOGCM Simulations (solicited)

16:00–16:15; EGU2008-A-00947; NP2.04-1MO4O-003

Kravtsov, S.

Nonlinear mechanisms of interdecadal climate modes (solicited)

16:15–16:30; EGU2008-A-01773; NP2.04-1MO4O-004

Handorf, D.; Dethloff, K.

The atmospheric regime behaviour under future climate projections (solicited)

16:30–16:45; EGU2008-A-11326; NP2.04-1MO4O-005

Newman, D.; Bhatt, U.; Polyakov, I.; Sanchez, R.; Wackerbauer, R.

Applying a dynamical systems approach to characterize climate for physical interpretation and comparison of models to observations

16:45–17:00; EGU2008-A-11132; NP2.04-1MO4O-006

Kwasniok, F.

Regime Predictability in an Atmospheric Model or Analogue Prediction Revisited

17:00 END OF SESSION

NP3.01 Scale, scaling and nonlinear variability in aquatic sciences (co-listed in OS) – Posters

Convener: Schmitt, F.
Co-Convener(s): Nikora, V., Károlyi, G.
Display Time: Monday, 08:00–19:30

Authors in Attendance: Monday, 13:30–15:00

Poster Area Hall A

Chairperson: N.N.

A0370; EGU2008-A-03532; NP3.01-1MO3P-0370

Toorman, EA; Wiedera, P; Heredia, M; Lacor, Ch

Upscaling of bottom-generated turbulence in large-scale 3D models for sediment transport in estuaries and coastal zones

A0371; EGU2008-A-00863; NP3.01-1MO3P-0371

Sokolov, A; Khomenko, G; Chami, M

Parametrization of VSF of coastal waters based on the measurements of the Black sea.

A0372; EGU2008-A-04434; NP3.01-1MO3P-0372

Dmitriev, E.V.; Khomenko, G.; Churilova, T.Y.; Chami, M.

Parameterization of particulate and dissolved absorption coefficients for the Black sea coastal waters

A0373; EGU2008-A-09481; NP3.01-1MO3P-0373

Moison, M.; Schmitt, F.; Souissi, S.

Investigating seasonal changes of the calanoid copepod *Temora longicornis* swimming behavior using statistical analyses

A0374; EGU2008-A-09389; NP3.01-1MO3P-0374

Rauch, M.; Denis, L.; Schmitt, F.

In situ measurement of oxygen dynamic in an intertidal sandflat

A0375; EGU2008-A-12344; NP3.01-1MO3P-0375

Mahjoub, M. S.; Devreker, D.; Souissi, S.; **Schmitt, F.G.**; Hwang, J.S.

Vulnerability of the copepod *Eurytemora affinis* to a co-occurring predator from the Seine estuary: influence of light, sex, and physiological state

A0376; EGU2008-A-12342; NP3.01-1MO3P-0376

Devreker, D.; Souissi, S.; Molinero, J.C.; Nkubito, F.

Trade-offs of the copepod *Eurytemora affinis* in mega-tidal estuaries. Insights from high frequency sampling in the Seine Estuary

A0377; EGU2008-A-03309; NP3.01-1MO3P-0377

Huang, Y; **Schmitt, FG**; Lu, Z; Liu, Y

Intermittency Study of river flow fluctuations by Using Empirical Mode Decomposition and

A0378; EGU2008-A-03099; NP3.01-1MO3P-0378
Schmitt, FG; Durrieu, G.; Sow, M.; Tran, D.; Ciret, P.; Massabuau, JC.
Shot noise modelling of high frequency valvometry data in oysters

NP3.02 Scale, Scaling, nonlinear variability and turbulent structures in the atmosphere and the climate (co-listed in AS, CL & HS) – Posters

Convener: Lovejoy, S.
Co-Convener(s): Falkovich, G., Royer, J.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0379; EGU2008-A-09768; NP3.02-1MO3P-0379
Fiori, E.; Parodi, A.; Siccardi, F.
The internal energy rate of change in a deep moist convective process

A0380; EGU2008-A-04089; NP3.02-1MO3P-0380
Piotrowski, Z.P.; **Malinowski, S.P.;** Smolarkiewicz, P.K.
Numerical aspects of Thermal Convection

A0381; EGU2008-A-08996; NP3.02-1MO3P-0381
Royer, J.F.; Biau, A.; Chauvin, F.; Schertzer, D.; Lovejoy, S.; Siang-Chie, S.; Dupeuble, R.
Multifractal analysis of rainfall change in a climate scenario

A0382; EGU2008-A-04422; NP3.02-1MO3P-0382
Lovejoy, S.; Schertzer, D.; Pinel, J.; Allaire, V.
Atmospheric complexity or scale by scale simplicity?

A0383; EGU2008-A-03071; NP3.02-1MO3P-0383
Schmitt, FG
On the coupling between atmospheric and oceanic temperature time series

NP3.03 Scaling, subgrid models, downscaling and parameterization (co-listed in AS & CL) – Posters

Convener: Parlange, M.
Co-Convener(s): de Lima, I., Meneveau, C.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
Poster Area Hall A
Chairperson: DE LIMA, I.

A0384; EGU2008-A-05708; NP3.03-1MO5P-0384
Veneziano, D.; Lepore, C.; de Lima, MIP; Langousis, A.; de Lima, JLMP
Comparison of IDF estimation methods at selected locations of mainland Portugal.

A0385; EGU2008-A-06728; NP3.03-1MO5P-0385
Bou-Zeid, E.; Higgins, C.; Parlange, M.B.; Huwald, H.; Meneveau, C.
Subgrid-scale physics under strongly stable atmospheric stratification: the SnoHATS experiment

A0386; EGU2008-A-07662; NP3.03-1MO5P-0386
Nadeau, D.; Bou-Zeid, E.; Parlange, M.B.; Barrenetxea, G.; Vetterli, M.
Determination of temperature roughness length for complex urban areas with high resolution wireless meteorological stations

A0387; EGU2008-A-09867; NP3.03-1MO5P-0387
Vercauteren, N. ; Bou-Zeid, E.; Huwald, H.; Lemmin, U.; Selker, J.; Parlange, M.B.
The Lake-Atmosphere Turbulent EXchanges (LATEX) field measurement campaign

A0388; EGU2008-A-09901; NP3.03-1MO5P-0388
Huwald, H.; Higgins, C.; Lehning, M.; Selker, J. S.; Parlange, M. B.
Subsurface heat flux in the snow pack with hybrid sensor systems

A0389; EGU2008-A-10156; NP3.03-1MO5P-0389
Higgins, C.W.; Parlange, M.B.; Lehning, M.; Faure, F.; Meneveau, C.
Large Eddy Simulations of the Atmospheric Flow over the Gaudergrat Ridge

A0390; EGU2008-A-10233; NP3.03-1MO5P-0390
Lunati, I.; Parlange, M.B.; Assouline, S.; Selker, J.S.; Tyler, S.W.
Coupled energy and mass fluxes in field soils

A0391; EGU2008-A-11516; NP3.03-1MO5P-0391
Ferraris, S.; Bevilacqua, I.; Calderon Vega, F.M.; Canone, D.; Prevati, M.; Haverkamp, R.
Methodology for calculating equivalent field scale soil hydraulic system parameters taking into account hysteresis

A0392; EGU2008-A-08428; NP3.03-1MO5P-0392
Ferraris, S.; Calderón Vega, F.M.; Canone, D.; Prevati, M.; Bevilacqua, I.; Haverkamp, R.
The use of a hysteresis model for the upscaling of soil hydraulic parameters

A0393; EGU2008-A-10150; NP3.03-1MO5P-0393
Froidevaux, M.; Parlange, M. B.; Serikov, I.; Ristori, P.; Simeonov, V.; Van den Bergh, H.
A scanning Raman lidar system to measure water vapor and temperature simultaneously in the atmospheric boundary layer

A0394; EGU2008-A-10445; NP3.03-1MO5P-0394
Glazunov, A
LES of a flow past a square cylinder using localized mixed dynamic SGS model

IS40 - NP3.04/HS1.8/NH10.5 Geophysical Extremes: scaling versus nonstationarity (co-organized by NP, HS & NH, co-listed in AS) – Posters

Convener: Koutsoyiannis, D.
Co-Convener(s): Tchiguirinskaia, I., Cârsteanu, A., Langousis, A., Bunde, A.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 13:30–15:00
Poster Area Hall A
Chairperson: LANGOUSIS, A.

A0395; EGU2008-A-01298; IS40 - NP3.04/HS1.8/NH10.5-1MO3P-0395
Garcia-Marin, A. P.; Ayuso-Muñoz, J. L.; Jiménez-Hornero, F.J.
Selecting the best intensity–duration–frequency model by using the multifractal approach

A0396; EGU2008-A-00570; IS40 - NP3.04/HS1.8/NH10.5-1MO3P-0396
Mukhamejanova, S.A.; Knyazeva, I.; Karimova, L.M.
Prediction of extreme geophysical events by methods of Markovian IFS

A0397; EGU2008-A-05615; IS40 - NP3.04/HS1.8/NH10.5-1MO3P-0397
Koutsoyiannis, D.
Emergence of antipersistence and persistence from a deterministic toy model

A0398; EGU2008-A-05634; IS40 - NP3.04/HS1.8/NH10.5-1MO3P-0398

Koutsoyiannis, D.

On detectability of nonstationarity from data using statistical tools

A0399; EGU2008-A-04928; IS40 - NP3.04/HS1.8/NH10.5-1MO3P-0399

Radoane, M.; Feier, I.; Radoane, N.; Cristea, I.; Burdulea, A. Fluvial deposits and environmental history of some large Romanian rivers

A0400; EGU2008-A-00008; IS40 - NP3.04/HS1.8/NH10.5-1MO3P-0400

Salami, T.

West African weather systems in the development of tropical cyclones

IS56 - NP3.06/SM18 Dynamics of Seismicity Patterns and Earthquake Triggering (co-organised by SM & NP, co-listed in NH & TS)

Convener: Hainzl, S.

Co-Convener(s): Zoeller, G., Cocco, M., Main, I.

Lecture Room 27

Chairperson: HAINZL, S.

8:30–9:00; EGU2008-A-10879; IS56 - NP3.06/SM18-1MO1O-001

Brodsky, E. E.; Van der Elst, N.

Connecting Aftershocks and Farfield Triggering through Regional Sensitivity Measures (solicited)

9:00–9:15; EGU2008-A-03856; IS56 - NP3.06/SM18-1MO1O-002

Lombardi, A.M.; **Marzocchi, W.**

Time-dependent occurrence of large earthquakes in Italy

9:15–9:30; EGU2008-A-06285; IS56 - NP3.06/SM18-1MO1O-003

Zoeller, G.; Hainzl, S.; Holschneider, M.

Recurrence times of large earthquakes: what can be inferred from small and intermediate events?

9:30–9:45; EGU2008-A-03726; IS56 - NP3.06/SM18-1MO1O-004

Bell, A.; Main, I.

The spatiotemporal distribution of triggered earthquakes

9:45–10:00; EGU2008-A-07826; IS56 - NP3.06/SM18-1MO1O-005

Kossobokov, V.

Testing earthquake forecast/prediction methods: "Real-time forecasts of tomorrow's earthquakes in California"

10:00 COFFEE BREAK

Chairperson: ZÖLLER, G.

10:30–10:45; EGU2008-A-05624; IS56 - NP3.06/SM18-1MO2O-001

Narteau, C.; Shebalin, P.; Byrdina, S.; Schorlemmer, D.

The onset of the aftershock decay rate across different stress regimes

10:45–11:00; EGU2008-A-04845; IS56 - NP3.06/SM18-1MO2O-002

Enescu, B.; Mori, J.; Miyazawa, M.; Kano, Y.

c-values Associated with Recent Moderate Earthquakes in Japan

11:00–11:15; EGU2008-A-07334; IS56 - NP3.06/SM18-1MO2O-003

Kraft, T.; Deichmann, N.; Husen, S.; Giardini, D.; Evans, K.; Häring, M.; Schanz, U.

Seismicity induced by fluid injection for Deep Heat Mining in Basel, Switzerland

11:15–11:30; EGU2008-A-02364; IS56 - NP3.06/SM18-1MO2O-004

Chelidze, T.; Matcharashvili, T.; Khutsishvili, T.; Zhukova, N.; Mepharidze, E.

Reservoir-induced synchronization in local seismicity

11:30–11:45; EGU2008-A-10178; IS56 - NP3.06/SM18-1MO2O-005

Dahm, T.; Fischer, T.; Hainzl, S.

Mechanism of intrusions: a comparison of models with application to the earthquake swarm region in NW Bohemia

11:45–12:00; EGU2008-A-10996; IS56 - NP3.06/SM18-1MO2O-006

Schmittbuhl, J.; **Toussaint, R.;** Maloy, K.J.; Santucci, S.; Grob, M.; Doubre, C.; Van der Woerd, J.; Peltzer, G.

Velocity fluctuations of a slow crack front during slow propagation: an experimental approach, and comparison to large scale spatio temporal scaling law in fault slip dynamics

12:00 LUNCH BREAK

Chairperson: COCCO, M.

13:30–13:45; EGU2008-A-01490; IS56 - NP3.06/SM18-1MO3O-001

Chan, C.; Stein, R.; Ma, K.

Stress evolution following the 1999 Chi-Chi, Taiwan, earthquake: Consequences for afterslip, relaxation, aftershocks, and departures from Omori decay

13:45–14:00; EGU2008-A-11249; IS56 - NP3.06/SM18-1MO3O-002

Steacy, S.; Gombert, J.

Testing a rate-state model of earthquake probabilities

14:00–14:15; EGU2008-A-05464; IS56 - NP3.06/SM18-1MO3O-003

Catalli, F.; Lombardi, A.M.; Cocco, M.; Marzocchi, W.

The role of the reference seismicity rate in a rate-and-state model

14:15–14:30; EGU2008-A-09344; IS56 - NP3.06/SM18-1MO3O-004

Hainzl, S.; Enescu, B.; Wang, R.; Roth, F.

Aftershock modeling based on uncertain Coulomb stress calculations and rate-state frictional response

14:30–15:00; EGU2008-A-03098; IS56 - NP3.06/SM18-1MO3O-005

Woessner, J.; Hainzl, S.; Catalli, F.; Lombardi, A. M.; Enescu, B.; Gerstenberger, M. C.; **Wiemer, S.**

Comparative Testing of Clustered Seismicity Models on prominent Aftershock Sequences (solicited)

15:00 END OF SESSION

NP3.07 Scale, Scaling, and Nonlinearity in the Earth's Surface, Soil and Solid Earth (co-listed in GMPV, SSS & TS)

Convener: Tarquis, A.
Co-Convener(s): Crawford, J., Gaonach, H., Cheng, Q.
Lecture Room 27
Chairperson: TARQUIS, A.M. CRAWFORD, J.

15:30–15:45; EGU2008-A-02347; NP3.07-1MO4O-001
Cheng, Q.

Information integration processes and power-law models for prediction of undiscovered mineral deposits (solicited)

15:45–16:00; EGU2008-A-09140; NP3.07-1MO4O-002
Gaonach, H.; Lovejoy, S.; Carrier-Nunes, M.; Schertzer, D.; Lepine, F.
Three dimensional percolation of magmas (solicited)

16:00–16:15; EGU2008-A-02938; NP3.07-1MO4O-003
Xie, S.; Cheng, Q.; Bao, Z.; Li, B.; Fan, P.
Multifractality and Resource Potential Prediction and Environment Assessment

16:15–16:30; EGU2008-A-11019; NP3.07-1MO4O-004
Oleschko, K.; Torres-Argüelles, V.; Gaona, C.; Tarquis, A.M.
Fractal Metrology: A toolbox for qualitative and quantitative research in Earth Science (solicited)

16:30–16:45; EGU2008-A-03382; NP3.07-1MO4O-005
Lark, R.M.; Corstanje, R.; Milne, A.E.
Quantitative assessment of scale-dependence in analysis of soil data and modelling of soil processes. (solicited)

16:45–17:00; EGU2008-A-07131; NP3.07-1MO4O-006
Mikheeva, I.
Variability of soil properties at different hierarchical levels of soil cover

17:00 COFFEE BREAK

Chairperson: GAONACH, H. CHENG, Q.

17:30–17:45; EGU2008-A-02870; NP3.07-1MO5O-001
Giraldez, J.V.; Jimenez-Hornero, F.J.; Laguna, A.M.; Vanwallegem, T
Multifractal analysis of soil loss measurements

17:45–18:00; EGU2008-A-04154; NP3.07-1MO5O-002
Crawford, J.W.
Is There a Link Between Space and Time in Soil? (solicited)

18:00–18:15; EGU2008-A-08868; NP3.07-1MO5O-003
Paz Ferreira, J.; Vidal Vázquez, E.
Assessing mercury injection porosimetry curves in two soils with contrasting structural stability by the entropy dimension

18:15–18:30; EGU2008-A-10301; NP3.07-1MO5O-004
Primavera, L.; Tarquis, A. M.; De Bartolo, S.; Gaudio, R.; Veltri, M.
Assessment of multifractal spectra of river networks (solicited)

18:30–18:45; EGU2008-A-07613; NP3.07-1MO5O-005
Gloaguen, R.; Shahzad, F.; Wobbe, F.; Kaessner, A.
Quantification of tectonic deformation processes using nonlinear analysis of river systems

18:45–19:00; EGU2008-A-03945; NP3.07-1MO5O-006
Santiago, A.; **Benito, R.M.;** Cardenas, J.P.; Losada, J.C.; Tarquis, A.M.; Borondo, F.
Scaling and multiscaling of soils as heterogeneous complex networks.

19:00 END OF SESSION

IS41 - NP3.08/HS1.9 Scales and scaling in surface and subsurface hydrology (co-organized by NP & HS, co-listed in NH) – Posters

Convener: de Lima, J.
Co-Convener(s): Krajewski, W., Marani, M.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
Poster Area Hall A
Chairperson: KRAJEWSKI, W.

A0401; EGU2008-A-05238; IS41 - NP3.08/HS1.9-1MO5P-0401
Isidoro, J.; Campina, V.; **de Lima, J.**
Physical modelling of urban drainage on an area with high construction density on a 1:100 scale

A0402; EGU2008-A-05252; IS41 - NP3.08/HS1.9-1MO5P-0402
Isidoro, J.; **de Lima, J.**
Faro's urban basin flood on the 28th November 2006

A0403; EGU2008-A-10612; IS41 - NP3.08/HS1.9-1MO5P-0403
Dinis, P. A.; Cunha, P. P.; **Lima, J. P.;** Souza, C. S.; Azevedo, J. M.
Grain-size variation patterns of sediment transported by overland flow evaluated from experimental simulations of upstream and downstream moving storms

A0404; EGU2008-A-11336; IS41 - NP3.08/HS1.9-1MO5P-0404
de Lima, MIP; de Lima, JLMP; Coelho, MFES
Variability of rainfall in the Azores archipelago: its multifractal nature studied with high-resolution data

A0405; EGU2008-A-05703; IS41 - NP3.08/HS1.9-1MO5P-0405
Lepore, C.; de Lima, MIP; Veneziano, D.; Langousis, A.; de Lima, JLMP
Statistical characterization of extreme rainfall climate along the future high-speed rail track in Portugal.

A0406; EGU2008-A-05690; IS41 - NP3.08/HS1.9-1MO5P-0406
Gaal, L.; **Bara, M.;** Szolgay, J.; Kohnova, S.
Spatial variability of simple scaling properties of extreme short-term rainfall in the Western Carpathians

A0407; EGU2008-A-08630; IS41 - NP3.08/HS1.9-1MO5P-0407
Zanetti, S.; Marani, M.
Rainfall temporal downscaling and stochastic generation: scaling and non-scaling approaches

A0408; EGU2008-A-03715; IS41 - NP3.08/HS1.9-1MO5P-0408
Deasy, C.; Brazier, R.E.; Heathwaite, A.L.
Effect of scale on runoff and sediment transfers in small catchments

A0409; EGU2008-A-06157; IS41 - NP3.08/HS1.9-1MO5P-0409
de Rooij, G.H.
Upscaling of Darcy's Law in Media with Variable Porosity: a Re-examination.

A0410; EGU2008-A-11837; IS41 - NP3.08/HS1.9-1MO5P-0410
Farkas, Cs.; **Flachner, Zs.**; Bakacsi, Zs.; Hagyo, A.; Toth, E.; Szabo, J.; Nemeth, T.; Pásztor, L.
Evaluation of the soil water regime of the Hungarian Bodrogek Region at profile and sub-regional scales

A0411; EGU2008-A-09325; IS41 - NP3.08/HS1.9-1MO5P-0411
Colin, FC; **Biarnes, AB**
Multi-scale modelling approach to assess hydrological impact of weed control practices in mediterranean vinegrowing catchment

A0412; EGU2008-A-12004; IS41 - NP3.08/HS1.9-1MO5P-0412
Harmancioglu, N.B. ; Ozkul, S.D.
Assessment of global warming at basin scale

IS42 - NP3.09/CL56 Study of Climate Trends using Nonlinear and Stochastic Methods (co-organized by NP & CL, co-listed in AS) – Posters

Convener: Penland, C.
Co-Convener(s): Wang, X.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 13:30–15:00
Poster Area Hall A
Chairperson: XIAOLAN L. WANG

A0413; EGU2008-A-08828; IS42 - NP3.09/CL56-1MO3P-0413
Liebermann, R.; Rust, H. W.; Maraun, D.; Osborn, T.J.
Changes in the seasonal cycle in European temperature observations

A0414; EGU2008-A-10595; IS42 - NP3.09/CL56-1MO3P-0414
Buendía, F.; Ojeda, B.; Tarkis, A.; Buendía, G.; Andina, D.
Multiresolution study of a bi-annual rainfall time series

A0415; EGU2008-A-10783; IS42 - NP3.09/CL56-1MO3P-0415
Beck, F; Bárdossy, A
Using fuzzy-rule based Circulation Patterns to identify trend signals in 1h-rainfall intensities

A0416; EGU2008-A-12133; IS42 - NP3.09/CL56-1MO3P-0416
Wang, X. L.; Swail, V. R.; Cox, A.
Dynamical versus Statistical Projections of Ocean Wave Heights

NP6.01 Mixing, Transport and Diffusion in the Environment – Posters

Convener: Hernandez-Garcia, E.
Co-Convener(s): d'Ovidio, F.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0417; EGU2008-A-09279; NP6.01-1MO3P-0417
d'Ovidio, F.; Lévy, M.; Madéc, G.
Filament dynamics at the ocean surface: a global climatology based on altimetry

A0418; EGU2008-A-12346; NP6.01-1MO3P-0418
Rossi, V.; Lopez, C.; Sudre, J.; **Hernandez-Garcia, E.**; Garçon, V.
Mixing, Lyapunov exponents, and biological activity in the Benguela and the Canary upwelling systems

A0419; EGU2008-A-10916; NP6.01-1MO3P-0419
Song, Y.; **Toth, Z.** ; Majumdar, S.; Szunyogh, I.; Langland, R.; Gelaro, R.; Doyle, C.; Caballero, J.; Wick, G.
Wintertime component of the THORPEX Pacific-Asian Regional Campaign

Tuesday

NP1.01 A tribute to Akiva Yaglom (Richardon Medalist)

Convener: Schertzer, D.
Co-Convener(s): Dijkstra, H., Lovejoy, S., Redondo, J., Toth, Z., von Hardenberg, J.
Lecture Room 27
Chairperson: G. GANSSEN

17:30–18:00; EGU2008-A-12400; NP1.01-1TU50-001
Hunt, J.
Changing goals of turbulence theory. (solicited)

18:00–18:30; EGU2008-A-01074; NP1.01-1TU50-002
Golitsyn, G.S.
Fundamental results by Akiva Yaglom in a further applications in geophysics and other natural sciences (solicited)

18:30–19:00; EGU2008-A-01075; NP1.01-1TU50-003
Frisch, U.
TBA (solicited)

19:00 END OF ORAL SESSIONS

Chairperson: D. SCHERTZER

19:00–19:30; EGU2008-A-01076; NP1.01-1TU60-001
Sreenivasan, K.R.
TBA (solicited)

19:30–20:00; EGU2008-A-12401; NP1.01-1TU60-002
Hubert, P.
TBA (solicited)

20:00 END OF SESSION

IS37 - NP1.02/ES5 The butterfly effect and other monsters of nonlinear geosciences: what is to be learnt? (co-organized by NP & ES)

Convener: Schertzer, D.
Co-Convener(s): Dijkstra, H., Lovejoy, S., Redondo, J., Toth, Z., von Hardenberg, J.
Lecture Room 9
Chairperson: N.N.

17:30–17:45; EGU2008-A-06492; IS37 - NP1.02/ES5-1TU50-001
Daviaud, F.; Laj, C.
Chaos in a simple deterministic system

17:45–18:00; EGU2008-A-11409; IS37 - NP1.02/ES5-1TU50-002
Gaonac'h, H.
Communicating extreme event science over multiple educational scales

18:00 END OF SESSION

IS37 - NP1.02/ES5 The butterfly effect and other monsters of nonlinear geosciences: what is to be learnt? (co-organized by NP & ES) – Posters

Convener: Schertzer, D.
Co-Convener(s): Dijkstra, H., Lovejoy, S., Redondo, J., Toth, Z., von Hardenberg, J.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0433; EGU2008-A-04367; IS37 - NP1.02/ES5-1TU3P-0433
Zvelebil, J.; Nechyba, M.; Vilimek, V.
How Risky is Our Risk Management: Dynamical Networks Approach

A0434; EGU2008-A-12351; IS37 - NP1.02/ES5-1TU3P-0434
Schertzer, D.; Lovejoy, S.; Tchiguirinskaia, I.
Complex space-time systems and their striking differences from complex time systems

IS38 - NP1.03/ERE3 Nonlinear problems of wind energy (co-organized by NP & ERE) – Posters

Convener: Peinke, J.
Co-Convener(s): Castro, J.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0435; EGU2008-A-02270; IS38 - NP1.03/ERE3-1TU3P-0435
Barth, S.; Eecen, P.J.
Peculiar Events in Wind Farm Flows

A0436; EGU2008-A-03410; IS38 - NP1.03/ERE3-1TU3P-0436
Laubrich, T.; Kantz, H.
The geometric AR(1) process for boundary layer wind speed simulation

A0437; EGU2008-A-03545; IS38 - NP1.03/ERE3-1TU3P-0437
Sood, A.; Heinemann, D.; Suselj, K.; Morales, A.; Peinke, J.
Examining high frequency stability conditions of the offshore vertical wind profile in the German Bight for verification of PBL parametrizations

A0438; EGU2008-A-06926; IS38 - NP1.03/ERE3-1TU3P-0438
Gottschall, J.; Peinke, J.
A dynamical approach to characterize the wind power conversion process

A0439; EGU2008-A-08972; IS38 - NP1.03/ERE3-1TU3P-0439
Marnett, M.; Schröder, W.
Vertical Axis Wind Turbines - Numerical Optimization of Design and Operating Conditions

NP2.01 ENSO: Dynamics, Predictability and Timescale Interactions (co-listed in CL & OS)

Convener: Timmermann, A.
Co-Convener(s): Jin, F., Balmaseda, M., Guilyardi, E.
Lecture Room 2
Chairperson: N.N.

8:30–8:45; EGU2008-A-05457; NP2.01-1TU1O-001
Lengaigne, M.; Vecchi, G.

Contrasting the termination of moderate and extreme El Niño events in Coupled General Circulation Models

8:45–9:00; EGU2008-A-05738; NP2.01-1TU1O-002
Wittenberg, A

Natural modulation of ENSO in the GFDL CM2.1 coupled GCM

9:00–9:15; EGU2008-A-11541; NP2.01-1TU1O-003

Stein, K.; Jin, F.; Schneider, N.; Timmermann, A
Effect of the seasonal cycle on ENSO in a simple oscillator model (solicited)

9:15–9:30; EGU2008-A-05835; NP2.01-1TU1O-004
Jin, F.-F.; Kug, J.-S.; Timmermann, A.; Kim, S.-T.
Variations in ENSO activity

9:30–9:45; EGU2008-A-02952; NP2.01-1TU1O-005

Choi, J.; An, S.-I.
Tropical Pacific decadal oscillation driven by the interaction between ENSO and mean state

9:45–10:00; EGU2008-A-10204; NP2.01-1TU1O-006

Vettoretti, G.; Peltier, W. R.
A coupled model simulation of the impact of a modified convective scheme on the MJO and ENSO during past climate regimes

10:00 END OF SESSION

NP2.01 ENSO: Dynamics, Predictability and Timescale Interactions (co-listed in CL & OS) – Posters

Convener: Timmermann, A.
Co-Convener(s): Jin, F., Balmaseda, M., Guilyardi, E.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0440; EGU2008-A-01446; NP2.01-1TU5P-0440

Yang, H.; Zhang, Q
Anatomizing the ocean role in ENSO changes under global warming

A0441; EGU2008-A-01603; NP2.01-1TU5P-0441

An, S.-I.; Ham, Y.-G.; Kug, J.-S.; Timmermann, A.; Choi, J.; Kang, I.-S.
Relationship between the annual-cycle strength and ENSO amplitude pivoted on the annual-mean state

A0442; EGU2008-A-02316; NP2.01-1TU5P-0442

Goelzer, H.; Levermann, A.; Rahmstorf, S.
Long-term transient response of ENSO to climate change in a coupled model of intermediate complexity

A0443; EGU2008-A-02942; NP2.01-1TU5P-0443

Duan, W.; Mu, M.
Investigating decadal variability of ENSO asymmetry by conditional nonlinear optimal perturbation

A0444; EGU2008-A-02991; NP2.01-1TU5P-0444

Song, Y.-H.; An, S.-I.; Ham, Y.-G.
Role of Indian Ocean in the modification of ENSO in a hybrid coupled model

A0445; EGU2008-A-04841; NP2.01-1TU5P-0445
Hurley, J.; Galewsky, J.
Probing ENSO influences on subtropical humidity using tracers of last saturation

A0446; EGU2008-A-08842; NP2.01-1TU5P-0446
Löptien, U. ; Eden, C.; Timmermann, A.
High resolution hybrid coupled modeling in the tropical Pacific

A0447; EGU2008-A-02330; NP2.01-1TU5P-0447
Mu, M.; Yu, Y.S.; Xu, H.; Duan, W.
A Study on the Roles of Initial Errors in Spring Predictability Barrier of ENSO events

A0448; EGU2008-A-01976; NP2.01-1TU5P-0448
Tang, Y
Interdecadal Variation of ENSO Predictability in Multiple Models

A0449; EGU2008-A-01743; NP2.01-1TU5P-0449
Timmermann, A.; Jin, F.-F.
ENSO instability revisited

A0450; EGU2008-A-09969; NP2.01-1TU5P-0450
Simonnet, E.; Chekroun, M.D.; Ghil, M.
The nonlinear recharge El-Nino oscillator : stochastic and seasonal forcing effects

NP2.03 Nonlinear Dynamics of the Ocean Circulation (co-listed in OS) – Posters

Convener: Weijer, W.
Co-Convener(s): HUCK, T.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: HUCK, T. AND WEIJER, W.

A0451; EGU2008-A-00554; NP2.03-1TU5P-0451
Arzel, O.; England, M. H.; Sijp, W. P.
Wind-stress feedback stabilization of thermohaline circulation modes without North Atlantic Deep Water formation during glacial times

A0452; EGU2008-A-04719; NP2.03-1TU5P-0452
Sévellec, F.; Huck, T.; Ben Jelloul, M.; Vialard, J.
Optimal surface salinity perturbations of the thermohaline circulation

A0453; EGU2008-A-05003; NP2.03-1TU5P-0453
Pierini, S.
Mechanisms of stochastic resonance in a North Pacific wind-driven ocean model

A0454; EGU2008-A-09270; NP2.03-1TU5P-0454
Kaiser, N.; Hense, A.; Lohmann, G.
The Thermohaline Circulation - stochastic analysis of a dynamic system

A0455; EGU2008-A-10844; NP2.03-1TU5P-0455
Weijer, W
Barotropic Modes of the Mascarene Basin

A0456; EGU2008-A-11482; NP2.03-1TU5P-0456
Sanchez, R.; Newman, D.; Bhatt, U.; Polyakov, I.
Characterizing the transport dynamics of ocean turbulence through a novel lagrangian float time series analysis technique

NP3.01 Scale, scaling and nonlinear variability in aquatic sciences (co-listed in OS)

Convener: Schmitt, F.
Co-Convener(s): Nikora, V., Károlyi, G.
Lecture Room 27
Chairperson: FG SCHMITT

10:30–10:45; EGU2008-A-02766; NP3.01-1TU2O-001
Neufeld, Z; Torney, C
Small scale patchiness of phototactic micro-organisms in turbulent flows (solicited)

10:45–11:00; EGU2008-A-00994; NP3.01-1TU2O-002
Goodman, L.; Robinson, A
The role of turbulence in biological physical interactions

11:00–11:15; EGU2008-A-02674; NP3.01-1TU2O-003
Mann, J.; Berg, J.; Ott, S.
Preferential concentration of neutrally bouyant particles in turbulence?

11:15–11:30; EGU2008-A-12000; NP3.01-1TU2O-004
Pattantyús-Ábrahám, M.; Józsa, J.; Krámer, T.; Tél, T.
Parameter dependence of the mixing behaviour of a wind-driven shallow lake

11:30–11:45; EGU2008-A-00762; NP3.01-1TU2O-005
Zongo, SB; Schmitt, FG
Multifractal pH fluctuations in marine waters

11:45–12:00; EGU2008-A-01028; NP3.01-1TU2O-006
Hernandez-Garcia, E.; Lopez, C.
Characterizing ocean processes with finite-size Lyapunov exponents (solicited)

12:00 END OF SESSION

NP3.02 Scale, Scaling, nonlinear variability and turbulent structures in the atmosphere and the climate (co-listed in AS, CL & HS)

Convener: Lovejoy, S.
Co-Convener(s): Falkovich, G., Royer, J.
Lecture Room 27
Chairperson: N.N.

14:15–14:30; EGU2008-A-03547; NP3.02-1TU3O-004
Fraedrich, K.; Blender, R.
Scaling of weather and climate fluctuations: CAPE, river discharges and ice cores (solicited)

14:30–14:45; EGU2008-A-12094; NP3.02-1TU3O-005
Moncrieff, M.; Hsu, H.
Spatio-temporal variability, dynamics and parameterization of organized precipitating convection (solicited)

14:45–15:00; EGU2008-A-00552; NP3.02-1TU3O-006
Stolle, J.; Lovejoy, S.; Schertzer, D.
A systematic analysis of scaling properties of meteorological analyses, numerical models, and atmospheric fields

15:00 END OF SESSION

IS40 - NP3.04/HS1.8/NH10.5 Geophysical Extremes: scaling versus nonstationarity (co-organized by NP, HS & NH, co-listed in AS)

Convener: Koutsoyiannis, D.

Co-Convener(s): Tchiguirinskaia, I., Cârsteanu, A., Langousis, A., Bunde, A.

Lecture Room 27

Chairperson: KOUTSOYIANNIS, D.

15:30–16:00; EGU2008-A-06387; IS40 - NP3.04/HS1.8/NH10.5-1TU4O-001

Hamed, K. H.

Scaling versus deterministic trend in geophysical extremes: The case of river flow data (solicited)

16:00–16:15; EGU2008-A-02517; IS40 - NP3.04/HS1.8/NH10.5-1TU4O-002

Hut, R.; Rutten, M.; Van de Giesen, N.

Non-stationarity of the Hurst coefficient in hydrological time series: Methodological artefact or observable property

16:15–16:30; EGU2008-A-10682; IS40 - NP3.04/HS1.8/NH10.5-1TU4O-003

Tchiguirinskaia, I.; Schertzer, D.; Lovejoy, S.

Multifractal flood frequency analysis

16:30–16:45; EGU2008-A-12223; IS40 - NP3.04/HS1.8/NH10.5-1TU4O-004

Kerkhoven, E.; Gan, T. Y.

Estimating Unconditional Uncertainty of Streamflows of Athabasca and Fraser rivers of western Canada using Multifractal Analysis

16:45–17:00; EGU2008-A-11451; IS40 - NP3.04/HS1.8/NH10.5-1TU4O-005

Escandon, L.G.; **Castro, J.J.;** Carsteanu, A.A.

Effects of turbulence multifractality in pollutant dispersion

17:00 END OF SESSION

IS56 - NP3.06/SM18 Dynamics of Seismicity Patterns and Earthquake Triggering (co-organised by SM & NP, co-listed in NH & TS) – Posters

Convener: Hainzl, S.

Co-Convener(s): Zoeller, G., Cocco, M., Main, I.

Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 13:30–15:00

Poster Area Hall A

Chairperson: N.N.

A0457; EGU2008-A-02568; IS56 - NP3.06/SM18-1TU3P-0457

Cadicheanu, N.; Zhu, P.; van Ruymbeke, M.

Some aspects of seismic wave attenuation in the Vrancea (Romania) zone confirmed by the tidal tomography

A0458; EGU2008-A-03734; IS56 - NP3.06/SM18-1TU3P-0458

Debski, W.; Domanski, B.

Dynamic stress drop for selected seismic events from Rudna copper mine

A0459; EGU2008-A-06467; IS56 - NP3.06/SM18-1TU3P-0459

Bethmann, F.; Deichmann, N.; Mai, P.M.

Scaling relations of Mw vs. Ml for families of similar earthquakes in Switzerland

A0460; EGU2008-A-11581; IS56 - NP3.06/SM18-1TU3P-0460

Fontiela, J.; Nunes, J.C.

The b-values on the Congro Fracture Zone during the period 2003-2007: a first approach

A0461; EGU2008-A-01265; IS56 - NP3.06/SM18-1TU3P-0461

Mukhamediev, Sh.; Grachev, A.; Yunga, S.

Variation of Seismic Activity of Platform Regions Caused by the Ridge Push Force

A0462; EGU2008-A-11602; IS56 - NP3.06/SM18-1TU3P-0462

German, V. I.

Probability of strong seismic events occurrence and its relationship with self-similarity of seismicity

A0463; EGU2008-A-05113; IS56 - NP3.06/SM18-1TU3P-0463

Smirnov, V.

Lithosphere failure cycle parameters: estimations, variations, nature.

A0464; EGU2008-A-11556; IS56 - NP3.06/SM18-1TU3P-0464

Avagimov, A.; Konev, Yu.; **Novikov, V.;** Zeigarnik, V.

Analysis of Possible Mechanisms of Seismicity Triggered by High-Power Electric Pulses

A0465; EGU2008-A-11493; IS56 - NP3.06/SM18-1TU3P-0465

Novikov, V.; Vorontsova, E.

Statistical Analysis of Triggering Susceptibility of Northern Tien Shan

A0466; EGU2008-A-07123; IS56 - NP3.06/SM18-1TU3P-0466

Gómez, J.B.; Pacheco, A.F.

Earthquakes, asperities, and forest-fire models

A0467; EGU2008-A-01018; IS56 - NP3.06/SM18-1TU3P-0467

Weatherley, D

Two power-law scaling regimes in long-range sandpile automata

A0468; EGU2008-A-06639; IS56 - NP3.06/SM18-1TU3P-0468

Hassanpoor sedghi, M.; Mokhtari, M

Multifractal analysis of the 1981 Kerman-Sirch and 2003 Bam earthquakes (Iran) from aftershock studies in Nayband Gowk fault system

A0469; EGU2008-A-01320; IS56 - NP3.06/SM18-1TU3P-0469

Allamehzadeh, M.

Recognition of Seismic Precursory Activities Using Self-organizing Feature Maps

A0470; EGU2008-A-03395; IS56 - NP3.06/SM18-1TU3P-0470

Vecchio, A.; **Carbone, V.;** Sorriso-Valvo, L.; Harabaglia, P.; Guerra, I.

Statistical properties of earthquakes clustering

A0471; EGU2008-A-10539; IS56 - NP3.06/SM18-1TU3P-0471

Console, R.; Murru, M.; Falcone, G.

Statistical study of the space-time variations of the seismic activity

A0472; EGU2008-A-05736; IS56 - NP3.06/SM18-1TU3P-0472

Christophersen, A.; Hainzl, S.; Wiemer, S.

Applying the ETAS model for aftershock forecasting in low seismicity regions

A0473; EGU2008-A-05076; IS56 - NP3.06/SM18-1TU3P-0473

Ganas, A.; Gosar, A.; Drakatos, G.

Static stress changes due to the 1998 and 2004 Krn Mountain (Slovenia) earthquakes and implications for future seismicity

A0474; EGU2008-A-10963; IS56 - NP3.06/SM18-1TU3P-0474

Santoyo, M.A.; García-Jerez, A.; Luzón, F.

A stress triggering analysis in a recent seismic series near the Itoiz reservoir, northern Spain

A0475; EGU2008-A-07908; IS56 - NP3.06/SM18-1TU3P-0475

Calderoni, G.; Di Giovambattista, R.; Ventura, G.; Burrato, P.

Influence of fluids on the evolution of the Ml 4.5, May 2000 Faenza seismic sequence, Northern Apennines (Italy)

A0476; EGU2008-A-07602; IS56 - NP3.06/SM18-1TU3P-0476

Chiarabba, C.; De Gori, P.; Boschi, E.

Fluid migration in the Umbria-Marche fault system inferred by velocity and attenuation time repeated local earthquake tomography.

A0477; EGU2008-A-02969; IS56 - NP3.06/SM18-1TU3P-0477

Bachmann, C.E.; Wiemer, S.; Woessner, J.

The induced Basel 2006 earthquake sequence: Statistical properties and a new probability-based monitoring system

NP3.07 Scale, Scaling, and Nonlinearity in the Earth's Surface, Soil and Solid Earth (co-listed in GMPV, SSS & TS) – Posters

Convener: Tarquis, A.

Co-Convener(s): Crawford, J., Gaonach, H., Cheng, Q.

Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 13:30–15:00

Poster Area Hall A

Chairperson: **TARQUIS, A.M. CRAWFORD, J. GAONACH, H. CHENG, Q.**

A0478; EGU2008-A-00246; NP3.07-1TU3P-0478

Martinez, G.; Vanderlinden, K.; Moñino, A.; Losada, M.A. Multiresolution Analysis of Soil Physical Properties in a Long-Term tillage experiment (solicited)

A0479; EGU2008-A-02444; NP3.07-1TU3P-0479

GARCIA MORENO, R.; DIAZ ALVAREZ, M.C.; SAA REQUEJO, A.; TARQUIS, A.M.

Multiscaling analysis of shadows related to soil surface roughness

A0480; EGU2008-A-07072; NP3.07-1TU3P-0480

De Bartolo, S.; Fallico, C.; Veltri, M.; Tarquis, A.

Scaling Analysis of the Water Retention Curves in Unsaturated Soil. Case Study of Turbolo Experimental Basin.

A0481; EGU2008-A-06780; NP3.07-1TU3P-0481

Paz Ferrerio, J.; Vidal Vázquez, E.; Miranda, J.G.V

Assessing variability of particle size distributions in experimental plots by multifractal scaling

A0482; EGU2008-A-07121; NP3.07-1TU3P-0482

Vidal Vázquez, E.; Miranda, J.G.V; Paz Ferreiro, J.; Tarquis, A. M.

Multifractal scaling of soil surface microrelief under different tillage treatments

A0483; EGU2008-A-07136; NP3.07-1TU3P-0483

Paz Ferreiro, J.; Vidal Vázquez, E.; Tarquis, A. M.

Multifractal analysis of soil porosity from Hg injection curves and N₂ adsorption isotherms in a Mollisol

A0484; EGU2008-A-08470; NP3.07-1TU3P-0484

Castellanos, M.T.; **Cartagena, M.C.;** Ribas, Fco.; Cabello, M.J.; Arce, A.; Tarquis, A.M.

Soil nitrogen variability. Noise or information?

A0485; EGU2008-A-09491; NP3.07-1TU3P-0485

Vidal Vázquez, E.; García Moreno, R.; Miranda, J.G.V; Tarquis, A. M.; Saa Requejo, A.; Paz González, A. DEM resolution effects on multifractal spectra of soil surface microrelief

A0486; EGU2008-A-10687; NP3.07-1TU3P-0486

Torres, J.; Piñuela, J.A.; Andina, D.; Tarquis, A.M.

Spatial-scale analysis of soil variables from 3D images using wavelet correlation.

A0487; EGU2008-A-11149; NP3.07-1TU3P-0487

Heck, R.; Antón, J.M.; Grau, J.B.; Fabregat, J.; Sanchez, M.E.; Andina, D.; Tarquis, A.M.

Soil structure singularities from 3D images

A0488; EGU2008-A-04453; NP3.07-1TU3P-0488

Tarquis, A.M.; Castellano, M.T.; Morato, M.C.; Bird, N.R.

Multifractal Analysis on Soil Transect Data (solicited)

A0489; EGU2008-A-06184; NP3.07-1TU3P-0489

Alonso, C.; Tarquis, A. M.; Benito, R. M.; Zúñiga, I.

Influence of spatial and radiometric resolution of satellite images in scaling/multiscaling behavior.

A0490; EGU2008-A-05725; NP3.07-1TU3P-0490

Valencia, J.L.; Tarquis, A.M.; Saa, A.; Gascó, J.M.

Relation between D.E.M and seldom parameters in two sub river basin of the Ebro basin by multifractal model (solicited)

A0491; EGU2008-A-09317; NP3.07-1TU3P-0491

Lovejoy, S.; Tarquis, A.M.; **Gaonach'h, H.;** Schertzer, D.

Multiscaling of vegetation and moisture indices from MODIS satellite data

A0492; EGU2008-A-02961; NP3.07-1TU3P-0492

ZUO, R.; Cheng, Q.; Xia, Q.

Distinguishing Different Phases for Cassiterite by Fractal Method

A0493; EGU2008-A-04900; NP3.07-1TU3P-0493

Xu, D.; Cheng, Q.; Wang, Z.

Hexagon CNN and its applications in sphalerite banding texture simulation (solicited)

A0494; EGU2008-A-09725; NP3.07-1TU3P-0494

Ehret, B.

Nonlinear relations between ground penetrating radar data and patterns of rock

A0495; EGU2008-A-05504; NP3.07-1TU3P-0495

Wang, W.; Cheng, Q.

Integration of multi-scale and multi-source geo-information for mapping geologic configuration related to mineralization

A0496; EGU2008-A-08633; NP3.07-1TU3P-0496

Jing, L.; **Cheng, Q.**

An image fusion method based on object-oriented classification of panchromatic image

A0497; EGU2008-A-05804; NP3.07-1TU3P-0497

Jimenez, A.; Tiampo, K. F.; Posadas, A. M.

Voronoi tessellation in earthquakes

A0498; EGU2008-A-10791; NP3.07-1TU3P-0498

Mohtar, R.; Braudeau, E.; Abou Najm, M.; Salahat, M.; Martin, P.

Kamel

IS42 - NP3.09/CL56 Study of Climate Trends using Nonlinear and Stochastic Methods (co-organized by NP & CL, co-listed in AS)

Convener: Penland, C.
Co-Convener(s): Wang, X.
Lecture Room 27
Chairperson: CECILE PENLAND

13:30–13:45; EGU2008-A-02734; IS42 - NP3.09/CL56-1TU3O-001

Pattantyus-Abraham, M.; Bardossy, A.

Does climate change lead to the alteration of the lengths of persistent periods?

13:45–14:00; EGU2008-A-05698; IS42 - NP3.09/CL56-1TU3O-002

Sardeshmukh, P.D.; Compo, G.P.; **Penland, C.**

Removing ENSO-related trends from the climate record

14:00–14:15; EGU2008-A-07147; IS42 - NP3.09/CL56-1TU3O-003

Barbosa, S. M.; Andersen, O. B.

Trend patterns in global sea surface temperature

14:15 END OF SESSION

NP6.01 Mixing, Transport and Diffusion in the Environment

Convener: Hernandez-Garcia, E.
Co-Convener(s): d'Ovidio, F.
Lecture Room 27
Chairperson: D'OVIDIO, F.

8:30–9:00; EGU2008-A-01062; NP6.01-1TU1O-001

Lekien, F.

Quasi-Turbulent Stirring and Lagrangian Coherent Structures (solicited)

9:00–9:15; EGU2008-A-01057; NP6.01-1TU1O-002

Sallée, J.-B.; Morrow, R.; Speer, K.; Lumpkin, R.

Lagrangian estimation of turbulent diffusion in the Southern ocean (solicited)

9:15–9:30; EGU2008-A-01060; NP6.01-1TU1O-003

Shuckburgh, E.

Surface eddy diffusivity in the Southern ocean derived from tracer transport (solicited)

9:30–9:45; EGU2008-A-08511; NP6.01-1TU1O-004

Hoor, P.; Bruehl, C.; Funke, B.; Glatthor, N.; Joeckel, P.; Lelieveld, J.; Steil, B.; Stiller, G.

Stratospheric transport barriers: Observational and model approaches

9:45–10:00; EGU2008-A-01034; NP6.01-1TU1O-005

Turiel, A.; Nieves, V.; Garcia-Ladona, E

Characterization of horizontal transport in oceans by applying multifractal analysis on satellite images of different scalars

10:00 END OF SESSION

Wednesday

NP2.04 Nonlinear Low-frequency Variability in Atmosphere, Ocean and the Climate System – Posters

Convener: Dethloff, K.
Co-Convener(s): Raible, C., Dijkstra, H.
Display Time: Wednesday, 08:00–19:30

Authors in Attendance: Wednesday, 17:30–19:00

Poster Area Hall A
Chairperson: RAIBLE, C.

A0386; EGU2008-A-06787; NP2.04-1WE5P-0386

Brachet, S.; Feliks, Y.; Ghil, M.; Simonnet, E

Low-frequency oscillations in the atmosphere induced by a mid-latitude SST front

A0387; EGU2008-A-08502; NP2.04-1WE5P-0387

Guemas, V.; Salas-Méla, D.; Giordani, H.; Voldoire, A.; Kageyama, M

Interactions between the ocean diurnal cycle and the intraseasonal variability of sea surface temperatures

A0388; EGU2008-A-11140; NP2.04-1WE5P-0388

Pérez González, I. ; OrtizBeviá, M.J.; Alvarez-García, F. J.
Nonlinear estimation of the ENSO signal in the North Atlantic

A0389; EGU2008-A-02272; NP2.04-1WE5P-0389

Dethloff, K.; Otto, F.; Brand, S.; Handorf, D.; Rinke, A.
Planetary and synoptic scale adjustment of the Northern Hemisphere atmosphere to stratospheric ozone changes

A0390; EGU2008-A-02275; NP2.04-1WE5P-0390

Brand, S.; **Dethloff, K.;** Handorf, D.

Atmospheric Variability in a Coupled Climate Model with Interactive Stratospheric Ozone Chemistry

A0391; EGU2008-A-02854; NP2.04-1WE5P-0391

Dorn, W.; **Dethloff, K.;** Rinke, A.; Kurgansky, M.

Interannual variability of the Arctic summer sea-ice cover

NP2.05 Empirical Dynamical Modelling in the Geosciences – Posters

Convener: Kwasniok, F.
Co-Convener(s): Dijkstra, H.
Display Time: Wednesday, 08:00–19:30

Authors in Attendance: Wednesday, 17:30–19:00

Poster Area Hall A
Chairperson: N.N.

A0392; EGU2008-A-05362; NP2.05-1WE5P-0392

von Storch, J.-S.; Beena, B. S.

Studying effects of daily surface flux anomalies on the time-mean ocean circulation using an empirical flux model

A0393; EGU2008-A-05526; NP2.05-1WE5P-0393

Kondrashov, D.; Kravtsov, S.; Ghil, M

Detecting origins of non-Gaussianity with reduced-order atmospheric model

A0394; EGU2008-A-08396; NP2.05-1WE5P-0394

Peinke, J.; Kittel, A.; Kleinhans, D.; Friedrich, J.
How to disentangle different noise sources in empirical data

A0395; EGU2008-A-11737; NP2.05-1WE5P-0395

Erokhin, N.S.; Zolnikova, N.N.; Mikhailovskaya, L.A.

Small-parametric nonlinear model of tropical regional cyclogenesis

A0396; EGU2008-A-11933; NP2.05-1WE5P-0396

Odoni, N. A.; Darby, S. E.

Exploring complex models with metamodels: a way through the tangle?

A0397; EGU2008-A-12345; NP2.05-1WE5P-0397

Kwasniok, F.

Prediction of Large-Scale Atmospheric Flow by a Mixture of Empirical Linear Models

NP3.03 Scaling, subgrid models, downscaling and parameterization (co-listed in AS & CL)

Convener: Parlange, M.

Co-Convener(s): de Lima, I., Meneveau, C.

Lecture Room 9

Chairperson: PARLANGE, M.

13:30–13:45; EGU2008-A-12118; NP3.03-1WE3O-001

Tribbia, J.

Scaling and Stochastic Parameterization for the Atmosphere (solicited)

13:45–14:00; EGU2008-A-11161; NP3.03-1WE3O-002

Krajewski, W.F.; Mandapaka, P.V.; Villarini, G.; Lewandowski, P.

Bridging the scale gap: Radar and small-scale rainfall variability (solicited)

14:00–14:15; EGU2008-A-10251; NP3.03-1WE3O-003

Hunt, J.C.R.; Eames, I.; Westerweel, J.

Subgrid processes and coherent structures (solicited)

14:15–14:30; EGU2008-A-11107; NP3.03-1WE3O-004

Freer, J.E.; Cloke, H.; He, Y.; McGregor, G.; Pappenberger, F.; Wetterhall, F.; Wilson, M

A cascaded uncertainty framework for cloud-to-catchment flood inundation modelling (solicited)

14:30–14:45; EGU2008-A-02807; NP3.03-1WE3O-005

Skamarock, W.; Bryan, G.

Modeling deep moist atmospheric convection

14:45–15:00; EGU2008-A-04454; NP3.03-1WE3O-006

JUNG, J.; ARAKAWA, A.

Coupling the GCM and cloud-resolving components in the multi-scale modeling framework

15:00 COFFEE BREAK

Chairperson: PARLANGE, M.

15:30–15:45; EGU2008-A-05180; NP3.03-1WE4O-001

Marani, M.; Zanetti, S.

Rainfall Temporal Variability: Scaling vs. non-Scaling Descriptions (solicited)

15:45–16:00; EGU2008-A-10242; NP3.03-1WE4O-002

Porporato, A.; Daly, E.; Molini, A.; Rigby, J.R.; Katul, G.

Scaling and intermittency in rainfall models with state dependent noise (solicited)

16:00–16:15; EGU2008-A-11203; NP3.03-1WE4O-003

Lehning, M.; Manes, C.; Guala, M.; Fierz, C.; Löwe, H

Formation of Surface Hoar in Alpine Terrain and its Roughness Properties (solicited)

16:15–16:30; EGU2008-A-10415; NP3.03-1WE4O-004

Uijlenhoet, R.; Leijnse, H.; Stricker, JNM; Berne, A

Measurement and parameterization of rainfall microstructure (solicited)

16:30–16:45; EGU2008-A-07235; NP3.03-1WE4O-005

Vrac, M.; Naveau, P.; Drobinski, P.

Modeling pairwise dependencies in precipitation intensities

16:45–17:00; EGU2008-A-08056; NP3.03-1WE4O-006

Pavlopoulos, H.; Chandler, R.; Isham, V.

Spectral multiscaling for downscaling processes of regional averages with a diagnostic study.

17:00 END OF SESSION

NP3.05 Uncertainty, Random Dynamical Systems and Stochastic Modeling in Geophysics (co-listed in HS) – Posters

Convener: Pavlyukevich, I.

Co-Convener(s): Schertzer, D., Duan, J.

Display Time: Wednesday, 08:00–19:30

Authors in Attendance: Wednesday, 13:30–15:00

Poster Area Hall A

Chairperson: N.N.

A0398; EGU2008-A-01541; NP3.05-1WE3P-0398

Feigin, A. M.; Loskutov, E. M.; Molkov, Y. I.; Mukhin, D. N.

Parameterized modeling of stochastic systems by time series and prognosis of their qualitative behavior

A0399; EGU2008-A-02242; NP3.05-1WE3P-0399

Lorenzo, M.N.; Taboada, J.J.; Isabel, I.

Influence of the stochastic sources in climate models

A0400; EGU2008-A-03229; NP3.05-1WE3P-0400

Czechowski, Z. ; Rozmarynowska, A.

The importance of the privilege for appearance of inverse-power solutions in Ito equations

A0401; EGU2008-A-04834; NP3.05-1WE3P-0401

Imkeller, P.; **Pavlyukevich, I.;** Wetzel, T.

Exit times in non-linear dynamical systems subject to non-Gaussian forcing

A0402; EGU2008-A-04836; NP3.05-1WE3P-0402

Hein, C.; Imkeller, P.; **Pavlyukevich, I.**

Probabilistic analysis of non-Gaussian time series

A0403; EGU2008-A-12341; NP3.05-1WE3P-0403

Duan, J.

Geophysical flows: stochastic modeling, analysis and computation

IS41 - NP3.08/HS1.9 Scales and scaling in surface and subsurface hydrology (co-organized by NP & HS, co-listed in NH)

Convener: de Lima, J.

Co-Convener(s): Krajewski, W., Marani, M.

Lecture Room 9

Chairperson: DE LIMA, J.L.M.P.

17:30–17:45; EGU2008-A-11454; IS41 - NP3.08/HS1.9-1WE5O-001

Schertzer, D.; Tchiguirinskaia, I.; El-Tabach, E.

Porous city : a multiscale modelling of peri-urban hydrology (solicited)

17:45–18:00; EGU2008-A-09379; IS41 - NP3.08/HS1.9-1WE5O-002

De Michele, C.; Ignaccolo, M.

Drop-like vs Flux-like description of the rainfall phenomenon: toward a new understanding of precipitation (solicited)

18:00–18:15; EGU2008-A-11072; IS41 - NP3.08/HS1.9-1WE50-003
Mandapaka, P.V.; **Krajewski, W.F.**; Mantilla, R.; Gupta, V.K.
Simulation based investigation of the effects of radar-rainfall on scaling of floods in the Whitewater basin, Kansas

18:15–18:30; EGU2008-A-02344; IS41 - NP3.08/HS1.9-1WE50-004
Cheng, Q.
Modeling flood events with local singularity model

18:30–18:45; EGU2008-A-03587; IS41 - NP3.08/HS1.9-1WE50-005
Germann, P.
Spatio-temporal scale of gravity-driven flow in non-saturated fissured and porous media.

18:45–19:00; EGU2008-A-07340; IS41 - NP3.08/HS1.9-1WE50-006
Herbst, M.; Prolingheuer, N.; Graf, A.; Huisman, J.A.; Weihermüller, L.; Vanderborght, J.; Vereecken, H.
Soil water content and temperature induced spatial structure of heterotrophic respiration at plot and field scale

19:00 END OF SESSION

NP5.01 Quantifying predictability including high impact weather (THORPEX) and hydrology (HEPEX) (co-listed in HS & NH)

Convener: Toth, Z.
Co-Convener(s): Balint, G., Szunyogh, I.
Lecture Room 27
Chairperson: TOTH, Z.

8:30–8:45; EGU2008-A-11504; NP5.01-1WE10-001
Kwasniok, F.; Feudel, U.
The Structure of Predictability in a Quasigeostrophic Atmospheric Model

8:45–9:00; EGU2008-A-10560; NP5.01-1WE10-002
Hohenegger, C.; **Schär, C.**
Atmospheric predictability at synoptic versus cloud-resolving scales

9:00–9:15; EGU2008-A-04475; NP5.01-1WE10-003
Mu, M.; Zhou, F.F.; Wang, H.L.; Ge, F.H.
Applications of Conditional nonlinear optimal perturbations to adaptive observations

9:15–9:30; EGU2008-A-10866; NP5.01-1WE10-004
Candille, G.
The Multi-Ensemble Approach: the NAEFS Example

9:30–9:45; EGU2008-A-01494; NP5.01-1WE10-005
Titley, H.; Hewson, T.; **Johnson, C.**; Swinbank, R.
Predicting high-impact weather using medium-range ensemble forecasts

9:45–10:00; EGU2008-A-07851; NP5.01-1WE10-006
Diomede, T.; Marsigli, C.; Montani, A.; Paccagnella, T.
The COSMO-LEPS system as tool to drive a real-time flood forecasting chain

10:00 COFFEE BREAK

Chairperson: BÁLINT, G.

10:30–10:45; EGU2008-A-12319; NP5.01-1WE20-001
Schaaake, J.; Thielen, J.
A review of the 2007 HEPEX workshop

10:45–11:00; EGU2008-A-01322; NP5.01-1WE20-002
Kuchment, L.S.; Gelfan, A.N.
Long-term ensemble forecasting of snowmelt floods

11:00–11:15; EGU2008-A-03131; NP5.01-1WE20-003
Thirel, G.; Rousset-Regimbeau, F.; Martin, E.; Noilhan, J.; Habets, F.
A comparison of short-range forecasts from two Ensemble Streamflow Prediction Systems

11:15 END OF SESSION

NP5.02 Data assimilation in the presence of nonlinearities

Convener: Talagrand, O.
Co-Convener(s): van Leeuwen, P.
Lecture Room 27
Chairperson: N.N.

11:15–11:30; EGU2008-A-01980; NP5.02-1WE20-004
Tang, Y
Sigma-point Kalman filter data assimilation methods for strongly nonlinear systems

11:30–11:45; EGU2008-A-03600; NP5.02-1WE20-005
Van Leeuwen, P.J.
A combined Local Particle and Local Ensemble Kalman Filter for large nonlinear systems

11:45–12:00; EGU2008-A-11090; NP5.02-1WE20-006
Ravela, S
Data Assimilation by Maximizing Mutual Information

12:00 LUNCH BREAK

Chairperson: N.N.

13:30–13:45; EGU2008-A-11052; NP5.02-1WE30-001
Pena, M.; **Toth, Z.**; Krzysztofowicz, R.; Wei, M.
A Bayesian approach to particle filtering

13:45–14:00; EGU2008-A-11366; NP5.02-1WE30-002
Ahanin, A.; **McLaughlin, D.**; Entekhabi, D.
Reduced rank filtering in chaotic systems using singular vectors

14:00–14:15; EGU2008-A-08220; NP5.02-1WE30-003
Agoshkov, V.; Botvinovsky, E.; Gusev, A.; Lebedev, S.; Parmuzin, E.; Shutyaev, V.
Variational data assimilation system INM-T1

14:15–14:30; EGU2008-A-11951; NP5.02-1WE30-004
Sakov, P.; Bertino, L.
Implications of the form of the ensemble transformation in the ensemble square root filter for nonlinear systems

14:30–14:45; EGU2008-A-04615; NP5.02-1WE30-005
Bocquet, M.; Wu, L.
Non-Gaussian data assimilation for source-driven atmospheric transport: generalisations to nonlinear physics

14:45–15:00; EGU2008-A-07211; NP5.02-1WE30-006
Brankart, J.M.; Lauvernet, C.; Brasseur, P.; Castruccio, F.; Broquet, G.; Verron, J.; Cosme, E.
A Truncated Gaussian filter for data assimilation with inequality constraints

15:00 COFFEE BREAK

Chairperson: N.N.

15:30–15:45; EGU2008-A-04209; NP5.02-1WE4O-001
Zhang, S.; Zupanski, D.; Hou, A.; Zupanski, M.
Application of an Ensemble Smoother to Precipitation
Assimilation

15:45–16:00; EGU2008-A-12122; NP5.02-1WE4O-002
Caya, A.; Buehner, M.; Carrieres, T.
Data assimilation in a coupled sea ice-ocean model: com-
parison between variational and ensemble approaches

16:00 END OF SESSION

NP5.03 Model Error: Dynamics, correction and mod- elling

Convener: Vannitsem, S.
Co-Convener(s): Reynolds, C.
Lecture Room 27
Chairperson: N.N.

16:00–16:15; EGU2008-A-01485; NP5.03-1WE4O-003
Johnson, C.; Swinbank, R.
Multi-model ensemble combination and calibration (so-
lolicited)

16:15–16:30; EGU2008-A-09560; NP5.03-1WE4O-004
Stolle, J.; Lovejoy, S.; Schertzer, D.; Pinel, J.; Allaire, V.
Comparing and contrasting the large scale stochastic cascade
structure of atmospheric radiances, numerical models, and
reanalyses: implications for model dynamics and errors
(solicited)

16:30–16:45; EGU2008-A-11285; NP5.03-1WE4O-005
Hallerberg, S.; Bröcker, J.; Smith, L. A.
Predicting errors of weather forecasts (solicited)

16:45–17:00; EGU2008-A-11397; NP5.03-1WE4O-006
Hou, D.; **Toth, Z.;** Zhu, Y.; Yang, W.
Evaluation of a stochastic perturbation scheme (solicited)

17:00 END OF SESSION

NP6.02 Geophysical Fluid Mechanics Laboratory Exper- iments – Posters

Convener: Fruh, W.
Co-Convener(s): BATEMAN, A., Fernando, J.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0404; EGU2008-A-00747; NP6.02-1WE3P-0404
Maddison, J. R.; Read, P. L.; Marshall, D. P.; Piggott, M. D.
Adaptive Mesh Modelling of the Thermally Driven Annulus

A0405; EGU2008-A-02087; NP6.02-1WE3P-0405
Williams, P.; Read, P.; Haine, T.
A calibrated, non-invasive method for measuring the internal
interface height field at high resolution in the rotating,
two-layer annulus

A0406; EGU2008-A-03568; NP6.02-1WE3P-0406
von Larcher, Th.; Patz, J.; Harlander, U.
Experiments on baroclinic instability in a differentially
heated rotating annulus with inclined bottom

A0407; EGU2008-A-08887; NP6.02-1WE3P-0407
Fruh, W.G.; Maubert, P.; Read, P.L.; Randria-
mampianina, A.; Wordsworth, R.
Turbulence characteristics of weakly turbulent centrifugal
convection

NP6.03 Jets, Wakes and Vortices in Geophysical and Astrophysical Flows – Posters

Convener: Montabone, L.
Co-Convener(s): Chashechkin, Y.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0408; EGU2008-A-03601; NP6.03-1WE3P-0408
Espa, S.; Cenedese, A.; Mariani, M.
Flow zonation in rotating turbulence

A0409; EGU2008-A-07273; NP6.03-1WE3P-0409
Platonov, A.; Sekula, E.; Grau, J.; **Redondo, J. M.**
Multi-fractal analysis of direct and inverse cascades in
turbulent jets and fronts; laboratory and field observations

NP6.05 Turbulence in the Atmosphere and the Ocean

Convener: Yague, C.
Co-Convener(s): Fraunie, P., Tampieri, F., Cuxart, J.
Lecture Room 27
Chairperson: N.N.

17:30–17:45; EGU2008-A-08544; NP6.05-1WE5O-001
Lovejoy, S.; Schertzer, D.; Tuck, A.
Studying the vertical cascade structure of the atmosphere
using dropsondes (solicited)

17:45–18:00; EGU2008-A-08518; NP6.05-1WE5O-002
Pagnini, G.
Particle pair rotation to constrain the non-uniqueness prob-
lem in Lagrangian stochastic modelling of turbulent relative
dispersion (solicited)

18:00–18:15; EGU2008-A-09675; NP6.05-1WE5O-003
Viana, S.; Ramos, D.; Maqueda, G.; Morales, G.; Yagüe, C.
Study of the relevant timescales from wavelet transform in
the Nocturnal Atmospheric Boundary Layer: interaction
between wave-like structures and turbulence

18:15–18:30; EGU2008-A-03737; NP6.05-1WE5O-004
Maurizi, A.; **Tampieri, F.;** Viola, A.
Similarity relationships for velocity and temperature mo-
ments in the atmospheric boundary layer

18:30–18:45; EGU2008-A-02824; NP6.05-1WE5O-005
Ferreres, E.; **Soler, M.R.;** Terradellas, E.; Bosveld, F. C.
Characteristics of intermittent turbulence in flat and complex
terrain: Cabauw and CIBA measurements

18:45–19:00; EGU2008-A-04677; NP6.05-1WE5O-006
Paradisi, P.; Palatella, L.; Cesari, R.; Contini, D.; Dona-
teo, A.; Martano, P.
Application of a Lagrangian model to turbulent dispersion
in the surface layer: the role of coherent structures

19:00 END OF SESSION

NP6.05 Turbulence in the Atmosphere and the Ocean – Posters

Convener: Yague, C.
Co-Convener(s): Fraunie, P., Tampieri, F., Cuxart, J.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 15:30–17:00
Poster Area Hall A
Chairperson: N.N.

A0410; EGU2008-A-04444; NP6.05-1WE4P-0410
Morato, M.C.; Castellano, M.T.; Seijas, J.; Tarquis, A.M.
Multifractal detrended fluctuation analysis of wind velocity time series

A0411; EGU2008-A-02931; NP6.05-1WE4P-0411
Tijera, M.; Cano, J.L.; González-Nieto, P.L.
Fractal dimension of atmospheric turbulent fluxes in the bidimensional physical space of the components of wind velocity

A0412; EGU2008-A-02546; NP6.05-1WE4P-0412
López gonzález-nieto, P.; Cano marchante, J.; Cano villaverde, D.; Tijera, M.
Time evolution of Thorpe profiles corresponding to atmospheric soundings

A0413; EGU2008-A-03040; NP6.05-1WE4P-0413
Dore, V.; **Moroni, M.;** Cenedese, A.
Investigation of penetrative convection in stratified fluids through 3D-PTV

NP7.01 Nonlinear Waves, Instabilities and wave-flow interactions – Posters

Convener: Rey, V.
Co-Convener(s): Ostrovsky, L.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0414; EGU2008-A-04096; NP7.01-1WE3P-0414
Piacsek, S.; Warn-Varnas, A.; Hawkins, J.; Smolarkiewicz, P.; McDonald, E.; Lamb, K.
Propagation of Shape-Preserving Solitons onto the Continental Shelf

A0415; EGU2008-A-07346; NP7.01-1WE3P-0415
Kopnin, S.I.; Popel, S.I.; Yu, M.Y.
Phenomena associated with dusty plasma formation in the ionosphere during meteor showers

A0416; EGU2008-A-07906; NP7.01-1WE3P-0416
Yang, Y.J.; Fang, Y.C.; Chang, M.H.; Tang, T.Y.; Ramp, S.R.
Observations of mode-2 internal solitary waves on the continental shelf of northern South China Sea

A0417; EGU2008-A-08971; NP7.01-1WE3P-0417
Dubosq, S.; **Francius, M.;** Saillard, M.; Grilli, S.; Branger, H.; Rey, V.
Modeling of nonlinear short gravity waves in the presence of an unsteady uniform current (solicited)

A0418; EGU2008-A-10416; NP7.01-1WE3P-0418
Centurioni, L. R.
Observations of Large Amplitude Non-Linear Internal Waves in the South China Sea

NP7.03 Wind-Wave interactions and mixing – Posters

Convener: Redondo, J.
Co-Convener(s): Gade, M., Bezerra, M.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0419; EGU2008-A-01092; NP7.03-1WE3P-0419
Mahjoub, O.B.; Redondo, J.M.
Intermittency in breaking wave induced turbulence

A0420; EGU2008-A-01623; NP7.03-1WE3P-0420
Bányai, Á.; Bányai, T.; Mang, B.
Optimisation of recycling systems – research activities at the University of Miskolc

A0421; EGU2008-A-06169; NP7.03-1WE3P-0421
Guinot, F.; Gouaud, F.; Rey, V.; Le Boulluec, M.
Wave and current interaction in finite water depth : influence on the kinematics (solicited)

A0422; EGU2008-A-12366; NP7.03-1WE3P-0422
Diez, M.; Bezerra, M.O.; Redondo, J.M.
Wind and Wave induced dispersion in the ocean (solicited)

A0423; EGU2008-A-12367; NP7.03-1WE3P-0423
Redondo, J.M.; **Drissi, A.**
Wave patterns in convection

A0424; EGU2008-A-12368; NP7.03-1WE3P-0424
Chashechkin, Y.B.; Kistovich, A.V.
New integral model of Surface wave propagation (solicited)

Thursday

NP1.04 Computational Methods in Nonlinear Earth System Sciences – Posters

Convener: Petkaki, P.
Co-Convener(s): Redondo, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: PETKAKI, P.

A0440; EGU2008-A-01299; NP1.04-1TH5P-0440
Burganov, B.; Khristoforov, A.; Khristoforova, N.
Geological structures identification using wavelets

A0441; EGU2008-A-02205; NP1.04-1TH5P-0441
Petkaki, P.
Real mass ratio Vlasov simulations of the nonlinear evolution of the ion-acoustic instability

A0442; EGU2008-A-03444; NP1.04-1TH5P-0442
Onofri, M.; Malara, F.; Veltri, P.; **Primavera, L.**
Three-dimensional numerical simulations of anisotropic turbulence induced by magnetic reconnection (solicited)

A0443; EGU2008-A-01546; NP1.04-1TH5P-0443
Markidis, S.; **Lapenta, G.**
The implicit moment method to treat micro-macro coupling and multiple physics in space weather modelling

A0444; EGU2008-A-08962; NP1.04-1TH5P-0444
Eraslan, A. H.; Özeren, M. S.; Postacioglu, N.
Fast-Transient Three-Dimensional Fully-2nd-Law-Conformant Discrete-Element Model for Simulating Tsunami Flows in Regions with Severe Depth Variations

A0445; EGU2008-A-09883; NP1.04-1TH5P-0445
Marras, S.; Vazquez, M.; Houzeaux, G.; Jimenez-Guerrero, P.; Jorba, O.; Cela, J.M.; Baldasano, J.M.
 A massively parallel finite elements approach to the solution of the Navier-Stokes equations in mesoscale atmospheric dynamics for numerical weather prediction (solicited)

IS39 - NP2.02/CR24 Nonlinear Cryosphere Dynamics (co-organized by NP & CR) – Posters

Convener: Ng, F.
 Co-Convener(s): Schoof, C.
 Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
 Poster Area Hall A
 Chairperson: NG, FELIX

A0446; EGU2008-A-12165; IS39 - NP2.02/CR24-1TH5P-0446
Schoof, C
 Freezing near the margins of an inactive ice stream

A0447; EGU2008-A-10306; IS39 - NP2.02/CR24-1TH5P-0447
Parrenin, F.; Hindmarsh, R.
 Influence of a non-uniform velocity field on isochrone geometry along a steady flowline of an ice sheet

A0448; EGU2008-A-03205; IS39 - NP2.02/CR24-1TH5P-0448
Wilchinsky, A; Feltham, D
 Anisotropic rheology of sea ice as a collection of diamond-shaped floes (solicited)

A0449; EGU2008-A-01873; IS39 - NP2.02/CR24-1TH5P-0449
Hindmarsh, R.C.A
 Sensitivity of marine ice-sheet grounding-line instability bifurcations to parameter ignorance.

A0450; EGU2008-A-07221; IS39 - NP2.02/CR24-1TH5P-0450
Lüthi, M.P.
 On the frequency response of glaciers

A0451; EGU2008-A-11979; IS39 - NP2.02/CR24-1TH5P-0451
Ng, F; Hodson, A
 Modelling the evolution of cryoconite holes

NP3.05 Uncertainty, Random Dynamical Systems and Stochastic Modeling in Geophysics (co-listed in HS)

Convener: Pavlyukevich, I.
 Co-Convener(s): Schertzer, D., Duan, J.
 Lecture Room 9
 Chairperson: N.N.

8:30–8:45; EGU2008-A-09670; NP3.05-1TH1O-001
Ghil, M.; Chekroun, M.D.; Simonnet, E.
 Stochastic climate modeling and random dynamical systems: robustness, frequency locking and applications

8:45–9:00; EGU2008-A-00789; NP3.05-1TH1O-002
Mukhin, D.; Feigin, A.; Molkov, Ya.; Loskutov, E.
 Reconstruction of high dimensional dynamic systems from time series by stochastic models

9:00–9:15; EGU2008-A-12398; NP3.05-1TH1O-003
 Dimri, V.P.; Srivastava, K.; Swaroopa, V.; Srinagesh, D.
 Tsunami wave propagation in Indian Ocean due to earthquakes in Sumatra and Makran subduction zones

9:15–9:30; EGU2008-A-05688; NP3.05-1TH1O-004
Sardeshmukh, P.D.; Sura, P.
 An interpretation of non-Gaussian statistics in geophysical data

9:30–9:45; EGU2008-A-00907; NP3.05-1TH1O-005
Chechkin, A.V.; Sokolov, I.M.
 Power-law truncated Levy flights

9:45–10:00; EGU2008-A-00596; NP3.05-1TH1O-006
Hoeghele, M.; Imkeller, P.; Pavlyukevich, I.
 Metastability in a simple SPDE climate model with Levy-flights

10:00 END OF SESSION

NP4.01 Nonlinear time series analysis in the geosciences

Convener: Donner, R.
 Co-Convener(s): Barbosa, S.
 Lecture Room 27
 Chairperson: DONNER, R.

13:30–14:00; EGU2008-A-09483; NP4.01-1TH3O-001
Maraun, D.
 Wavelet Myths Demystified (solicited)

14:00–14:15; EGU2008-A-07918; NP4.01-1TH3O-002
Faticchi, S.; Caporali, E.
 Trends in temperature time series: detection and uncertainties

14:15–14:30; EGU2008-A-11711; NP4.01-1TH3O-003
Halley, J. M.
 Detecting unnatural global warming in the context of long-term persistence

14:30–14:45; EGU2008-A-02701; NP4.01-1TH3O-004
Gudmundsson, L.; Lischeid, G.; Lange, H.
 Filling missing values in time series using Singular System Analysis and application to hydrological time series

14:45–15:00; EGU2008-A-05809; NP4.01-1TH3O-005
 Jimenez, A.; Posadas, A. M.; Tiampo, K. F.
 Small world in seismic complex networks

15:00 COFFEE BREAK

Chairperson: BARBOSA, S.

15:30–15:45; EGU2008-A-00382; NP4.01-1TH4O-001
Anderson, CNK; Hull, P; Sugihara, G
 Nonlinear forecast tools determine how much "ecosystem" is needed for Ecosystem Based Management (solicited) (cancelled)

15:45–16:00; EGU2008-A-00900; NP4.01-1TH4O-002
 Lucarini, V.
 From symmetry break to Poisson point process in 2D Voronoi tessellations: the generic nature of hexagons

16:00–16:15; EGU2008-A-10225; NP4.01-1TH4O-003
Siek, M.B.; Solomatine, D.P.
 Multivariate Phase Space Reconstruction and Chaos Model Prediction for Water Level and Surge Dynamics

16:15–16:30; EGU2008-A-03212; NP4.01-1TH4O-004
Williams, SDP; Bos, MS; Fernandes, RMS; Bastos, L
 Fast error analysis of continuous GPS observations

16:30 END OF SESSION

IS43 - NP4.02/CL55 Statistical analysis of climate time series (co-organized by NP & CL)

Convener: Mudelsee, M.
Co-Convener(s): Witt, A.
Lecture Room 27
Chairperson: MUDELSEE, M.

8:30–8:45; EGU2008-A-01134; IS43 - NP4.02/CL55-1TH1O-001

Langen, P. L.; Ditlevsen, P. D.

Effects of precipitation weighting on temperature time series in present day and glacial climates

8:45–9:00; EGU2008-A-08336; IS43 - NP4.02/CL55-1TH1O-002

Barbosa, S. M.; Silva, M. E.

Quantile regression analysis of climate time series

9:00–9:15; EGU2008-A-05893; IS43 - NP4.02/CL55-1TH1O-003

Hamed, K. H.

The effect of parameter estimation bias on the effectiveness of prewhitening in trend analysis of hydrologic and climatic data

9:15–9:30; EGU2008-A-12164; IS43 - NP4.02/CL55-1TH1O-004

Freyberger, J.; Urbain, J.-P.

Robust trend analysis in temperature time series data

9:30–9:45; EGU2008-A-02038; IS43 - NP4.02/CL55-1TH1O-005

Schicker, I.; Formayer, H.; Seibert, P.

Does climate change affect the mixing height?

9:45–10:00; EGU2008-A-03973; IS43 - NP4.02/CL55-1TH1O-006

Hoang, T.T.H.; Parey, S.; Dacunha-Castelle, D.

Trends and extremes in observed temperature series: a non stationary statistical analysis

10:00 COFFEE BREAK

Chairperson: TRAUTH, M.H.

10:30–10:45; EGU2008-A-11038; IS43 - NP4.02/CL55-1TH2O-001

Palus, M.; Novotna, D.

Common oscillatory modes in solar, geomagnetic and climate data and their interactions: Statistical problems and implications for solar-terrestrial relationships

10:45–11:00; EGU2008-A-03500; IS43 - NP4.02/CL55-1TH2O-002

Marwan, N.; Kurths, J.; Trauth, M. H.

A significance test for a recurrence based transition analysis

11:00–11:15; EGU2008-A-00586; IS43 - NP4.02/CL55-1TH2O-003

Donner, R.

Nonlinear methods for studying the temporal variability of spatial correlations between climatic time series

11:15–11:30; EGU2008-A-09806; IS43 - NP4.02/CL55-1TH2O-004

Collet, J.C.; Epiard, X.; Coudray, P

A model to simulate hydraulic inflows for France

11:30–11:45; EGU2008-A-10569; IS43 - NP4.02/CL55-1TH2O-005

Schölzel, C.; Friederichs, P.

Multivariate non-normally distributed random variables in climate research – introduction to the copula approach

11:45–12:00; EGU2008-A-11655; IS43 - NP4.02/CL55-1TH2O-006

Nicolay, S.; Mabilie, G.; Fettweis, X.; Erpicum, M.

Solar activity in connection with a 2.5 years period cycle in air temperature time series using the Morlet wavelet method

12:00 END OF SESSION

NP4.03 Satellite time series analysis

Convener: Lasaponara, R.

Co-Convener(s): Lanorte, A.

Lecture Room 27

Chairperson: LASAPONARA R., MCCLOY K.R.

16:30–16:45; EGU2008-A-02500; NP4.03-1TH4O-005

Leroy, M.; Bicheron, P.; Lacaze, R.; Miras, B.

The POSTEL Land Surface Thematic Center as a source of time series of vegetation variables and land cover at global scale (solicited)

16:45–17:00; EGU2008-A-02830; NP4.03-1TH4O-006

Ma, Y.; Ma, W.; Zhong, L.; Su, Z.; Menenti, M.

Using the satellite data to determinate the regional land surface heat fluxes over heterogeneous landscape of the Tibetan Plateau (solicited)

17:00 COFFEE BREAK

Chairperson: N.N.

17:30–17:45; EGU2008-A-02812; NP4.03-1TH5O-001

McCloy, K. R.; J. E. Olesen, J. E.

Estimation of crop nitrogen status from time series remotely sensed data

17:45–18:00; EGU2008-A-02043; NP4.03-1TH5O-002

Lattanzio, A.; Govaerts, Y.M.; Theodore, B.

Generation of long term surface albedo datasets with Meteosat First Generation images.

18:00–18:15; EGU2008-A-01111; NP4.03-1TH5O-003

Veraverbeke, S.; Goossens, R.

NDVI and LST trend line analysis using coarse resolution datasets for the Mediterranean Basin 1981-2007 (cancelled)

18:15–18:30; EGU2008-A-01635; NP4.03-1TH5O-004

Verhoef, W.

SPOT-VGT reflectance time series of Europe in 2002 processed by HANTS

18:30–18:45; EGU2008-A-06132; NP4.03-1TH5O-005

Lhermitte, S.; Verbesselt, J.; Verstraeten, W.W.; Coppin, P.

Quantitative Comparison of Time Series Similarity Measures for Mapping and Detecting Changes in NDVI Time Series

18:45–19:00; EGU2008-A-11986; NP4.03-1TH5O-006

Simoniello, T.; Carone, M.T.; Grippa, A.; Liberti, M.; Coppola, R.; Macchiato, M.

Inter-calibration of Landsat-TM/ETM scenes in heterogeneous areas

19:00 END OF SESSION

NP5.01 Quantifying predictability including high impact weather (THORPEX) and hydrology (HEPEX) (co-listed in HS & NH) – Posters

Convener: Toth, Z.

Co-Convener(s): Balint, G., Szunyogh, I.

Display Time: Thursday, 08:00–19:30

Authors in Attendance: Thursday, 13:30–15:00

Poster Area Hall A

Chairperson: TOTH, Z.

A0452; EGU2008-A-12317; NP5.01-1TH3P-0452

Schultz, P.; Yuan, H.; Charles, M.; Krzysztofowicz, R.; Toth, Z.

A continuous variable for the statistical processing of precipitation

A0453; EGU2008-A-12204; NP5.01-1TH3P-0453

Toth, Z.; Bougeault, P.

Activities and plans for TIGGE

A0454; EGU2008-A-09366; NP5.01-1TH3P-0454

Argence, S.; Lambert, D.; Richard, E.; **Chaboureaud, J.-P.**

Application of local potential vorticity modifications to improve the numerical prediction of an intense Mediterranean cyclone

A0455; EGU2008-A-01978; NP5.01-1TH3P-0455

Tang, Y

Comparison of Information-based Measures of Forecast Uncertainty in Ensemble ENSO Prediction

A0456; EGU2008-A-11320; NP5.01-1TH3P-0456

Cui, B.; **Toth, Z.;** Zhu, Y.; Hou, D.

Statistical bias correction and downscaling methods

A0457; EGU2008-A-10875; NP5.01-1TH3P-0457

Schaaake, J

Analysis of uncertainty in the distribution of wet precipitation events

A0458; EGU2008-A-06996; NP5.01-1TH3P-0458

Andel van, S. J.; Lobbrecht, A. H.; Price, R. K.

Anticipatory Water Management; cost-benefit analysis

A0459; EGU2008-A-03111; NP5.01-1TH3P-0459

Rousset-Regimbeau, F.; Noilhan, J.; **Thirel, G. ;** Martin, E.; Habets, F.

Medium-range Ensemble Streamflow forecast over France

A0460; EGU2008-A-12288; NP5.01-1TH3P-0460

Montani, A.; Marsigli, C.; Diomede, T.

Basin-oriented verification of COSMO-LEPS system

A0461; EGU2008-A-08627; NP5.01-1TH3P-0461

Zelazny, R.; Malinowski, S.P.; Jakubiak, B.; Loboocki, L.; Witek, M.L.; Kurowski, M.; Bednarek, K.; Piotrowski, Z.P.; Struzewska, J.; Zdunek, M.

A multimodel regional ensemble over Central Europe: preliminary results.

A0462; EGU2008-A-12265; NP5.01-1TH3P-0462

Zhina, J.; Mu, M.

An investigation on the application of conditional nonlinear optimal perturbation to ensemble prediction

NP5.02 Data assimilation in the presence of nonlinearities – Posters

Convener: Talagrand, O.

Co-Convener(s): van Leeuwen, P.

Display Time: Thursday, 08:00–19:30

Authors in Attendance: Thursday, 13:30–15:00

Poster Area Hall A

Chairperson: N.N.

A0463; EGU2008-A-08008; NP5.02-1TH3P-0463

Nakano, S.; Ueno, G.; Higuchi, T.

Parameter estimation for dynamic nonlinear models using the merging particle filter

A0464; EGU2008-A-02964; NP5.02-1TH3P-0464

SACHER, S.W.; BARTELLO, B.P

Sampling errors in Ensemble Kalman filtering

A0465; EGU2008-A-05068; NP5.02-1TH3P-0465

Dobricic, S.

A sequential variational algorithm for data assimilation in oceanography and meteorology

A0466; EGU2008-A-10811; NP5.02-1TH3P-0466

Grzeschik, G.; Zus, Z.; Bauer, B.; Wulfmeyer, W.; Wickert, W;

Dick, D.; Gendt, G.; Bender, B.; Offiler, O

Assimilation of ground-based GPS observations into the MM5 4D-Var system

A0467; EGU2008-A-05353; NP5.02-1TH3P-0467

Ueno, G.; Higuchi, T.; Tsuchiya, T.; Kagimoto, T.; Hirose, N.

Regularization of singular covariance matrices with graphical models

A0468; EGU2008-A-06666; NP5.02-1TH3P-0468

Shutyaev, V.

On optimal solution error in the variational data assimilation problem for the ocean thermodynamics model

A0469; EGU2008-A-08313; NP5.02-1TH3P-0469

Wlasak, M.

A randomisation method to quantify the size of the initialisation constraint term in 4D-Var.

A0470; EGU2008-A-06721; NP5.02-1TH3P-0470

Parmuzin, E.; Rusakov, A.; Zalesny, V.

Numerical solution of a 4D-variational initialization problem for the Indian Ocean

A0471; EGU2008-A-04596; NP5.02-1TH3P-0471

Varela, H.V.; Guérif, M.; Buis, S

Estimating soil parameters of a crop model to improve crop behavior prediction: interest of global sensitivity analysis.

A0472; EGU2008-A-07671; NP5.02-1TH3P-0472

Wu, L.; Mallet, V.; Bocquet, M.; Sportisse, B.

A comparison study of data assimilation algorithms for ozone forecasts

A0473; EGU2008-A-07572; NP5.02-1TH3P-0473

Losa, S. N.; Schröter, J.; Wenzel, M.

Particle filtering in strongly non-linear ecosystem modelling

A0474; EGU2008-A-08917; NP5.02-1TH3P-0474

Rémy, S.; Bergot, T.

Ensemble Kalman filter assimilation in a boundary layer 1D numerical model

A0475; EGU2008-A-10977; NP5.02-1TH3P-0475

Coman, A.; Forêt, G.; Ionescu, A.; Candau, Y.; Beekmann, M.; Bergametti, G.

Sequential ozone assimilation on a chemistry-transport model, CHIMERE, at a regional scale

NP5.03 Model Error: Dynamics, correction and modelling – Posters

Convener: Vannitsem, S.
Co-Convener(s): Reynolds, C.

Display Time: Thursday, 08:00–19:30

Authors in Attendance: Thursday, 13:30–15:00

Poster Area Hall A
Chairperson: N.N.

A0476; EGU2008-A-02702; NP5.03-1TH3P-0476

Vannitsem, S.

Dynamical properties of MOS forecasts. Analysis of the ECMWF operational forecasting system.

A0477; EGU2008-A-08413; NP5.03-1TH3P-0477

Carrassi, A.; Vannitsem, S.; Nicolis, C.

Model error and sequential data assimilation: A deterministic perspective.

A0478; EGU2008-A-10365; NP5.03-1TH3P-0478

Stauch, VJ

Statistical adaptation of mesoscale numerical weather forecasts for the predictive control of indoor building climate

A0479; EGU2008-A-11869; NP5.03-1TH3P-0479

Pena, M; Toth, Z

Growth of errors of Nino 3.4 forecasts in a coupled GCM

NP6.04 Nonlinear Geophysical Fluid Dynamics – Posters

Convener: Caulfield, C.

Co-Convener(s): Dalziel, S., Balmforth, N.

Display Time: Thursday, 08:00–19:30

Authors in Attendance: Thursday, 13:30–15:00

Poster Area Hall A

Chairperson: CAULFIELD, C.P.

A0480; EGU2008-A-00422; NP6.04-1TH3P-0480

Lucarini, V.

Response theory for non-equilibrium steady states: causality and generalized Kramers-Kronig relations

A0481; EGU2008-A-01364; NP6.04-1TH3P-0481

Bokhove, O.; Akers, B.

Hydraulic Flow through a Channel Contraction: Multiple Steady States

A0482; EGU2008-A-03810; NP6.04-1TH3P-0482

Pudasaini, S. P.; Miller, S. A.

The method of characteristics breaks down for accelerating frictional materials on inclined surfaces

A0483; EGU2008-A-04258; NP6.04-1TH3P-0483

Fourrière, A.; Claudin, P.; Andreotti, B.

Why river dunes do not form by a linear instability

A0484; EGU2008-A-05440; NP6.04-1TH3P-0484

Breuer, M.; Hansen, U.

Turbulent convection in the zero Reynolds number limit and the phenomenon of flow reversals

A0485; EGU2008-A-05454; NP6.04-1TH3P-0485

Chan, I; Balmforth, N.J.; Young, W.R.

Parametric subharmonic instability (PSI) and the beta effect

A0486; EGU2008-A-05641; NP6.04-1TH3P-0486

Patterson, M. D.; Caulfield, C. P.; Dalziel, S. B.

The interaction of nonlinear lee waves with shear and boundary layers

A0487; EGU2008-A-05660; NP6.04-1TH3P-0487

Balmforth, N; Rust, A

The viscoplastic Rayleigh-Benard problem

A0488; EGU2008-A-08979; NP6.04-1TH3P-0488

Lacaze, L.; Phillips, J.C.; Kerswell, R.R.

Planar collapse of a granular column : experiments and discrete element simulations

A0489; EGU2008-A-09798; NP6.04-1TH3P-0489

collaboration, VKS; Aumaitre, S; VKS collaboration

Some nonlinear phenomena in an experimental dynamo

A0490; EGU2008-A-12092; NP6.04-1TH3P-0490

Dubash, N.; Balmforth, N. J.; Cochard, S.; Slim, A.

What is the shape of a viscoplastic slump?

A0491; EGU2008-A-12155; NP6.04-1TH3P-0491

Cochard, S.; Ancey, C.

Time-dependent free-surface viscoplastic flows down steep slopes; experimental results

NP6.06 Astrophysical Turbulence, Shocks and Plasmas – Posters

Convener: Haas, J.

Co-Convener(s): Meshkov, E., Redondo, J.

Display Time: Thursday, 08:00–19:30

Authors in Attendance: Thursday, 13:30–15:00

Poster Area Hall A

Chairperson: N.N.

A0492; EGU2008-A-02002; NP6.06-1TH3P-0492

Kochemasov, G.

Saturnian ring particles as building material for tiny "flying saucers"

A0493; EGU2008-A-10993; NP6.06-1TH3P-0493

Bespalov, P.A. ; Savina, O.N.

Some aspects of magnetospheric response to the ionospheric infrasonic wave

A0494; EGU2008-A-02758; NP6.06-1TH3P-0494

Maj, S.

On the relationship between reduced heat flow density and mean heat flow density for heat flow provinces of the continental Earth's crust

A0495; EGU2008-A-12364; NP6.06-1TH3P-0495

Hernandez, D.; Redondo, J.M.

Turbidity current ignition processes

A0496; EGU2008-A-12365; NP6.06-1TH3P-0496

Redondo, J.M.; Matulka, A.; Platonov, A.; Castilla, R.

Multifractal analysis of SAR of the ocean surface, currents,

A0497; EGU2008-A-12362; NP6.06-1TH3P-0497

Redondo, J.M.; Sanchez, M.A.

Mixing efficiency in stratified flows

NP6.07 Turbulence in particle-laden flows – Posters

Convener: BATEMAN, A.

Co-Convener(s): Cencini, M.

Display Time: Thursday, 08:00–19:30

Authors in Attendance: Thursday, 13:30–15:00

Poster Area Hall A

Chairperson: N.N.

A0498; EGU2008-A-00224; NP6.07-1TH3P-0498

Bhawar, R.; Devara, P.C.S

Decadal variability of aerosols and trace gases over a tropical urban station (Pune, India) (solicited)

A0499; EGU2008-A-02243; NP6.07-1TH3P-0499

Hales, T.; Band, L.; Ford, C.; Scharer, K.; Vose, J.

The Effect of Forest Management on the Spatial Distribution of Root Cohesion and Slope Stability (solicited)

A0500; EGU2008-A-03188; NP6.07-1TH3P-0500
Zahnw, J. C.; Vilela, R. D.; Tél, T.; Feudel, U.
Aggregation and fragmentation dynamics of inertial particles in chaotic flows (solicited)

A0501; EGU2008-A-03898; NP6.07-1TH3P-0501
Gao, A; Liu, B; Zeilinger, C
Cenozoic paleosurfaces reconstruction and erosion quantification for northeastern Tibetan plateau using SRTM DEM

A0502; EGU2008-A-05065; NP6.07-1TH3P-0502
Cherniavski, V.; Suetnova, E.
Exact solution for a creeping flow and some applications to the sedimentary basins

A0503; EGU2008-A-08762; NP6.07-1TH3P-0503
Perchuk, A.L.; Davidova, V.V.; Stoeckhert, B.
Eclogitization of hot granulites, Bergen Arcs, Norway

Friday

NP1.04 Computational Methods in Nonlinear Earth System Sciences

Convener: Petkaki, P.
Co-Convener(s): Redondo, J.
Lecture Room 27
Chairperson: PRIMAVERA, L.

15:30–15:45; EGU2008-A-12109; NP1.04-1FR4O-001
Bodenschatz, E.
Particle Transport in Fully Developed Trubulence (solicited)

15:45–16:00; EGU2008-A-03363; NP1.04-1FR4O-002
Petkaki, P.; **MacKinnon, A. L.**
Particle acceleration by fluctuating electric fields at a magnetic field null point

16:00–16:15; EGU2008-A-10752; NP1.04-1FR4O-003
von Hardenberg, J.; Morrison, P. J.; Provenzale, A.; Weiss, J. B.
The dependence of vortex population properties on resolution and on initial conditions in two-dimensional turbulence (solicited)

16:15–16:30; EGU2008-A-03127; NP1.04-1FR4O-004
Myerscough, R. J.; Marsh, R.; Shepherd, J. G.; Lenton, T. M.; Johnson, M.; Price, A. R.; Cox, S. J.; Lunt, D. J.; Williams, G.
Thermohaline circulation hysteresis loops obtained for a grid-enabled fully-coupled climate model under different parameterizations of ocean vertical mixing (solicited)

16:30–16:45; EGU2008-A-02491; NP1.04-1FR4O-005
Vogt, J.; Zieger, B.; Glassmeier, K.-H.; Stadelmann, A.; Kallenrode, M.-B.; Sinnhuber, M.; Winkler, H.
Effects of internal geomagnetic variations on the Earth's space environment and the middle atmosphere (solicited)

16:45–17:00; EGU2008-A-02067; NP1.04-1FR4O-006
Carbone, V.; **Bruno, R.**
Turbulence in space plasmas (solicited)

17:00 END OF SESSION

IS39 - NP2.02/CR24 Nonlinear Cryosphere Dynamics (co-organized by NP & CR)

Convener: Ng, F.
Co-Convener(s): Schoof, C.
Lecture Room 30
Chairperson: NG, FELIX

8:30–8:45; EGU2008-A-05087; IS39 - NP2.02/CR24-1FR1O-001
Fowler, A.C.

Dynamics of subglacial floods (solicited)

8:45–9:00; EGU2008-A-02525; IS39 - NP2.02/CR24-1FR1O-002
Feltham, DL

Sea ice dynamics in the marginal ice zone: the role of rheology (solicited)

9:00–9:15; EGU2008-A-00854; IS39 - NP2.02/CR24-1FR1O-003
DeGiuli, E.; Schoof, C.
Hysteresis and chaos in ice stream behaviour

9:15–9:30; EGU2008-A-03753; IS39 - NP2.02/CR24-1FR1O-004
Perona, P.
Minimalist models of Alpine hydrological processes and their relation to climate (solicited)

9:30–9:45; EGU2008-A-08689; IS39 - NP2.02/CR24-1FR1O-005
Brown, J; Bueler, E
Superposition of velocity for ice sheet modeling

9:45–10:00; EGU2008-A-05909; IS39 - NP2.02/CR24-1FR1O-006
Tulaczyk, S.
Conditions for initiation of surface water drainage to the base of a polar ice sheet

10:00 END OF SESSION

NP4.01 Nonlinear time series analysis in the geosciences – Posters

Convener: Donner, R.
Co-Convener(s): Barbosa, S.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 10:30–12:00
Poster Area Hall A
Chairperson: BARBOSA, S. / DONNER, R.

A0463; EGU2008-A-01968; NP4.01-1FR2P-0463
Ramírez- Rojas, A.; Del Río-Correa, J. L.; Guzman-Vargas, L.
A model of self-potential time series based in a chaotic map

A0464; EGU2008-A-02295; NP4.01-1FR2P-0464
Guzmán-Vargas, L.; Ramírez-Rojas, A.; Angulo-Brown, F.
Variability and entropy in electroseismic time series

A0465; EGU2008-A-01584; NP4.01-1FR2P-0465
Telesca, L.; Lovallo, M.
Analysis of scaling behaviour in seismic interevent series revealed by detrended fluctuation analysis

A0466; EGU2008-A-04918; NP4.01-1FR2P-0466
Muhamedov, V.
financial time series as model system for earthquake prediction

A0467; EGU2008-A-04170; NP4.01-1FR2P-0467
Hawkins, J; **Warn-Varnas, A**
Internal gravity waves in the Strait of Luzon: dispersion studies using Fourier and continuous wavelet analysis

A0468; EGU2008-A-05210; NP4.01-1FR2P-0468
Miksovsky, J.
 Retrieving missing segments of daily temperature series:
 Can nonlinear methods help to improve the results?

A0469; EGU2008-A-08864; NP4.01-1FR2P-0469
Barbosa, S. M.
 Changing seasonality in global sea surface temperature

A0470; EGU2008-A-06437; NP4.01-1FR2P-0470
Donner, R.; Donner, S.
 Impact of seasonal cycle removal on linear and nonlinear
 time series analysis of geophysical data

A0471; EGU2008-A-12203; NP4.01-1FR2P-0471
 Donner, S.; Padberg, K.; Orgis, T.; Donner, R.; Brand, S.;
 Schwarz, U.; Kurths, J.; Dethloff, K.
 Methods for detecting saddle points and invariant manifolds
 from spatio-temporal geophysical data: Comparison and
 applications to GCM-simulated wind fields

A0472; EGU2008-A-06456; NP4.01-1FR2P-0472
Donner, R.
 Scale-resolved phase coherence analysis between signals of
 solar and climatic variability

A0473; EGU2008-A-08580; NP4.01-1FR2P-0473
Kovács, P.
 Study of nonlinear relation between the magnetosphere
 and solar wind dynamics - Chaos analyses of magnetic
 time-series of the investigated systems

A0474; EGU2008-A-03384; NP4.01-1FR2P-0474
Laubrich, T.; Kantz, H.
 Instationarity of the increment distribution of boundary layer
 wind speed

A0475; EGU2008-A-02881; NP4.01-1FR2P-0475
Jafari, M.; sharifi, M. A.
 Smoothing satellite altimetry data using Kalman and wiener
 filters

A0476; EGU2008-A-01816; NP4.01-1FR2P-0476
Khelifa, S.; Ghezali, B.; Kahlouche, S.
 Denoising of stations coordinates time series of space
 geodesy : Application to Doris stations time series

**IS43 - NP4.02/CL55 Statistical analysis of climate time
 series (co-organized by NP & CL) – Posters**

Convener: Mudelsee, M.

Co-Convener(s): Witt, A.

Display Time: Friday, 08:00–19:30

Authors in Attendance: Friday, 10:30–12:00

Poster Area Hall A

Chairperson: MUDELSEE, M.

A0478; EGU2008-A-00888; IS43 - NP4.02/CL55-1FR2P-
 0478
 Ghanbarian-Alavijeh, B.; Hedayati, L.; **Jafari, G.R.;**
 Liaghat, A.M.
 Multifractal Detrended Fluctuation Analysis of Standard
 Precipitation Index Time Series

A0479; EGU2008-A-05470; IS43 - NP4.02/CL55-1FR2P-
 0479
Mosaedi, A.; Mohammadi O., A.; Meftah H., M.
 Detection of outliers data (precipitation and flood) in
 Golestan Dam Watershed

A0480; EGU2008-A-10740; IS43 - NP4.02/CL55-1FR2P-
 0480
Schölzel, C.; Litt, T.; Kühl, N.; Hense, A.
 Probabilistic climate reconstructions using Holocene pollen
 records from lake Holzmaar and Meerfelder Maar

A0481; EGU2008-A-02418; IS43 - NP4.02/CL55-1FR2P-
 0481
 Kysely, J.; **Beranova, R.;** Picek, J.
 Application of extreme value models with time-dependent
 parameters in climate change studies

A0482; EGU2008-A-03840; IS43 - NP4.02/CL55-1FR2P-
 0482
Suselj, K.; Sood, A.; Heinemann, D.
 North Sea surface winds in the past and future climates

A0483; EGU2008-A-02796; IS43 - NP4.02/CL55-1FR2P-
 0483
Mudelsee, M.; Fleitmann, D.; Scholz, D.; Röthlisberger, R.;
 Wolff, E.W.
 Climate spectrum estimation, aliasing and timescale errors:
 Algorithms and application to stalagmite and ice core records

A0484; EGU2008-A-07724; IS43 - NP4.02/CL55-1FR2P-
 0484
Barbosa, S. M.; Silva, M. E.
 Model-based decomposition of climate time series

A0485; EGU2008-A-06505; IS43 - NP4.02/CL55-1FR2P-
 0485
Schmith, T.
 Stationarity of regression relationships: Application to
 empirical downscaling

A0486; EGU2008-A-09047; IS43 - NP4.02/CL55-1FR2P-
 0486
Juckes, M.N.; Weber, S.L.
 Refining error estimates for a millennial temperature recon-
 struction

A0487; EGU2008-A-00427; IS43 - NP4.02/CL55-1FR2P-
 0487
Shulgina, T.; Gordov, E.; Nikitchuk, K.; Titov, A.
 Statistical analysis of the air temperature dynamics for
 Northern Eurasia

A0488; EGU2008-A-09299; IS43 - NP4.02/CL55-1FR2P-
 0488
Holme, R.; Marshall, J.; Duckworth, D
 Detrending noisy and non-stationary climate time series
 with penalised least-squares splines

A0489; EGU2008-A-04315; IS43 - NP4.02/CL55-1FR2P-
 0489
Bakalian, F.; Ritchie, H.; Thompson, K.R.; Merryfield, W.J.
 Modes of variability of the coupled atmosphere-ocean sys-
 tem: Redundancy analysis of global sea surface temperature
 and air pressure

A0490; EGU2008-A-05655; IS43 - NP4.02/CL55-1FR2P-
 0490
Oliver, ECJ; Thompson, KR
 Connections Between the Madden Julian Oscillation and
 Extratropical Regions of the Global Ocean

A0491; EGU2008-A-05253; IS43 - NP4.02/CL55-1FR2P-
 0491
Ihrig, D. F.
 Detection of climate trends from local time series using a
 Monte-Carlo-enhanced filtering process

A0492; EGU2008-A-10390; IS43 - NP4.02/CL55-1FR2P-
 0492
 Vujovic, D.; **Veljovic, K.**
 Fog analysis at Belgrade International Airport

A0493; EGU2008-A-06277; IS43 - NP4.02/CL55-1FR2P-
 0493
Cahynová, M.; Huth, R.
 Enhanced persistence of atmospheric circulation over Eu-
 rope: fact or fiction?

A0494; EGU2008-A-10697; IS43 - NP4.02/CL55-1FR2P-0494
Khan, V.; Tischenko, V.; Sadokov, V.; Vilfand, R.
 Occurrences of quasi-stationary anticyclones in the Euro-Atlantic region

NP4.03 Satellite time series analysis – Posters

Convener: Lasaponara, R.
 Co-Convener(s): Lanorte, A.
 Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 10:30–12:00
 Poster Area Hall A
 Chairperson: N.N.

A0495; EGU2008-A-02820; NP4.03-1FR2P-0495
McCloy, K. R.
 Analysis of changes in plant phenology using time series image data

A0496; EGU2008-A-11223; NP4.03-1FR2P-0496
Udelhoven, T.; Stellmes, M.
 Time-series analysis using a 1km AVHRR data-set for change-detection in the Mediterranean (1989-2004)

A0497; EGU2008-A-11681; NP4.03-1FR2P-0497
Savin, E.; Nertan, A.; Flueraru, C.
 Multitemporal NDVI SPOT VEGETATION images analysis for vegetation stress monitoring

A0498; EGU2008-A-12193; NP4.03-1FR2P-0498
Lanorte, A.; Lasaponara, R.
 Estimating land degradation by using satellite SPOT/VEGETATION NDVI time series

A0499; EGU2008-A-11987; NP4.03-1FR2P-0499
Liberti, M.; Simoniello, T.; Lanfredi, M.; Coppola, R.; Macchiato, M.; Cuomo, V.
 Preliminary validation of GIMMS time series on Mediterranean ecosystems

A0500; EGU2008-A-02545; NP4.03-1FR2P-0500
 Lanorte, A.; Lasaponara, R.; Telesca, L.
 Persistent Behavior in SPOT-VEGETATION NDVI data for Mediterranean Ecosystems of Southern Italy

A0501; EGU2008-A-02542; NP4.03-1FR2P-0501
 Coluzzi, R.; Lasaponara, R.; Telesca, L.
 Time-variation of urban morphology in a small town of southern Italy explored by using Landsat data

A0502; EGU2008-A-04038; NP4.03-1FR2P-0502
Sifakis, N.; Iossifidis, C.; Sarigiannis, D.
 Landsat satellite data analysis for high spatial resolution aerosol mapping and backcasting over the urban area of Athens (1986-2001)

A0503; EGU2008-A-10300; NP4.03-1FR2P-0503
 Sharifi, M.A.; **Forootan, E.**
 Spectral analysis of Caspian Sea level change, using TOPEX/Poseidon mission data

A0504; EGU2008-A-09621; NP4.03-1FR2P-0504
Huesca, M.; Litago, J.; Palacios-Orueta, A.; Merino-de-Miguel, S.
 Model design to predict forest fire risk in Navarra (Spain) using time series analysis

A0505; EGU2008-A-10822; NP4.03-1FR2P-0505
Lanorte, A.; Telesca, L.; Lasaponara, R.
 Fire-induced variability in vegetation covers by using SPOT-VGT NDVI time series

NP6.02 Geophysical Fluid Mechanics Laboratory Experiments

Convener: Fruh, W.
 Co-Convener(s): BATEMAN, A., Fernando, J.
 Lecture Room 27
 Chairperson: N.N.

10:30–10:45; EGU2008-A-07569; NP6.02-1FR2O-001
 Sekula, E.; Redondo, J. M.
 Intermittency and structure function of turbulent jets

10:45–11:00; EGU2008-A-03912; NP6.02-1FR2O-002
Gostiaux, L.; Gerkema, T.; Sommeria, J.; Harlander, U.
 Occurrence of an attractor in a laboratory experiment on internal-tide generation at a shelf break.

11:00–11:15; EGU2008-A-03191; NP6.02-1FR2O-003
Hazewinkel, J.; van Breevoort, P.; Dalziel, S.B.; Maas, L.R.M.
 Observations on an internal wave attractors in a stratified fluid

11:15–11:30; EGU2008-A-01789; NP6.02-1FR2O-004
Maas, L.R.M.
 Experiments on rotating flows: impact of rotation on flow through tilted rectangular ducts (solicited)

11:30–11:45; EGU2008-A-01783; NP6.02-1FR2O-005
Futterer, B.; Bergemann, K.; Feudel, F.; Tuckerman, L.; Egbers, C.
 ISS experiment GEOFLOW: non-rotational and rotational regimes of thermal convection on rotating spherical shells

11:45–12:00; EGU2008-A-00206; NP6.02-1FR2O-006
 Bardakov, R.N.; **Chashechkin, Yu.D.**
 Singular disturbed components of stratified flows and their impact on transport of contaminants

12:00 END OF SESSION

NP6.04 Nonlinear Geophysical Fluid Dynamics

Convener: Caulfield, C.
 Co-Convener(s): Dalziel, S., Balmforth, N.
 Lecture Room 27
 Chairperson: CAULFIELD, C.P.

13:30–13:45; EGU2008-A-01957; NP6.04-1FR3O-001
Young, W.; Tsang, Y-K; Thompson, A.
 Forced two-dimensional turbulence: energy balance and variational constraints (solicited)

13:45–14:00; EGU2008-A-05573; NP6.04-1FR3O-002
Carazzo, G.; Kaminski, E.; Tait, S.
 Dynamics of experimental hot particle-laden jets

14:00–14:15; EGU2008-A-08916; NP6.04-1FR3O-003
 Witham, F.; **Phillips, J.C.**
 The dynamics and mixing of turbulent plumes in a turbulently convecting environment with application to persistent volcanic activity

14:15–14:30; EGU2008-A-04827; NP6.04-1FR3O-004
Hewitt, I. J.; Fowler, A. C.
 Melt migration in partially molten upwelling mantle

14:30–14:45; EGU2008-A-05947; NP6.04-1FR3O-005
Slim, AC.; Balmforth, NJ
 Elastic-skinned gravity currents

14:45–15:00; EGU2008-A-02508; NP6.04-1FR3O-006
Hutter, K.; Schneider, L.
Important Aspects in the Formulation of Solid-Fluid Debris
Flow Models

15:00 END OF SESSION

NP6.06 Astrophysical Turbulence, Shocks and Plasmas

Convener: Haas, J.
Co-Convener(s): Meshkov, E., Redondo, J.
Lecture Room 27
Chairperson: N.N.

17:30–18:00; EGU2008-A-02705; NP6.06-1FR5O-001
Carbone, V.; Marino, R.; Sorriso-Valvo, L.; Veltri, P.;
Noullez, A.; Bruno, R.; Bavassano, B.
The energy cascade in solar wind turbulence (solicited)

18:00–18:15; EGU2008-A-02478; NP6.06-1FR5O-002
Chapman, S. C.; Hnat, B.; Kiyani, K.
The observed scaling properties of turbulent fluctuations in
the turbulent solar wind: anisotropy and anomalous scaling
due to MHD.

18:15–18:30; EGU2008-A-12360; NP6.06-1FR5O-003
Redondo, J.M.; Garzon, G.
Multiscale Models of Rayleigh-Taylor Instability

18:30–18:45; EGU2008-A-12361; NP6.06-1FR5O-004
Gonzalez-Nieto, P.; Redondo, J.M.; Cano, J.L.;
Rozanov, V.P.
The Structure of Interacting Turbulent Jets and RT fronts
(solicited)

18:45–19:00; EGU2008-A-12363; NP6.06-1FR5O-005
Matulka, A.M.; Mahjoub, O.B.; Carrillo, A.
Rotating Stratified Flows (solicited)

19:00 END OF SESSION

NP7.01 Nonlinear Waves, Instabilities and wave-flow interactions

Convener: Rey, V.
Co-Convener(s): Ostrovsky, L.
Lecture Room 27
Chairperson: N.N.

8:30–8:45; EGU2008-A-01397; NP7.01-1FR1O-001
Grimshaw, R.; Helfrich, K.
Transformation of an isolated pulse into an envelope soliton:
long-time solutions of the Ostrovsky equation

8:45–9:00; EGU2008-A-01415; NP7.01-1FR1O-002
Scherer, E.; **Zeitlin, V.**
Instability of coupled geostrophic density fronts and its
nonlinear evolution

9:00–9:15; EGU2008-A-02485; NP7.01-1FR1O-003
MAUGÉ, R.; **Gerkema, T.**
Generation of weakly nonlinear nonhydrostatic internal tides
over large topography: a multi-modal approach

9:15–9:30; EGU2008-A-02822; NP7.01-1FR1O-004
McDonald, B.
Probing the seafloor with nonlinear compressional waves

9:30–9:45; EGU2008-A-06461; NP7.01-1FR1O-005
Reznik, G. M.; Zeitlin, V.
Resonant excitation and nonlinear evolution of waves in the
equatorial waveguide in the presence of the mean current

9:45–10:00; EGU2008-A-08114; NP7.01-1FR1O-006
Lamb, K.G.; Xiao, W.; Nguyen, V.T.
Energy flux and shoaling internal solitary waves

10:00 END OF SESSION
