
EGU 2008 Meeting Programme

Hydrological Sciences

Monday

HS1.2 Linking Participation and knowledge sharing with Integrated Land Use Management

Convener: Kirkby, M.
Co-Convener(s): Schwilch, G.
Lecture Room 32
Chairperson: N.N.

13:30–13:45; EGU2008-A-12331; HS1.2-1MO3O-001

McDonagh, J.

Interdisciplinary approaches for land degradation assessment (solicited)

13:45–14:00; EGU2008-A-10162; HS1.2-1MO3O-002

Valente, S.; Coelho, C.; Ferreira, A.; Amaral, L.; Silva, F.
Traditional water management systems – Are they still important to local communities?

14:00–14:15; EGU2008-A-10606; HS1.2-1MO3O-003

Schwilch, G.; Bachmann, F.; Gabathuler, E.; Liniger, HP.
A methodology to appraise and select strategies to mitigate desertification based on stakeholder participation and global best practices

14:15–14:30; EGU2008-A-02963; HS1.2-1MO3O-004

Alexander, K. S.; Nancarrow, B. E.
A partnered approach to sustainable land management practices: Integrating local knowledge and social and biophysical scientific models

14:30–14:45; EGU2008-A-11109; HS1.2-1MO3O-005

Gebreyohannis, S.; Bishop, K
Linking deforestation to the flow regime in the Upper Blue Nile Basin: community perception vs/and/or the observational record

14:45–15:00; EGU2008-A-08749; HS1.2-1MO3O-006

Lane, S.N.; Bradley, S.; Landstrom, C.; Odoni, N.; Ward, N.; Whatmore, S.
Environmental competency groups: the case of flood risk modelling

15:00 END OF SESSION

HS1.2 Linking Participation and knowledge sharing with Integrated Land Use Management – Posters

Convener: Kirkby, M.
Co-Convener(s): Schwilch, G.
Display Time: Monday, 08:00–19:30

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

Poster Area Hall A
Chairperson: N.N.

A0208; EGU2008-A-12335; HS1.2-1MO5P-0208

Critchley, W.; Bon, A.; Di Prima, S.
Hard sell, – or softly, softly? - Testing channels for information exchange amongst farmers and communities

A0209; EGU2008-A-04257; HS1.2-1MO5P-0209

Hope, R.; Borgoyary, M; Agarwal, C
Exploring incentives for socio-ecological transformation in India

A0210; EGU2008-A-04778; HS1.2-1MO5P-0210

Sanchez-Moreno, J.F.; **Farshad, A.;** Jetten, V.
Farmer or expert; whose reality counts? A case study of Lao PDR

A0211; EGU2008-A-06264; HS1.2-1MO5P-0211

Sargordi, F.; Sharifi, A; Boerboom, L; Van Keulen, H
Setting the windows of opportunities for sustainable agriculture using multiple goal linear programming (MGLP) Case study: Borkhar district, Iran

A0212; EGU2008-A-07259; HS1.2-1MO5P-0212

Sauer, T.

Integrating new aspects of irrigation water-use into an interdisciplinary global land-use modelling framework

A0213; EGU2008-A-12411; HS1.2-1MO5P-0213

Lindeque, G.H.L; Hoffman, M.T.
Mapping natural resource conservation and land degradation in South Africa

A0214; EGU2008-A-09181; HS1.2-1MO5P-0214

Irvine, B.J.; Kirkby, K.J.

Modelling the margins of best practice in land conservation

A0215; EGU2008-A-07514; HS1.2-1MO5P-0215

Feng, K.; Hubacek, K; Siu, Y; Termansen, M; Kirkby, M; Irvine, B
Full biophysical and socio-economic carbon accounting for the UK

A0216; EGU2008-A-07357; HS1.2-1MO5P-0216

Stringer, LC.; Scricciu, S; Reed, MS

Linking climate change mitigation, biodiversity conservation and the rehabilitation of degraded land in southern Romania: Synergy through participation

A0217; EGU2008-A-09257; HS1.2-1MO5P-0217

Farshad, A.; Mantel, S.

Suitable or not suitable, how right are we when applying FAO framework?

HS7.4 Hydro-ecology of riparian zones: hyporheic controls at the groundwater - surface water interface

Convener: Krause, S.

Co-Convener(s): Fleckenstein, J., Hannah, D., Huggenberger, P.

Lecture Room 31
Chairperson: N.N.

8:30–8:45; EGU2008-A-01353; HS7.4-1MO1O-001

Tyler, S.; Saito, L.

Interpretation of streambed heat transfer using fiber optic derived temperatures (solicited)

8:45–9:00; EGU2008-A-01706; HS7.4-1MO1O-002

Boano, F.; Revelli, R; Ridolfi, L

Quantifying the impact of the stream-aquifer interaction on the surface-subsurface exchange

9:00–9:15; EGU2008-A-11725; HS7.4-1MO1O-003

Brookfield, A.E.; Sudicky, E.A.; Park, Y.J.; Conant Jr., B.
Simulation of thermal stream loadings using a fully-integrated surface/subsurface modeling framework

9:15–9:30; EGU2008-A-10252; HS7.4-1MO1O-004
Schmidt, C.; Kalbus, E.; Schirmer, M.
 Patterns of groundwater discharge to a stream and their influence on the timescales of contaminant release from streambed sediments

9:30–9:45; EGU2008-A-04168; HS7.4-1MO1O-005
Karwan, D.; Saiers, J.
 Stream channel storage of fine particulate material

9:45–10:00; EGU2008-A-03730; HS7.4-1MO1O-006
Lewandowski, J.; Nuetzmann, G.
 Field Study of Groundwater - Surface Water Interactions at the Lowland River Spree (Germany)

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-03514; HS7.4-1MO2O-001
Pinay, G.; Marmonier, P.
 Why should we bother about hyporheic zone? (solicited)

10:45–11:00; EGU2008-A-03986; HS7.4-1MO2O-002
Durand, V.; Aller, M.-F.; Greswell, R.; Rivett, M. O.; Mackay, R.; Tellam, J. H.
 Bank-side extraction well field tests to investigate water exchanges and physico-chemical conditions in the hyporheic zone

11:00–11:15; EGU2008-A-05905; HS7.4-1MO2O-003
HUMPHREY, J.; Yesavage, T.
 Sources and removal of nitrate in a mountain watershed: Possible riparian zone denitrification, Turkey Creek Basin, Colorado, USA

11:15–11:30; EGU2008-A-01091; HS7.4-1MO2O-004
 Rupp, D; Schmidt, J; **Woods, R;** Mckerchar, A
 Modelling spatio-temporal variability of streamflows in an intermittent alluvial plain river

11:30–11:45; EGU2008-A-03558; HS7.4-1MO2O-005
Kalbus, E.; Mutz, M.; Meinecke, S.
 In-stream wood enhances hyporheic exchange flows

11:45–12:00; EGU2008-A-11690; HS7.4-1MO2O-006
Wood, P.J. ; Boulton, A.J.; Stubbington, R.
 Low flow controls on riverine and hyporheic macroinvertebrates

12:00 END OF SESSION

HS7.4 Hydro-ecology of riparian zones: hyporheic controls at the groundwater - surface water interface – Posters

Convener: Krause, S.
 Co-Convener(s): Fleckenstein, J., Hannah, D., Huggenberger, P.
 Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
 Poster Area Hall A
 Chairperson: N.N.

A0218; EGU2008-A-00618; HS7.4-1MO5P-0218
Grant, J; Soulsby, C; Malcolm, I.A
 Physico-chemical controls on hyporheic community structure

A0219; EGU2008-A-00673; HS7.4-1MO5P-0219
Demaria, A.; Boano, F.; Camporeale, C.; Revelli, R.; Ridolfi, L.
 Hyporheic exchange induced by sinuosity of meandering rivers

A0220; EGU2008-A-03276; HS7.4-1MO5P-0220
Gerull, L.; Frossard, A.; Mutz, M.; Gessner, M.
 Metabolic hot spots in a virgin landscape - research concept in an artificial watershed

A0221; EGU2008-A-07089; HS7.4-1MO5P-0221
Krause, S.; Heathwaite, L.; Binley, A.; Kaeser, D.
 The impact of hyporheic connectivity on the nitrogen metabolism as the groundwater - surface water interface

A0222; EGU2008-A-05199; HS7.4-1MO5P-0222
Schmid, B.H.
 Repeat experiments as a tool for the analysis of solute transport parameter variability

A0223; EGU2008-A-05300; HS7.4-1MO5P-0223
Ibrahim, T.; Wainwright, J.; Thornton, S.
 Scales of ground and surface water interaction in the hyporheic zone of a heterogeneous environment

A0224; EGU2008-A-07255; HS7.4-1MO5P-0224
Riess, N.P.; Muia, W.A.; Thornton, S.F.; Osborn, A.M.; Smith, J.W.N
 Investigating nitrogen attenuation in the hyporheic zone of a lowland river: a multi-disciplinary approach

A0225; EGU2008-A-08401; HS7.4-1MO5P-0225
Ochoa-Salazar, O; Baque, B; Henry, H; Dandurand, D; Sanchez-Perez, S; Loubet, L
 Functioning of an alluvial wetland zone deduced from a geochemical multicomponent analysis of their waters, using "mixing diagrams"

A0226; EGU2008-A-08599; HS7.4-1MO5P-0226
Curie, F.; Ducharme, A.; Sebilo, M.; Bendjoudi, H.
 Denitrification in a hyporheic riparian zone controlled by river regulation

A0227; EGU2008-A-08965; HS7.4-1MO5P-0227
Kalbus, E.; Schmidt, C.; Molson, J.; Reinstorf, F.; Schirmer, M.
 Thermal modeling approach to determine aquifer heterogeneity from spatial patterns of stream-aquifer interactions

A0228; EGU2008-A-10144; HS7.4-1MO5P-0228
Garófano-Gómez, V.; Martínez-Capel, F.; Francés, F.; Nebot-Domínguez, T.; Cavallé-Garrido, A.; Morillo-Sarrión, R.
 Riparian species and their relationship with the flow regime in the Mijares River (Spain)

A0229; EGU2008-A-10179; HS7.4-1MO5P-0229
Volze, N.; Neumann, C.; Green, C.T.; Tyler, S.; Fleckenstein, J.H.
 Quantifying the spatial and temporal variability of groundwater-lake exchange

A0230; EGU2008-A-10954; HS7.4-1MO5P-0230
Hannah, D.M; Brown, L.E.; Milner, A.M.
 Hyporheic temperature dynamics of an alpine stream

A0231; EGU2008-A-11833; HS7.4-1MO5P-0231
Eckhardt, K.
 A comparison of baseflow indices, which were calculated with seven different baseflow separation methods

A0232; EGU2008-A-06852; HS7.4-1MO5P-0232
Vassiliou, E.; Founda, M.; Dimitrakopoulos, D.
 The water quality of Alfios River and the effects on it from the mining activities, in the area of Megalopolis. Estimating the quality of the river system by Phreeqc modeling.

A0233; EGU2008-A-07405; HS7.4-1MO5P-0233
Grigorakou, E.; Vassiliou, E.; Dimitrakopoulos, D.
 The quality characteristics of the water resources in Ptolemais lignite district, Greece

HS7.7 Riverine systems: new methods, concepts and applications linking hydrology, hydraulics, geomorphology and ecology (co-listed in BG & GM)

Convener: Tetzlaff, D.
Co-Convener(s): Lane, S., Harvey, G., Molnar, P.
Lecture Room 31
Chairperson: TETZLAFF, D., LANE, S.

13:30–13:45; EGU2008-A-05071; HS7.7-1MO3O-001
Laudon, H

The case of hydrological and biogeochemical process-understanding for predicting stream biota across scales (solicited)

13:45–14:00; EGU2008-A-09767; HS7.7-1MO3O-002
Borchardt, D.; **Völker, J.**

Effective hydromorphological parameters for the diversity and structure of benthic invertebrate communities in rivers

14:00–14:15; EGU2008-A-07767; HS7.7-1MO3O-003
Moggridge, H; Gurnell, A

The importance of hydrochory in structuring riparian vegetation: examples from two UK rivers

14:15–14:30; EGU2008-A-08945; HS7.7-1MO3O-004

Poppe, M.; Muhar, S.; Schmutz, S.; Melcher, A.; Trautwein, C.

How do land use structures influence the ecological status of the aquatic environment at three different spatial scales? An Austrian example.

14:30–14:45; EGU2008-A-09208; HS7.7-1MO3O-005
Tal, M.; Paola, C.

Interactions between braiding and vegetation leading to the formation of single-thread channels in a laboratory experiment and the importance of competing time scales in how such systems organize

14:45–15:00; EGU2008-A-08781; HS7.7-1MO3O-006

Savina, M.; Molnar, P.; Perona, P.; Burlando, P.
Using aerial photography to detect riparian vegetation change in an alpine braided river affected by streamflow regulation

15:00 COFFEE BREAK

Chairperson: HARVEY, G., MOLNAR, P.

15:30–15:45; EGU2008-A-01347; HS7.7-1MO4O-001
Richards, K S; Moss, T

How do we do inter-disciplinary eco-hydrological restoration science? Some experience from the EC-funded FLOBAR2 project

15:45–16:00; EGU2008-A-04726; HS7.7-1MO4O-002
Heritage, G L ; Large, A R G; Milan, D J

Robust identification of hydraulic biotopes using terrestrial laser scan data of water surface properties

16:00–16:15; EGU2008-A-08678; HS7.7-1MO4O-003
Bradley, C; Gurnell, A.M.; Clay, A.; Emery, J.

Patterns of surface sub-surface water exchange in an upland catchment, and the importance of pool: riffle couplets.

16:15–16:30; EGU2008-A-10818; HS7.7-1MO4O-004
Siviglia, A.; Zolezzi, G.

Thermopeaking in Alpine streams: field observations and model predictions

16:30–16:45; EGU2008-A-09249; HS7.7-1MO4O-005
Troldborg, L; Olsen, M

Tuning hydrological models for ecological modelling

16:45–17:00; EGU2008-A-08919; HS7.7-1MO4O-006

Lane, S.N.; Mould, D.C.

Habitat quality or quantity? Application of two-dimensional hydraulic and fuzzy biological modeling to the redesign of reservoir releases

17:00 END OF SESSION

HS7.7 Riverine systems: new methods, concepts and applications linking hydrology, hydraulics, geomorphology and ecology (co-listed in BG & GM) – Posters

Convener: Tetzlaff, D.

Co-Convener(s): Lane, S., Harvey, G., Molnar, P.

Display Time: Monday, 08:00–19:30

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Poster Area Hall A

Chairperson: TETZLAFF, D., HARVEY, G., MOLNAR, P., LANE, S.

A0234; EGU2008-A-00166; HS7.7-1MO5P-0234

Mitrofanova, E.

Indicative significance of phytoplankton for estimation of large river state near cities and settlements (Ob and Tom Rivers as a case study, Russia)

A0235; EGU2008-A-02611; HS7.7-1MO5P-0235

Smolar-Zvanut, N.; Mikos, M.; Krivograd Klemecic, A.; Breznik, B.

The effect of water abstraction on aquatic ecosystem in the Koritnica River

A0236; EGU2008-A-04722; HS7.7-1MO5P-0236

Heritage, G L; Milan, D J; Large, A R G

Rapid mapping of floodplain morphology and habitat using terrestrial laser scan data

A0237; EGU2008-A-03141; HS7.7-1MO5P-0237

Truscott, A.M; **Soulsby, C.;** Palmer, S.C.F; Newell, L.; Hulme, P.E.

Dispersal of the invasive plant *Mimulus guttatus* and the role of high flow events

A0238; EGU2008-A-08292; HS7.7-1MO5P-0238

Soulsby, C.; Addy, S.J.; Hartley, A.J.

Landscape Controls on Channel Morphology in the Cairngorm Mountains, Scotland: identifying habitats for riverine ecosystems

A0239; EGU2008-A-04043; HS7.7-1MO5P-0239

Malcolm, I.A.; **Soulsby, C.;** Youngson, A.F.; Tetzlaff, D.

Hyporheic hotspots - inferring groundwater-surface water exchange with continuous monitoring of dissolved oxygen

A0240; EGU2008-A-00290; HS7.7-1MO5P-0240

Imholt, C.; Soulsby, C.; Gibbins, C.; Malcolm, I.A.; Langan, S.

Within-catchment variation in stream invertebrate growth patterns: influence of riparian cover and stream temperatures on invertebrate growth

A0241; EGU2008-A-00719; HS7.7-1MO5P-0241

Krause, S.; Heathwaite, L.; Binley, A.; Kaeser, D.

Nutrient transformation in the hyporheic zone - A panacea for river restoration or a ticking time bomb

A0242; EGU2008-A-08666; HS7.7-1MO5P-0242

Curie, F.; Ducharme, A.; Bendjoudi, H.; Billen, G.; Viennot, P.

Ranking the factors controlling the spatio-temporal variability of nitrate retention in the Seine Basin

A0243; EGU2008-A-08667; HS7.7-1MO5P-0243
TERUGGI, L. B.; Sala, S.; Vaccaro, C.; Caporali, E.; Casco, M.; Rapti-Caputo, D.; Kristensen, M.; Cefarelli, A.; Segura, M. A.
Monitoring fluvial ecosystem: the Río Quequén Grande, Argentina.

A0244; EGU2008-A-02695; HS7.7-1MO5P-0244
Gob, F.; Albert, M.-B.; Belliard, J.; Navratil, O.
Understanding the impact of physical alteration of streams on their biocenoses

A0245; EGU2008-A-03237; HS7.7-1MO5P-0245
Radecki-Pawlik, A.; Wyzga, B.; Amirowicz, A.; Zawiejska, J.
Variation in potential fish habitats and fish community in a mountain river subjected to variable human impact

A0246; EGU2008-A-08803; HS7.7-1MO5P-0246
Lane, S.N.; Buckley, C.P.; Heathwaite, A.L.; Reaney, S.M.
What makes a fish happy?: The identification of land use hotspots using inverse modeling of fish data

A0247; EGU2008-A-05040; HS7.7-1MO5P-0247
Jiang, Z.; Perona, P.; Molnar, P.; Bosco, M.; Corripio, J.; Burlando, P.
Development of a comprehensive experimental installation for monitoring the morphodynamic evolution of restored river corridors

A0248; EGU2008-A-05983; HS7.7-1MO5P-0248
Zarris, D.
Comparative analysis of two different methods for determining the environmental flow for a river basin in Central Greece

A0249; EGU2008-A-08900; HS7.7-1MO5P-0249
Poggi, D.; Krug, C.; Katul, G.G.
Effective resistance of submerged vegetation: a first order approach

A0250; EGU2008-A-09977; HS7.7-1MO5P-0250
ARNAUD-FASSETTA, G.; FORT, M.
Hydrogeomorphological change (AD 1855-2005), control factors and fluvial risk on an upper alpine valley floor (Guil river, Southern French Alps)

A0251; EGU2008-A-11145; HS7.7-1MO5P-0251
Anlnager, C.; Sukhodolov, A.; Schnauder, I.; Uijttewaall, W.S.J.; Rauch, H.P.
Impact of submerged groynes on the flow field – results from a field experiment at the river Spree, Germany

A0252; EGU2008-A-10553; HS7.7-1MO5P-0252
Neto Santos, C.
The macroinvertebrates community associated at seagrass *Halodule wrightii* (Ascherson, 1868) in Mussulo Lagoon, Angola.

A0253; EGU2008-A-12173; HS7.7-1MO5P-0253
Copertino, V.A.; Scavone, G.; Mirauda, D.; de Bari, C.; Giosa, L.; Ermini, R.; Oliveto, G.; Masi, V.; Pannone, M.
A multilayer informative system for river morphologies study

HS9.1 Subsurface flow, solute transport, and energy processes: concepts, modelling, and observations (co-listed in SSS)

Convener: Zechner, E.
Co-Convener(s): Durner, W.
Lecture Room 30
Chairperson: DURNER, W.

13:30–13:45; EGU2008-A-02172; HS9.1-1MO3O-001
Weihermüller, L.; Polmeier, A.; van Dusschoten, D.; Vereecken, H.
Imaging water and solute fluxes in porous media by Magnetic Resonance Imaging: Experimental and modelling results

13:45–14:00; EGU2008-A-02409; HS9.1-1MO3O-002
Kodesova, R.; Kapicka, A.; Lebeda, J.; Fialova, H.; Kopac, J.; Petrovsky, E.
Experimental and numerical study of fly-ash migration in sands of various particle size distributions

14:00–14:15; EGU2008-A-04906; HS9.1-1MO3O-003
Duwig, C.; Prado, B.; Raymundo, E.; Lopez, J.; Hidalgo, C.; Müller, K.; Etchevers, J.
Herbicide fate in an allophanic soils: comparison of several experimental and data analysis techniques

14:15–14:30; EGU2008-A-00543; HS9.1-1MO3O-004
Pang, L.; Walshe, G.; Nowostawska, U.; Hunter, K.; Flury, M.; Close, M.; Sinton, L.; Leonard, M.
Transport of MS2 phages in the presence of kaolinite in gravel aquifer media

14:30–14:45; EGU2008-A-09139; HS9.1-1MO3O-005
Hesse, F.; Radu, F.A.; Thullner, M.; Attinger, S.
On the upscaling of the reaction-advection-diffusion equation in porous media with Monod-like kinetics

14:45–15:00; EGU2008-A-08311; HS9.1-1MO3O-006
Marnach, S.; Ippisch, O.; Bastian, P.
Simulation of CO₂ sequestration in geological formations using mimetic finite difference methods

15:00–15:15; EGU2008-A-05612; HS9.1-1MO3O-007
Spaaks, J.H.; Bouten, W.
Nonlinearity in subsurface stormflow generation: comparison of an explicitly nonlinear model to a Richards equation based approach.

15:15 COFFEE BREAK

Chairperson: ZECHNER, E.

15:30–15:45; EGU2008-A-09276; HS9.1-1MO4O-001
Mohrlok, U.; Radny, D.; Scheytt, T.
Experimental investigations of the dynamics of the capillary fringe

15:45–16:00; EGU2008-A-11151; HS9.1-1MO4O-002
Mancarella, D.; **Simeone, V.**
EPR modelling of groundwater level response to precipitation

16:00–16:15; EGU2008-A-07708; HS9.1-1MO4O-003
Brovelli, A.; Malaguerri, F.; Barry, D.A.
Hydrodynamic changes of saturated porous media due to biomass growth

16:15–16:30; EGU2008-A-08353; HS9.1-1MO4O-004
Blum, P.; Iturralde, C.; Maier, U.; Weede, M.; Grathwohl, P.
Methods for the estimation of the mixing zones and the length of steady state contaminant plumes

16:30–16:45; EGU2008-A-07956; HS9.1-1MO4O-005
Michel, L.; **Meheust, Y.**; Bouquain, J.; Caudal, J.-P.; de
Bremond d'Ars, J.; de Dreuzy, J.-R.; Davy, P.
Solute exchange between a fracture and the surrounding
porous matrix: an analog experiment

16:45–17:00; EGU2008-A-08219; HS9.1-1MO4O-006
Derx, J.; Blaschke, A.P.
Dynamic 3D numerical Simulations of Groundwater Ex-
change Processes at the Danube Riverbank

17:00–17:15; EGU2008-A-08034; HS9.1-1MO4O-007
Wuttke, M. W.; Han, J.; Halisch, M.; Kessels, W.
Application of numerical modelling to support underground
coalfire fighting in the Wuda coal mining area

17:15 END OF SESSION

**HS9.1 Subsurface flow, solute transport, and energy pro-
cesses: concepts, modelling, and observations (co-listed
in SSS) – Posters**

Convener: Zechner, E.
Co-Convener(s): Durner, W.

Display Time: Monday, 08:00–19:30

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

Poster Area Hall A
Chairperson: DURNER, W.

A0254; EGU2008-A-01887; HS9.1-1MO5P-0254
Shahedi, K.; Torfs, P.J.; Troch, P.A.; Uijlenhoet, R.
The role of bedrock geometry on hillslope hydrological
response

A0255; EGU2008-A-10561; HS9.1-1MO5P-0255
Huber, J.; Voelkel, J.; Leopold, M.
Periglacial slope deposits and saprolites controlling water
discharge – results from a three years measurement on a test
site in the Bavarian Forest, Germany

A0256; EGU2008-A-09531; HS9.1-1MO5P-0256
Spilotro, G.; Canora, F.; Caporale, F.; Fidelibus, M.D.
Fine soils-water interactions: study methodologies and main
results.

A0257; EGU2008-A-11704; HS9.1-1MO5P-0257
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
Bodroghöz Region at profile and sub-regional scales

A0258; EGU2008-A-07160; HS9.1-1MO5P-0258
Fumagalli, L.; Guermandi, M.; Laruccia, N.
Modeling soilwater and nitrogen balances in the Emilia-
Romagna plain

A0259; EGU2008-A-10725; HS9.1-1MO5P-0259
Barontini, S.; Bacchi, B.; Ranzi, R.
Ephemeral saturated layers in the vadose zone: some
theoretical results for gradually variable soils

A0260; EGU2008-A-08922; HS9.1-1MO5P-0260
De Biase, C.; Baeder-Bederski, O.; Maier, U.; Oswald, S.;
Thullner, M.
microbial contaminant degradation in vertical soil filter
systems: analysis by reactive transport simulations

A0261; EGU2008-A-08310; HS9.1-1MO5P-0261
Canone, D.; Ferraris, S.; Lunati, I.; Or, D.
Characteristics of acoustic emissions during fluid front
displacement in porous media

A0262; EGU2008-A-02261; HS9.1-1MO5P-0262
Anders, R.; **Chrysikopoulos, C.V.**
Transport of MS2 and PRD1 through saturated and unsatu-
rated columns packed with sand

A0263; EGU2008-A-03899; HS9.1-1MO5P-0263
Pryce, O; **Quinton, J.**; Heathwaite, L
Development of Fluorescent Polystyrene Microspheres as
Tracers for Soil Colloids

A0264; EGU2008-A-12014; HS9.1-1MO5P-0264
Kjaergaard, C.; Mogensen, J.; Høj, A.; Petersen, C
Effect of variable flow-pathways on in situ mobilization of
soil colloids in structured soils

A0265; EGU2008-A-05104; HS9.1-1MO5P-0265
Wissmeier, L.; **Barry, D.A.**
Reactive transport in unsaturated soil: Comprehensive
modelling of the dynamic spatial and temporal mass balance
of water and chemical components

A0266; EGU2008-A-06847; HS9.1-1MO5P-0266
Robinson, C.; **Barry, D. A.**; Kouznetsova, I.; Gerhard, J. I.
BUCHLORAC: Program for predicting the buffer require-
ment for enhanced anaerobic bioremediation of chlorinated
solvents

A0267; EGU2008-A-08105; HS9.1-1MO5P-0267
Bastock, J.; Romero-Gonzalez, M.; Wilson, R
Contaminant transport and fate in engineered charcoal
remediation systems

A0268; EGU2008-A-07688; HS9.1-1MO5P-0268
Brovelli, A.; Barry, D.A.
Three-dimensional reactive transport modelling in the
vadose zone

A0269; EGU2008-A-02474; HS9.1-1MO5P-0269
Radu, F. A.; Attinger, S.
Simulation of multicomponent reactive solute transport
in saturated/unsaturated flow by mixed finite elements
(cancelled)

A0270; EGU2008-A-06172; HS9.1-1MO5P-0270
Ratej, J.; Krivic, J.
Hydrogeological evaluation of future radioactive waste
repository design using finite element numerical modeling

A0271; EGU2008-A-09072; HS9.1-1MO5P-0271
Dagès, C.; Voltz, M.; Ackerer, P.; Fabre, J. C.
Simplified modelling of surface water – groundwater in-
teractions based on coupled one-dimensional Richards and
Boussinesq equations.

A0272; EGU2008-A-01612; HS9.1-1MO5P-0272
Liang, C.; Chen, J.
Analytical power series solution to the one-dimensional
advection-dispersion equation with asymptotic distance-
dependent dispersivity

A0273; EGU2008-A-02200; HS9.1-1MO5P-0273
Chen, J.-S.; Chen, Y.-C.; Liang, C.-P.
Analysis of chemical transport in a vertical circulation flow
field

A0274; EGU2008-A-00955; HS9.1-1MO5P-0274
Chen, C.-S.; Lan, C.-K.
Influence of tested interval length on and new shape factors
of the multilevel slug test in a vertically heterogeneous
aquifer

A0275; EGU2008-A-10433; HS9.1-1MO5P-0275
Mazi, K.; **Koussis, A.**
Quantitative assessment of well vulnerability by an efficient
2-D backward transport model

A0276; EGU2008-A-09011; HS9.1-1MO5P-0276
Engwer, C.; Bastian, P.; Kuttanikkad, S. P.
Using Discontinuous Galerkin Methods for Numerical Upscaling in Porous Media

A0277; EGU2008-A-03255; HS9.1-1MO5P-0277
Li, H.T
Using remote sensing data to automatically calibrate a groundwater model

A0278; EGU2008-A-03956; HS9.1-1MO5P-0278
Durand, V.; Léonardi, V.; de Marsily, G.
The estimation of recharge and the roles of the weathered layers and fractures in hard-rock aquifers assessed by a finite-difference model

A0279; EGU2008-A-03679; HS9.1-1MO5P-0279
Han, J.; Wuttke, M. W.; Halisch, M.; Kessels, W.
Numerical Modelling of Underground Coalfire Fighting by Saltwater in the Wuda Coal Mining Area

A0280; EGU2008-A-08844; HS9.1-1MO5P-0280
Halisch, M.; Kessels, W.; Wuttke, M.W.; Han, J.
Petrophysical experiments for coalfire fighting by using saltwater in the Wuda Coal Mining Area

HS9.2 Subsurface assessment and characterisation of flow, transport, and fate using physical, chemical, and isotopic tools (co-listed SSS) – Posters

Convener: Bloem, E.
Co-Convener(s): Elsner, M., Penning, H.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
Poster Area Hall A
Chairperson: PENNING, H

A0281; EGU2008-A-07973; HS9.2-1MO5P-0281
Penning, H.; Elsner, M.
pH-dependency of carbon and nitrogen kinetic isotope fractionation associated with hydrolysis of the phenylurea herbicide isoproturon

A0282; EGU2008-A-03873; HS9.2-1MO5P-0282
Dulinski, M.; Kapusta, M.; Karpinska-Rzepa, A.; **Rozanski, K.;** Witczak, S.
Evolution of carbon isotope composition of pore waters in the unsaturated zone: open or closed system conditions?

A0283; EGU2008-A-08766; HS9.2-1MO5P-0283
Schmidt, A.; Haderlein, S.
Oxidation of Fe(II) by CCl₄ at iron mineral surfaces influenced by pH and organic buffers: a compound specific isotope analysis study

A0284; EGU2008-A-07762; HS9.2-1MO5P-0284
Elsner, M.; Chartrand, M.M.G.; VanStone, N.; Lacrampe Couloume, G.; Sherwood Lollar, B.
Identifying Abiotic Chlorinated Ethene Degradation: Characteristic Isotope Patterns in Reaction Products with Nanoscale Zero-Valent Iron

A0285; EGU2008-A-06292; HS9.2-1MO5P-0285
Guida, M.; Guadagnuolo, D.; Guida, D.; **Longobardi, A.;** Villani, P.
Measuring groundwater - river interaction using ²²²Rn tracer in karstic mediterranean environment. A case study: the Bussento river and the Policastro gulf system

A0286; EGU2008-A-03245; HS9.2-1MO5P-0286
Stadler, S.; Frechen, M
Groundwater dynamics in flooded salt mines

A0287; EGU2008-A-01693; HS9.2-1MO5P-0287
Cucchi, F.; **Franceschini, G.;** Treu, F.; Zini, L.
Groundwater evolution and recharge areas for the Friuli Venezia Giulia confined and unconfined aquifers, northeast Italy

A0288; EGU2008-A-06810; HS9.2-1MO5P-0288
Möller, P.; Siebert, C.; Geyer, S.
Identification of groundwater sources by trace elements and isotopes

A0289; EGU2008-A-08383; HS9.2-1MO5P-0289
xiaosi, Su.; xueyu, Lin; guangcai, Hou; Weihong, Dong
Environmental isotopic composition of natural water in Ordos cretaceous groundwater basin and its significance for hydrological cycle

A0290; EGU2008-A-02514; HS9.2-1MO5P-0290
Kull, W.; Cirpka, C.A.
Determination of the full permeability tensor

A0291; EGU2008-A-10923; HS9.2-1MO5P-0291
Kim, T. Y.; Kang, D. H.; Kim, S. S.; Yang, S. I.
The scale-dependent of hydraulic conductivity through pumping test in alluvial aquifer with high permeability

A0292; EGU2008-A-07855; HS9.2-1MO5P-0292
Wienhöfer, J.; Germer, K.; Färber, A.; Zehe, E.
Subsurface flow observations at a steep forested hillslope using fiber-optic fluorometry

A0293; EGU2008-A-08258; HS9.2-1MO5P-0293
Kang, D. H.; Kim, T. Y.; Kim, S. S.; Yang, S. I.; Kwon, B. H.
Variation characteristics of hydraulic gradient and major flow direction in the landfill soils

A0294; EGU2008-A-08300; HS9.2-1MO5P-0294
Kang, D. H.; Yang, S. I.; Kim, S. S.; Park, H. J.
The variation characteristics of groundwater level with distance from shoreline in the Jeju island, Korea

A0295; EGU2008-A-06268; HS9.2-1MO5P-0295
Ruelleu, R.; Bour, B.; Le Borgne, LB
Characterization of flowpaths geometry in a complex crystalline aquifer from detailed core analysis and numerical inversion of cross-boreholes flowmeter tests.

A0296; EGU2008-A-01752; HS9.2-1MO5P-0296
Adejumo, O.O.; Balogun, F.A.; Ogundare, F.O
Relating soil texture at different depths with volumetric soil water content and bulk density for central south west Nigerian soil types.

HS9.4 Fissured and karstified aquifers – Posters

Convener: Graf, T.
Co-Convener(s): Birk, S., Gabrovsek, F., Maloszewski, P.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
Poster Area Hall A
Chairperson: GRAF, T.

A0297; EGU2008-A-00013; HS9.4-1MO5P-0297
Bonacci, O.
Extremely different hydrological characteristics of two neighbouring sinking karst rivers Lika and Gacka (Dinaric karst, Croatia)

A0298; EGU2008-A-06076; HS9.4-1MO5P-0298
Denic-Jukic, V.; Jukic, D.
Contribution of correlation and spectral analyses to the hydrological study of two adjacent karst springs: example of the Jadro and Žrnovnica Springs

A0299; EGU2008-A-09446; HS9.4-1MO5P-0299
Spilotro, G.; Canora, F.; Caporale, F.; Fidelibus, M.D.
 Analysis of the hydrochemical data and the stable isotopes (D-18O) to characterise the recharge of the Madonna del Pollino carbonate aquifer, Southern Italy.

A0300; EGU2008-A-07236; HS9.4-1MO5P-0300
El gaouzi, E.; Sebilo, S.; Plagnes, P.; Ribstein, R.; Zakeossian, Z.; Somon, S.
 Characterization of sources of water in karstic aquifers in the watershed of Paris by measurement of the isotopic composition of nitrogen and oxygen in nitrate

A0301; EGU2008-A-07401; HS9.4-1MO5P-0301
Rapti-Caputo, D.; Bianca, M.
 Carbonate aquifer systems: fault-controlled groundwater flow and vulnerability

A0302; EGU2008-A-07680; HS9.4-1MO5P-0302
Bosch, F.P.; Chalikakis, K.; Gurk, M.; Plagnes, V.; Guerin, R.
 Investigating the shallow subsurface in the vicinity of a karstic reactivated sinkhole in the depression of "Lousoi" (Peloponnesus, Greece) with remote radio transmitter EM methods

A0303; EGU2008-A-07124; HS9.4-1MO5P-0303
Jacob, T.; Bayer, R.; Chery, J.; Jourde, H.; Le Moigne, N.; Boy, J.-P.; Brunet, P.; Hinderer, J.; Luck, B.; Boudin, F.
 Ground-based gravimetry as a tool to monitor the non-saturated zone of karst aquifers

A0304; EGU2008-A-02122; HS9.4-1MO5P-0304
 James, S.C.; **Chrysikopoulos, C.V.**
 Monodisperse and polydisperse colloid transport in water saturated fractures with various orientations: Gravity effects

A0305; EGU2008-A-04061; HS9.4-1MO5P-0305
Masser, E.; Winkler, G.; Birk, S.
 Scale dependency of hydraulic properties in a fractured carbonatic aquifer - an example from the Eastern Alps (Austria)

A0306; EGU2008-A-09333; HS9.4-1MO5P-0306
Le Goc, R.; Darcel, C.; Davy, P.; de Dreuz, J.-R.; Bour, O.
 Uncertainty and variability analysis of Discrete Fracture Network models from extensive outcrop and borehole field data

HS9.6 Shallow and deep geothermal energy – Posters

Convener: Blum, P.
 Co-Convener(s): Kolditz, O., McDermott, C.
 Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
 Poster Area Hall A
 Chairperson: BLUM, P.

A0307; EGU2008-A-01831; HS9.6-1MO5P-0307
 Pasquale, V.; Verdoya, M.; Chiozzi, P.
 Thermal anomalies associated with groundwater circulation in the southern part of the Po Plain

A0308; EGU2008-A-04960; HS9.6-1MO5P-0308
Milsch, H.; Spangenberg, E.; Seibt, A.
 Long-term flow-through petrophysical experiments on geothermal reservoir rocks: An assessment of risk potentials during reservoir stimulation and exploitation.

A0309; EGU2008-A-12171; HS9.6-1MO5P-0309
 Bär, K.; **Buss, A.;** Saas, I.
 3D-model of the deep geothermal potential of the federal state Hesse / Germany

A0310; EGU2008-A-06202; HS9.6-1MO5P-0310
Grunert, A.G.; Viejo, P.
 Geothermal Potential Analysis of the Upper Rhine Valley

A0311; EGU2008-A-05053; HS9.6-1MO5P-0311
 Blumenthal, M.; Kühn, M.; Pape, H.; Rath, V.; **Clauser, C.**
 Numerical modelling of hydraulic and thermal processes in the deep heat reservoir of the EGS test site Soultz-sous-Forêts, France

A0312; EGU2008-A-08540; HS9.6-1MO5P-0312
Koch, A.; Jorand, R.; Pechin, R.; Clauser, C.
 Thermal properties of Tertiary sediments of the Lower Rhine Basin (Germany)

A0313; EGU2008-A-03045; HS9.6-1MO5P-0313
Thomas, R.; Schulz, R.
 Reflection seismic investigations for the Unterhaching geothermal power plant

A0314; EGU2008-A-06532; HS9.6-1MO5P-0314
Rumpel, H.-M.; Beilecke, T.; Bunes, H.; Musmann, P.; von Hartmann, H.
 Reduce the risk of finding a deep geothermal reservoir by means of 3D seismics

A0315; EGU2008-A-08825; HS9.6-1MO5P-0315
Lerm, S.; Wandrey, M.; Würdemann, H.; Seibt, A.; Wolfgramm, M.
 Microbial investigations in geothermal used groundwater systems

A0316; EGU2008-A-04311; HS9.6-1MO5P-0316
Musuza, J.; Attinger, S.; Radu, F.
 A new stability criterion for density-driven flows in the framework of a two-scale expansion

A0317; EGU2008-A-02169; HS9.6-1MO5P-0317
Mottaghy, D.; Dijkshoorn, L.
 Implementing a new effective finite difference formulation for borehole heat exchangers into a heat transport code

A0318; EGU2008-A-12119; HS9.6-1MO5P-0318
Bayer, P.; Molina, N.; Hecht, J.; Rasouli, P.; Zheng, C.; Blum, P.
 Geothermal modelling using MT3DHEAT

HS10.16 Prediction and management of water quality on the catchment scale

Convener: Rode, M.
 Co-Convener(s): Fohrer, N., Bormann, H., Bogena, H., Abbaspour, K.
 Lecture Room 29
 Chairperson: N.N.

8:30–8:45; EGU2008-A-02699; HS10.16-1MO10-001
Worrall, F.
 The fluvial flux of carbon from the UK – controls and processes (solicited)

8:45–9:00; EGU2008-A-11609; HS10.16-1MO10-002
Breuer, L.; Frede, H.-G.
 The role of organic nitrogen in the nitrogen cycle of developed landscapes

9:00–9:15; EGU2008-A-12128; HS10.16-1MO10-003
Lepistö, A.; Koskiah, J.; Tattari, S.; Granlund, K.; Huttala, T.; Kirkkala, T.
 Intensive measurements provide new information on nutrient leaching and erosion processes in the Yläneenjoki catchment, SW Finland

9:15–9:30; EGU2008-A-03024; HS10.16-1MO1O-004
Groenendijk, P.; Renaud, L.V.; Walvoort, D.J.J.; Bijlsma, R.M.

Uncertainty assessment of nutrient loads and nutrient losses at catchment scale by detailed mechanistic models

9:30–9:45; EGU2008-A-04581; HS10.16-1MO1O-005
Ullrich, A.; **Volk, M.**

Influence of the parameterisation of land management practices and the uncertainty of monitoring data on SWAT model calibration and evaluation

9:45–10:00; EGU2008-A-10329; HS10.16-1MO1O-006

Peña-Haro, S.; Pulido-Velazquez, M.; Sahuquillo, A.
A hydro-economic modelling framework for reducing groundwater nitrate concentration from agricultural sources

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-12271; HS10.16-1MO2O-001
van Griensven, A.

Integrating river water quality processes in catchment modelling for ecological risk assessment (solicited)

10:45–11:00; EGU2008-A-06064; HS10.16-1MO2O-002
Rode, M.; Wagenschein, D.; Kebede, T.

Modelling in-stream nitrogen retention in the 4th order lowland river Weisse Elster, Germany

11:00–11:15; EGU2008-A-04125; HS10.16-1MO2O-003

Loos, S.; Middelkoop, H.; van Beek, L.P.H.; van der Perk, M.
Modelling seasonal nutrient fluxes in large river basins: Rhine case study

11:15–11:30; EGU2008-A-02221; HS10.16-1MO2O-004
Leu, C.; Schneider, M.K.; **Stamm, C.**

The Base Flow Index and the volume of fast flow as proxies for the susceptibility of catchments to diffuse herbicide losses to surface waters

11:30–11:45; EGU2008-A-06912; HS10.16-1MO2O-005

Frey, M. P.; David, T.; Schneider, M. K.; Dietzel, A.; Reichert, P.; Stamm, C.
Using hydrological modelling to account for uncertainty in the prediction of contributing areas for diffuse herbicide losses to surface waters

11:45–12:00; EGU2008-A-04148; HS10.16-1MO2O-006
Isermann, I.

Sustainable mitigation and land use options for human health and environmental quality in respect to the nutrition system and the nutrients C, N, P, S

12:00 END OF SESSION

HS10.16 Prediction and management of water quality on the catchment scale – Posters

Convener: Rode, M.

Co-Convener(s): Fohrer, N., Bormann, H., Bogena, H., Abbaspour, K.

Display Time: Monday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0319; EGU2008-A-00453; HS10.16-1MO5P-0319

Hahn, C.; Prasuhn, V.; Stamm, C.; Schulin, R.
Prediction of contributing areas for P losses from agricultural land – an outline

A0320; EGU2008-A-03487; HS10.16-1MO5P-0320

Hejduk, L.; Banasik, K.

Dissolved phosphorus and nitrates concentration in a lowland rural river

A0321; EGU2008-A-03508; HS10.16-1MO5P-0321

Hejduk, L.

Phosphorus fractionation in sediments of small agricultural river

A0322; EGU2008-A-07751; HS10.16-1MO5P-0322

Schmalz, B.; Bieger, K.; Grudziński, A.; Fohrer, N.; **Härmann, G.**

Water quality monitoring in a lowland river catchment - joint analysis of the stream, its tributaries and connected eutrophic lakes

A0323; EGU2008-A-10554; HS10.16-1MO5P-0323

Tramblay, Y.T.; Saint-Hilaire, A.; Ouara, TBMJ

Frequency-Magnitude of extreme events of suspended sediment concentration and load: Regional estimation for 22 rivers in California

A0324; EGU2008-A-11023; HS10.16-1MO5P-0324

Gnecco, I.; Lanza, L.G.; Sansalone, J.J.; La Barbera, P

The potential impact of storm water runoff on the quality of receiving water bodies

A0325; EGU2008-A-11868; HS10.16-1MO5P-0325

Bourauoi, F.; **Grizzetti, B.**; Aloe, A.

Water and nutrients input into the Mediterranean Sea

A0326; EGU2008-A-01661; HS10.16-1MO5P-0326

Moravcová, J.; Pavlíček, T.; Koupilová, M.; Kvítek, T.; Váchal, J.

Monitoring and valuation of selected indicators of water quality and nutrients loss by extreme rainfall-drain events in dependence on cultures representation in small catchment

A0327; EGU2008-A-00674; HS10.16-1MO5P-0327

Voistinova, E.

Estimation of water quality the river Tom and regional problems of water use (for example of the town Tomsk, West Siberia)

A0328; EGU2008-A-03070; HS10.16-1MO5P-0328

van der Heijden, S.; Haberlandt, U.

The Influence of spatial Interpolation Methods for Climate Variables on Runoff and Nitrate Fate

A0329; EGU2008-A-04642; HS10.16-1MO5P-0329

Rothwell, J.J.; Futter, M.; Dise, N.B.

Predicting nitrogen leaching in European forests using linear and non-linear statistical methods

A0330; EGU2008-A-07788; HS10.16-1MO5P-0330

Parisi, S.; Mongelli, G.; Paternoster, M.

Geochemical groundwaters quality of a volcanic area: Mount Vulture (southern Italy)

A0331; EGU2008-A-09285; HS10.16-1MO5P-0331

Lo Porto, A.; De Girolamo, A.M.; Zaccolo, S.; Usai, D.; Aiello, M.

Selection and assessment of alternative land use and management scenarios in a water-scarce area in the Mediterranean (Sardinia, Italy) to improve quality and quantity of available surface water resources.

A0332; EGU2008-A-09378; HS10.16-1MO5P-0332

Spilotro, G.; Canora, F.; Caporale, F.; Fidelibus, M.D.

Determination of nitrate pollution due to agricultural activities in the Ionian coastal plain aquifer (Basilicata, Southern Italy).

A0333; EGU2008-A-11847; HS10.16-1MO5P-0333
Yu, P.; Wang, Y.; Sogn, T.; Mulder, J.; Zhu, J.
 Simulating soil chemical responses to high atmospheric S, N and Ca deposition in a Masson pine forest ecosystem in south China using the nutrient cycling model, NuCM

A0334; EGU2008-A-02231; HS10.16-1MO5P-0334
David, T.; Frey, M. P.; Stamm, C.
 Site classification with regard to risk for diffuse pollution

A0335; EGU2008-A-04638; HS10.16-1MO5P-0335
Reichenberger, S.; the FOOTPRINT team
 The FOOT-CRS tool: Pesticide risk assessment and management in the EU at the catchment scale

A0336; EGU2008-A-05433; HS10.16-1MO5P-0336
Bardowicks, K.; Billib, M.; Boochs, P.-W.
 Impact of pesticides on the groundwater resources in intensive irrigated areas of Argentina and Chile

A0337; EGU2008-A-05480; HS10.16-1MO5P-0337
Siber, R.; Stamm, C.; Reichert, P.
 GIS-based estimation of pesticide input into surface water in Switzerland

A0338; EGU2008-A-00268; HS10.16-1MO5P-0338
Glavan, M.; White, S
 Using SWAT to assess diffuse source nutrients reduction measures in the river Axe catchment, UK

A0339; EGU2008-A-00848; HS10.16-1MO5P-0339
Abouabdillah, A.; Lazrak, A.; Lo porto, A.
 Application of a hydrologic model (SWAT) for the simulation of the water and nutrient balance in a water stressed / data scarce catchment (Merguellil- Tunisia)

Tuesday

IS22 - HS2.1/NP1.05 Climate, Water and Health (co-organised by HS & NP)

Convener: Christakos, G.
 Co-Convener(s): Cârsteanu, A., Bardossy, A., Papalexioiu, S., Koutsoyiannis, D.
 Lecture Room 29
 Chairperson: CARSTEANU, A.

8:30–9:00; EGU2008-A-00368; IS22 - HS2.1/NP1.05-1TU1O-001
El Adlouni, E.A.; Bayentin, L.B.; Ouarda, T.O.; Gosselin, P.G.
 Assessment of Climate effects on morbidity in Quebec (Canada) over last 20 years (solicited)

9:00–9:15; EGU2008-A-08970; IS22 - HS2.1/NP1.05-1TU1O-002
Mekaru, S.; Ozonoff, A
 Temporal association of major waterborne disease outbreaks and heavy precipitation events

9:15–9:30; EGU2008-A-00098; IS22 - HS2.1/NP1.05-1TU1O-003
Yu, H-L.; Choi, K-M; Christakos, G.
 Climate issues of influenza mortality risks

9:30–9:45; EGU2008-A-00815; IS22 - HS2.1/NP1.05-1TU1O-004
Khabarova, O.V.; Ragulskaya, M.V.; Babayev, E.S.
 Human sensibility to environmental parameters' changes in dependence on geographic latitude (results of international experiment). (solicited)

9:45–10:00; EGU2008-A-04587; IS22 - HS2.1/NP1.05-1TU1O-005
Bertuzzo, E.; Azaele, S.; Maritan, A.; Gatto, M.; Rodriguez-Iturbe, I.; Rinaldo, A.
 Hydrologic control on the spreading of diseases: on the space-time evolution of a cholera epidemic.

10:00 COFFEE BREAK

Chairperson: WU, J.

10:30–11:00; EGU2008-A-00218; IS22 - HS2.1/NP1.05-1TU2O-001
Sivakumar, B.
 Climate change and its impacts on water resources: a case for nonlinear data downscaling approaches (solicited)

11:00–11:15; EGU2008-A-11108; IS22 - HS2.1/NP1.05-1TU2O-002
Akanda, A.; Jutla, A.; Islam, S
 Understanding the seasonality of Cholera transmission in South Asia: role of Hydroclimatology

11:15–11:30; EGU2008-A-08007; IS22 - HS2.1/NP1.05-1TU2O-003
Kolovos, A.; Yu, H.-L.
 Knowledge Synthesis-Based Tool Development for Spatiotemporal Analysis

11:30–11:45; EGU2008-A-00924; IS22 - HS2.1/NP1.05-1TU2O-004
Fasbender, D.; Peeters, L.; Bogaert, P.; Dassargues, A.
 Bayesian data fusion applied to water table spatial mapping

11:45–12:00; EGU2008-A-12311; IS22 - HS2.1/NP1.05-1TU2O-005
 Georgopoulou, E.; Restrepo, P.; Kotronarou, A.; **Koussis, A.**; Mazi, K.; Gomez-Gotor, A.; Rodriguez, J.J.; Destouni, G.
 A Decision Aid Tool for the management of coastal aquifers based on sea-intrusion control through recharge with treated wastewater and desalination of brackish groundwater

12:00 LUNCH BREAK

Chairperson: CHRISTAKOS, G.

13:30–14:00; EGU2008-A-00394; IS22 - HS2.1/NP1.05-1TU3O-001
 Huang, F.; **Wu, J.**
 Assessment of the relationship between land use, climate and surface water quality in Hangzhou, China (solicited)

14:00–14:15; EGU2008-A-00725; IS22 - HS2.1/NP1.05-1TU3O-002
Montosi, E.; Manzoni, S; Montanari, A; Porporato, A
 Modeling hydro-climatic controls on seasonal malaria dynamics

14:15–14:30; EGU2008-A-02284; IS22 - HS2.1/NP1.05-1TU3O-003
 Tonini, M.; Maignan, M.; Sharshenova, A.; Shilonosov, V.; Ten, E.; **Kanevski, M.**
 Health risk assessment of the population of Bishkek. Spatiotemporal analysis of cancer clusters

14:30–14:45; EGU2008-A-02504; IS22 - HS2.1/NP1.05-1TU3O-004
Hristopulos, D.T.; Elogne, S.N.
 Fast Spatial Interpolation using Spartan Random Fields with Environmental Health Applications

14:45–15:00; EGU2008-A-12076; IS22 - HS2.1/NP1.05-1TU3O-005

Joigneaux, E.; Albéric, A.; Pauwels, H.; Guttierrez, A.; Baran, N.; Binet, S.

The impacts of climate change on point groundwater discharge in a fluviokarst landscape

15:00 END OF SESSION

IS22 - HS2.1/NP1.05 Climate, Water and Health (co-organised by HS & NP) – Posters

Convener: Christakos, G.

Co-Convener(s): Cârsteanu, A., Bardossy, A., Papalexiou, S., Koutsoyiannis, D.

Display Time: Tuesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: PAPALEXIOU, S-M

A0214; EGU2008-A-10529; IS22 - HS2.1/NP1.05-1TU5P-0214

Serre, M.L.; Akita, Y.; Escamilla, V.; Emch, M.; **Kolovos, A.**
Spatial analysis of arsenic exposure and diarrheal disease risk in Bangladesh related to population pressures on groundwater resources

A0215; EGU2008-A-01944; IS22 - HS2.1/NP1.05-1TU5P-0215

Borbor, M.J.; Hayden, M.; Mejia, R.; Stewart, A.
Climate variability in the North Andes, implications for human health

A0216; EGU2008-A-00254; IS22 - HS2.1/NP1.05-1TU5P-0216

Ma, C.

Spatio-temporal random fields with discrete ARMA temporal margins (solicited)

A0217; EGU2008-A-00076; IS22 - HS2.1/NP1.05-1TU5P-0217

Porcu, E.; Mateu, J.; Christakos, G.

new space-time models with non Euclidean metrics for studying integrated climate-water-health systems (solicited)

A0218; EGU2008-A-12006; IS22 - HS2.1/NP1.05-1TU5P-0218

Zarkadoulas, N.; Koutsoyiannis, D.; Mamassis, N.; Papalexiou, S. M.

Climate, water and health in ancient Greece

A0219; EGU2008-A-03168; IS22 - HS2.1/NP1.05-1TU5P-0219

Malkhazova, S.M.; Prasolova, A.I.

Creation of the medical-demographic atlas

A0220; EGU2008-A-12235; IS22 - HS2.1/NP1.05-1TU5P-0220

Modis, K.

How many samples are enough? A theoretical determination of optimal sampling density in environmental-health applications (solicited)

A0221; EGU2008-A-12241; IS22 - HS2.1/NP1.05-1TU5P-0221

Berdeja-Sotelo, I.A.; Christakos, G.; **Carsteanu, A.A.**

Algorithmic pattern identification in pollution-precipitation dynamics from Mexico City

A0222; EGU2008-A-05346; IS22 - HS2.1/NP1.05-1TU5P-0222

Svircev, Z.; Vukadinov, J.; Krsic, S.; Stefan-Mikic, S.; Markovic, S.B.

Distribution of leptospirosis in freshwaters of Vojvodina region, Serbia

A0223; EGU2008-A-11899; IS22 - HS2.1/NP1.05-1TU5P-0223

Manariotis, I.D.; Yiannopoulos, A.Ch.; **Chrysikopoulos, C.V.**

Performance of a solar reactor for anaerobic wastewater treatment under different climatic conditions

A0224; EGU2008-A-11908; IS22 - HS2.1/NP1.05-1TU5P-0224

Rieckermann, J.; Christakos, G.

Sewage epidemiology – assessing community health factors by wastewater monitoring

A0225; EGU2008-A-00970; IS22 - HS2.1/NP1.05-1TU5P-0225

Duhau, S.

Solar activity declination in the near future and its consequences in hydro meteorological processes. (solicited)

A0226; EGU2008-A-01196; IS22 - HS2.1/NP1.05-1TU5P-0226

Kim, B.S.; Kim, B.K.; Kim, H.S.; Yoon, S.Y.; Sivakumar, B.

Impact assessment of climate change on occurrence of weather events in South Korea using extreme indices

A0227; EGU2008-A-01197; IS22 - HS2.1/NP1.05-1TU5P-0227

Kim, B.S.; Kim, B.K.; Kyung, M.S.; Kim, H.S.; Sivakumar, B.

Estimation of Change in Extreme Rainfall Across Korea under Climate Change using Bartlett-Lewis Rectangular Pulses Model (BLRPM) and Adjusting Method

A0228; EGU2008-A-01094; IS22 - HS2.1/NP1.05-1TU5P-0228

Sivakumar, B.; Kim, H.S.; Kim, B.S.; Kyoung, M.S.; Kim, B.K.

Incorporating climate change in water resources planning and management: scientific challenges and beyond

A0229; EGU2008-A-01014; IS22 - HS2.1/NP1.05-1TU5P-0229

Zhang, X. D.; Huang, G. H.

Inexact multicriteria decision analysis for climate change impacts on small drinking water systems

A0230; EGU2008-A-07347; IS22 - HS2.1/NP1.05-1TU5P-0230

Rapti-Caputo, D.; Vaccaro, C.

Influence of climatic and human activities on the salinization process in two coastal aquifer systems of Sicily (Italy)

A0231; EGU2008-A-00202; IS22 - HS2.1/NP1.05-1TU5P-0231

Nazarenko, O.

Climate change during second half of the XX century and its influence on the transformation of groundwater recharge in Rostov region

A0232; EGU2008-A-01051; IS22 - HS2.1/NP1.05-1TU5P-0232

Acar, R.; Benocak, S.

Detection of statistically significant trends in the short duration rainfalls (sdr) of Adana city

A0233; EGU2008-A-02974; IS22 - HS2.1/NP1.05-1TU5P-0233

Kim, B.S.; Kim, B.K.; Kim, H.S.

Evaluation of Spatial Rainfall Data Uncertainties in Distributed Rainfall-Runoff Model Using Meta-Gaussian approach

A0234; EGU2008-A-11875; IS22 - HS2.1/NP1.05-1TU5P-0234

Amini, M.; Mueller, K.; Abbaspour, K.c.; Johnson, A.C.

Statistical modelling of global geogenic fluoride contamination in groundwaters

A0235; EGU2008-A-00367; IS22 - HS2.1/NP1.05-1TU5P-0235

Bogaert, P.; Fasbender, D.

Multivariate prior distributions using the maximum entropy principle: implementation and benefits for spatial prediction

A0236; EGU2008-A-00694; IS22 - HS2.1/NP1.05-1TU5P-0236

Lin, H.T.; **Yu, H.L.;** Tan, Y.C.; Chen, C.H.

Effective hydrogeological parameter estimation with a novel modified Tabu search algorithm

A0237; EGU2008-A-06922; IS22 - HS2.1/NP1.05-1TU5P-0237

Kanevski, M.; Pozdnoukhov, A.; Timonin, V.; Foresti, L.

Predictive Modeling of Geospatial Data with Machine Learning Algorithms

A0238; EGU2008-A-00628; IS22 - HS2.1/NP1.05-1TU5P-0238

Ranjineh Khojasteh, E.; Sauter, M.

Stochastic modeling of hydrogeological and geological features in a changing environment

A0239; EGU2008-A-00093; IS22 - HS2.1/NP1.05-1TU5P-0239

Modis, K.; Vatalis, K.; Papantonopoulos, G.; Sachanidis, Ch.

Uncertainty management of a hydrogeological data set in a lignite basin, using BME

A0240; EGU2008-A-00759; IS22 - HS2.1/NP1.05-1TU5P-0240

Lee, S. J.; Wentz, E. A.; Gober, P.

Extrapolation mapping of water demand: Case study using historical water use data in Phoenix, Arizona

A0241; EGU2008-A-03865; IS22 - HS2.1/NP1.05-1TU5P-0241

Zukovic, M.; Hristopulos, D.T.

A Non-Parametric Approach for the Conditional Simulation of Large Environmental Data Sets based on Statistical Physics Models and an Application to the Walker Lake Data

A0242; EGU2008-A-11499; IS22 - HS2.1/NP1.05-1TU5P-0242

Mena-Lorca, J.; Carsteanu, A.A.; Ramos-Jiliberto, R.; Morales-Alvarez, W.

Statistical parameterization of the dynamics of lake plankton populations

A0243; EGU2008-A-00281; IS22 - HS2.1/NP1.05-1TU5P-0243

Varouchakis, E.A.; Hristopulos, D.T.

Geostatistical study of groundwater level variability in the Messara valley of Crete

A0244; EGU2008-A-00355; IS22 - HS2.1/NP1.05-1TU5P-0244

Tartakovsky, D. M.

Environmental decision support systems

A0245; EGU2008-A-12126; IS22 - HS2.1/NP1.05-1TU5P-0245

Paleologos, E.K. ; Schwabedissen, R.

Effect of Probability Models and Loss Functions on Decisions in Emission Control Problems

A0246; EGU2008-A-00208; IS22 - HS2.1/NP1.05-1TU5P-0246

Betancourt B., J.; Ortiz, E.; González, A.; Brito, H; Varela, Y

Interdisciplinary strategy against environmental affectations from communities

HS5.1 Science for improved sediment and habitat management in aquatic ecosystems (co-listed in GM & SSS)

Convener: Owens, P.

Co-Convener(s): Petticrew, E., Summer, W., Reeves, A., Neto, S.

Lecture Room 33

Chairperson: OWENS, P.N.

13:30–13:45; EGU2008-A-01659; HS5.1-1TU3O-001

Taylor, K

Using science to help manage contaminated sediments in urban river systems (solicited)

13:45–14:00; EGU2008-A-05584; HS5.1-1TU3O-002

van der Perk, M.; Hoendervoogt, R.

Metal transfer and retention in the Dutch Meuse River

14:00–14:15; EGU2008-A-12238; HS5.1-1TU3O-003

Maia, P.D.; **Maurice, L.;** Cossa, D.; Portugal, R.A.; Etcheber, E.; Rodrigues de Souzae, J.; Guimarães, E.M.; Boaventura, G.R.

Is the Curuai floodplain (Middle Amazon, Brazil) an efficient trap for particulate mercury?

14:15–14:30; EGU2008-A-06493; HS5.1-1TU3O-004

Dewals, B.J.; Archambeau, P.; Erpicum, S.; Piroton, M.

A modelling system for open-channel flows with mobile bed - Application as a decision-support tool for sediment management in a hydropower project

14:30–14:45; EGU2008-A-12236; HS5.1-1TU3O-005

Pillidge, S.; Blake, W.H.; Williams, A.; Bright, D.

Evaluating the role of buffer strips in arable catchments using fallout radionuclide tracers

14:45–15:00; EGU2008-A-12237; HS5.1-1TU3O-006

Neto dos Santos, C.; Costa, J.L.; Costa, M.J.; Lopes Matos, M.T.

The macroinvertebrate intertidal community associated with the seagrass *Halodule wrightii* (Ascherson, 1868) in the Mussulo Lagoon, Angola

15:00 END OF SESSION

HS5.1 Science for improved sediment and habitat management in aquatic ecosystems (co-listed in GM & SSS) – Posters

Convener: Owens, P.

Co-Convener(s): Petticrew, E., Summer, W., Reeves, A., Neto, S.

Display Time: Tuesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: PETTICREW, E.L.

A0247; EGU2008-A-00752; HS5.1-1TU5P-0247

Tuyukina, T.

Genesis, properties and ecosystem role of carbonate lacustrine sediments in northern taiga ecosystems on terraces of lakes with sulfate waters

A0248; EGU2008-A-01312; HS5.1-1TU5P-0248

Batalla, R.J.; Vericat, D; Gibbins, CN

Experimental assessment of the effects of changing hydraulics on sediment entrainment and invertebrate drift

A0249; EGU2008-A-01450; HS5.1-1TU5P-0249

Owens, P.N.

The role of environmental stewardship in sediment management: the example of the Fraser River basin, British Columbia, Canada

A0250; EGU2008-A-03577; HS5.1-1TU5P-0250
Priadi, C.; Ayrault, S.; Robin, E.; Bonté, P.; Franke, C.; Morin, G.
Characterisation of trace metal carriers in the Seine River sediments

A0251; EGU2008-A-03650; HS5.1-1TU5P-0251
Eder, A.; Krueger, T.; Strauss, P.; Quinton, J.N.
Evaluation of a discharge-sediment hysteresis model to calculate catchment sediment load

A0252; EGU2008-A-03701; HS5.1-1TU5P-0252
Carraz, F.; Taylor, K. G.; Drew, I.B.; Owens, P.
Geochemistry and speciation of phosphorus in an urban river basin: implications for sustainable water management

A0253; EGU2008-A-03877; HS5.1-1TU5P-0253
Gintz, D.; Beylich, A.A.; Zippel, B.; **Kaute, K.**
Detection of stable and mobile channel units using biofilm analysis in cold environments

A0254; EGU2008-A-04470; HS5.1-1TU5P-0254
Owens, P.N.
Sediment management at the river basin scale: recommendations of the European Sediment Network

A0255; EGU2008-A-04636; HS5.1-1TU5P-0255
Rothwell, J.J.; Shotbolt, L.A.; Evans, M.G.; Allott, T.E.H
Particulate lead export from contaminated peatlands

A0256; EGU2008-A-05566; HS5.1-1TU5P-0256
van der Perk, M.; Straatsma, M.; Middelkoop, H.; van den Brink, N.G.M
Quantification of fine sediment retention in the Rhine delta using a two-dimensional floodplain sedimentation model

A0257; EGU2008-A-05649; HS5.1-1TU5P-0257
Grauso, S.; Fattoruso, G.; Crocetti, C.; **Montanari, A.**
Estimating the suspended sediment yield by means of geomorphic parameters and regression relationships

A0258; EGU2008-A-07070; HS5.1-1TU5P-0258
Mosaedi, A.; **Alaghmand, S.;** Mohammadi, A
Estimation of Transported Sediment Load

A0259; EGU2008-A-07287; HS5.1-1TU5P-0259
Navratil, O.; Esteves, M.; Nemery, N.; Legout, C.; Poirel, A.; Gratiot, N.; Belleudy, P
Multi-scale survey of Suspended Sediment Concentration in the Bleone river basin (Southern French Alps)

A0260; EGU2008-A-09752; HS5.1-1TU5P-0260
Blake, W.H.; Pillidge, S.; Gehrels, W.R.; Masselink, G.; Bugler, M.; Stocker, J.
Evaluating the downstream consequences of agriculture in a rural river-estuary system

A0261; EGU2008-A-10764; HS5.1-1TU5P-0261
Neto, S
Water cycle, scales and vulnerability

A0262; EGU2008-A-10782; HS5.1-1TU5P-0262
Camkin, J.; Bristow, K.
Dealing with complexity and uncertainty: frameworks to support irrigation and water management decision-making in northern Australia

A0263; EGU2008-A-10793; HS5.1-1TU5P-0263
Camkin, J.; Bristow, K
Where to now for irrigation in northern Australia: Reflections, findings, challenges and opportunities arising from the Northern Australia Irrigation Futures project

A0264; EGU2008-A-11110; HS5.1-1TU5P-0264
Petticrew, E.L.; Williams, N.D.
Techniques for tracing organic matter between terrestrial and aquatic environments

A0265; EGU2008-A-11473; HS5.1-1TU5P-0265
Blanpain, O.; Goncalves, G.; **Masson, E.**
Polluted sediment management: from logistic optimization to decision making

HS5.3 Sediment dynamics during extreme events

Convener: Rickenmann, D.
Co-Convener(s): Bathurst, J., Esteves, M.
Lecture Room 33
Chairperson: ESTEVES, M.

15:30–15:45; EGU2008-A-04684; HS5.3-1TU4O-001
Krapesch, G.; Habersack, H.
Morphological processes and parameters of extreme floods

15:45–16:00; EGU2008-A-06867; HS5.3-1TU4O-002
Mathys, N.; Esteves, M.; Klotz, S.
Water and sediment yield during extreme events in mountainous marly catchments (Draix, Alpes-de-Haute-Provence, France)

16:00–16:15; EGU2008-A-04713; HS5.3-1TU4O-003
Milan, D J.; Heritage, G L
Impacts of a severe flood event upon channel morphology in an upland stream

16:15–16:30; EGU2008-A-02605; HS5.3-1TU4O-004
Rickenmann, D.; Koschni, A.; Canuto, N.
Sediment transport and debris flows during the floods of August 2005 in Switzerland

16:30–16:45; EGU2008-A-12073; HS5.3-1TU4O-005
Gautier, J.N.; Rodrigues, S.; Jugé, P.; Peters, J.J.
Sediment transport processes during flood events in the Middle Loire: gauging and first results

16:45–17:00; EGU2008-A-04907; HS5.3-1TU4O-006
Tramblay, Y.T.; Saint-hilaire, A.S.T.; Ouarda, T.B.M.J.O
Regional frequency analysis of extreme suspended sediment concentration : Comparison of methods in North America

17:00 END OF SESSION

HS5.3 Sediment dynamics during extreme events – Posters

Convener: Rickenmann, D.
Co-Convener(s): Bathurst, J., Esteves, M.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: RICKENMANN, D.

A0266; EGU2008-A-01982; HS5.3-1TU5P-0266
Klenov, V.I.
Virtual Nature Systems for debris flows evaluation

A0267; EGU2008-A-08908; HS5.3-1TU5P-0267
Bacchi, V. ; Naaim-Bouvet, F.; Mathys, N.; Pilotti, M.
High suspended sediment concentration during extreme events: laboratory experiments for the determination of the hydraulic behaviour of hyperconcentrated flows.

A0268; EGU2008-A-02772; HS5.3-1TU5P-0268
Liébault, F.; Waeckel, C.; Klotz, S.
Sediment supply during flow events in a small experimental upland catchment

A0269; EGU2008-A-04015; HS5.3-1TU5P-0269
Turowski, J.M.; Badoux, A.; Rickenmann, D.; McArdeell, B.W
Initiation of bedload transport in the Erlenbach, Switzerland

A0270; EGU2008-A-07927; HS5.3-1TU5P-0270

a. Recking, a. R.

Relations between bed forms and bed load transport rate on steep slopes

A0271; EGU2008-A-03473; HS5.3-1TU5P-0271

Chiari, M.; Rickenmann, D.

LiDAR based estimation of morphologic changes during a flood event and comparison with bedload transport volumes determined by a simulation model

A0272; EGU2008-A-07264; HS5.3-1TU5P-0272

Hauer, C.; Habersack, H.

Morphodynamics of a 1000-year flood in the Kamp River, Austria and impacts on valley morphology

A0273; EGU2008-A-03622; HS5.3-1TU5P-0273

Salemi, E.; **Preciso, E.;** Billi, P.

The problem of estimating bed-load transport: a comparison between field measures and equations for two sand-bed Italian rivers

A0274; EGU2008-A-06489; HS5.3-1TU5P-0274

Frings, R.M.; Berbee, B.M.; Erkens, G.; Kleinhans, M.G.

Flow and sediment properties of the river Rhine during floods: a reconstruction of historical changes due to human impact

A0275; EGU2008-A-06416; HS5.3-1TU5P-0275

Frings, R.M.; Kleinhans, M.G.; Vollmer, S.

The pore structure of the river bed

A0276; EGU2008-A-08584; HS5.3-1TU5P-0276

Fernandes, J.; Rocha, J.

Analysis of the River Tagus bed variation during the last 20 years

A0277; EGU2008-A-11683; HS5.3-1TU5P-0277

Teodor, S.

Solid flood, major source for reservoir silting

HS7.2 Lakes and Inland Seas under Anthropogenic Pressure and Climate Change

Convener: Zavialov, P.

Co-Convener(s): Friedrich, J.

Lecture Room 32

Chairperson: N.N.

15:30–15:45; EGU2008-A-04123; HS7.2-1TU4O-001

Durisch-Kaiser, E.; Schmid, M.; Dinkel, C.; Diem, T.; Schubert, C.; Wehrli, B.

In Lake Tanganyika intense anaerobic and aerobic methanotrophy prevents methane release to the atmosphere

15:45–16:00; EGU2008-A-01572; HS7.2-1TU4O-002

Naftz, D.; Fuller, C.; Johnson, W.; Wurtsbaugh, W.; Beisner, K.; Diaz, X.; Burkhardt, M.

Loading and biogeochemical cycling of anthropogenic contaminants in Great Salt Lake, Utah (solicited)

16:00–16:15; EGU2008-A-00583; HS7.2-1TU4O-003

Dukhovny, V.A.

The Aral Sea and Aral Sea coast: past, present, and future

16:15–16:30; EGU2008-A-03905; HS7.2-1TU4O-004

Renssen, H.; Loughheed, B.C.; Aerts, J.C.J.; de Moel, H.; Ward, P.J.; Kwadijk, J.C.J.

Simulating long-term Caspian Sea level changes: the impact of Holocene and future climate conditions

16:30–16:45; EGU2008-A-07213; HS7.2-1TU4O-005

Friedrich, J.; Mee, L.D.

Feedback of benthic Nutrient Recycling to Ecosystem Decline and Recovery in the northwestern Black Sea

16:45–17:00; EGU2008-A-02595; HS7.2-1TU4O-006

Zavialov, P.; Kremenetskiy, V.; Makkaveyev, P.; Zatsopin, A.

Tracing continental discharges in the Kara Sea: Anomalous spreading of river runoffs in the fall of 2007

17:00 END OF SESSION

HS7.2 Lakes and Inland Seas under Anthropogenic Pressure and Climate Change – Posters

Convener: Zavialov, P.

Co-Convener(s): Friedrich, J.

Display Time: Tuesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0278; EGU2008-A-08332; HS7.2-1TU5P-0278

Crétaux, J-F.; Bergé-Nguyen, M.; Cazenave, A.

Combining of Radar altimetry, and MODIS imagery for the monitoring of surface water over central Asian lakes and reservoirs.

A0279; EGU2008-A-11808; HS7.2-1TU5P-0279

Lebedev, S.A.

Application of the satellite altimetry and radiometry for analysis of anthropogenic pollutants of the Caspian Sea

A0280; EGU2008-A-11814; HS7.2-1TU5P-0280

Lebedev, S.A.; Ostroumova, L.P.; Sirota, A.M.

Seasonal and Interannual Variability of the Caspian Sea Evaporation on Remote Sensing Data

A0281; EGU2008-A-06701; HS7.2-1TU5P-0281

Ishniyazov, D.; Pinkhasov, B.; Ni, A.; Preduinenko, T.; **Petrov, M.**

Halogenesis in Akpetky archipelago (eastern part of the Aral Sea)

A0282; EGU2008-A-12080; HS7.2-1TU5P-0282

Kurbaniyazov, A.K.; Zhakypova, A.Zh.

Artificial small lakes in Amudarya delta

A0283; EGU2008-A-07371; HS7.2-1TU5P-0283

Roget, E.; Muñiz, M.A.; Zavialov, P.

Mixing related to internal waves and gyres in the western lobe of the Large Aral Sea

A0284; EGU2008-A-02601; HS7.2-1TU5P-0284

Zavialov, P.

The continuing tale of the dying Aral Sea: Recent developments

A0285; EGU2008-A-04310; HS7.2-1TU5P-0285

Sklyarov, V.E.

Aral sea: dust storms and upwellings

A0286; EGU2008-A-03540; HS7.2-1TU5P-0286

Neiman, V.G.; Byshev, V.I.; Romanov, Ju.A.

On essential distinction of the regional effects of the Indian monsoon and El Niño before and after seventies

A0287; EGU2008-A-09312; HS7.2-1TU5P-0287

Pelevin, V.; Karlsen, G.; Abramov, O.

Concentration of dissolved organic matter (DOM), chlorophyll and suspended matter estimations in the Black Sea by ultraviolet fluorescence LIDAR in 2005-2007

A0288; EGU2008-A-00497; HS7.2-1TU5P-0288

Möller, O.; Vaz, A.; Castello, J.

The effect of river discharge on the interannual and longer term variability of shrimp production in Patos lagoon (30 S, Brazil)

A0289; EGU2008-A-07314; HS7.2-1TU5P-0289
Turunçoğlu, U. U.; Dalfes, H. N.
Modeling historical lake level fluctuations for Lake Van (Turkey).

A0290; EGU2008-A-04066; HS7.2-1TU5P-0290
Chalupova, D.; Jansky, B.
Anthropogenic impact on fluvial lakes in the Czech Elbe River section

A0291; EGU2008-A-06656; HS7.2-1TU5P-0291
Boehrer, B.; Schultze, M
Meromixis, anthropogenic impact and climate change

A0292; EGU2008-A-04161; HS7.2-1TU5P-0292
Kneis, D.; **Bronstert, A**
Water quality modelling for shallow river-lake systems: Application for the Havel

A0293; EGU2008-A-00073; HS7.2-1TU5P-0293
Melentyev, K.; Melentyev, V.; Pettersson, L.
Climate change and modification of the inland water bodies ice regime in the moderate climatic zone

A0294; EGU2008-A-10971; HS7.2-1TU5P-0294
Kim, S. S.; Kang, D. H.; Kwon, B. H.; Kim, I. K.
Variation characteristics of soil organic carbon and carbon dioxide in the constructed wetland at the Goheung bay

HS7.3 Wetland ecohydrology: interactions and feedbacks between water table, soil moisture, and vegetation (co-listed in BG)

Convener: Tamea, S.
Co-Convener(s): D'Odorico, P., Laio, F., Loheide, S.
Lecture Room 33
Chairperson: TAMEA, S.

10:30–10:45; EGU2008-A-08409; HS7.3-1TU2O-001
Waddington, J.M.; Turetsky, M.R.
Peatland ecohydrology: water-vegetation-carbon interactions in a changing climate (solicited)

10:45–11:00; EGU2008-A-01078; HS7.3-1TU2O-002
Rennermalm, A. K.; Nordbotten, J. M.; Wood, E. F.
Hydrological variability and peatland functioning

11:00–11:15; EGU2008-A-05797; HS7.3-1TU2O-003
Loheide, S
Groundwater-vegetation interactions in mountain meadows

11:15–11:30; EGU2008-A-00411; HS7.3-1TU2O-004
Perucca, E.; Camporeale, C.; Ridolfi, L.
Influence of riparian vegetation distributions on the dispersion processes in rivers

11:30–11:45; EGU2008-A-01138; HS7.3-1TU2O-005
BARTHOLOMEUS, R.P.; Witte, J.P.M.; van Bodegom, P.M.; van Dam, J.C.; Aerts, R.
Critical soil conditions for oxygen availability to plant roots: improvement of the Feddes-function

11:45–12:00; EGU2008-A-01711; HS7.3-1TU2O-006
Limpens, J.; Robroek, B.J.M.; Heijmans, M.P.D
Vegetation feedbacks on surface water availability in bogs

12:00 END OF SESSION

HS7.3 Wetland ecohydrology: interactions and feedbacks between water table, soil moisture, and vegetation (co-listed in BG) – Posters

Convener: Tamea, S.
Co-Convener(s): D'Odorico, P., Laio, F., Loheide, S.
Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: LOHEIDE, S.

A0295; EGU2008-A-00756; HS7.3-1TU5P-0295
Gribovszki, Z.; Kalicz, P.; Kucsara, M.; Szilágyi, J.
Calculation of riparian evapotranspiration from diurnal rhythm of groundwater level and baseflow

A0296; EGU2008-A-01656; HS7.3-1TU5P-0296
Robroek, B.J.M.; Limpens, J.; Schouten, MGC
Patch size and species identity affect the hydrology along the surface on Sphagnum dominated peatlands

A0297; EGU2008-A-02149; HS7.3-1TU5P-0297
Bufkova, I.; Stibal, F.; Mikulaskova, E.
Ecology of drained mires in the Sumava National Park (Czech Republic) and possibilities for restoration

A0298; EGU2008-A-02622; HS7.3-1TU5P-0298
Griessler Bulc, B.; **Smolar-Zvanut, N.;** Sajn Slak, A.; Vrhovsek, D.
Ecoremediation – a new concept of ecosystem technologies

A0299; EGU2008-A-02741; HS7.3-1TU5P-0299
Balestrini, R.; Arese, C.; Delconte, C.; Trevisan, M.; Calliera, M.
Biogeochemical and hydrological control of nitrate transport in a freshwater wetland in the Ticino catchment (Italy).

A0300; EGU2008-A-05009; HS7.3-1TU5P-0300
Vervoort, R.W.; **Vanderzee, S.E.**
Modeling the effect of capillary rise from ground water on probabilistic soil moisture dynamics

A0301; EGU2008-A-05365; HS7.3-1TU5P-0301
Montalto, FA.; Parlange, JY; Steenhuis, TS
An Analytical Model of Tidal Marsh Water Table Fluctuations

A0302; EGU2008-A-05761; HS7.3-1TU5P-0302
Marconi, V.; Antonellini, M.; Laghi, M.; Minchio, A.; Savelli, D.
A water table fluctuations model in sandy soil below a coastal pine forest

A0303; EGU2008-A-06559; HS7.3-1TU5P-0303
Balasooriya, W.K.; Denef, K.; Peters, J.; Verhoest, N.E.C.; Boeckx, P.
Hydrological control on vegetation composition and soil microbial community structure in a temporary wetland (Ghent, Belgium)

A0304; EGU2008-A-07664; HS7.3-1TU5P-0304
Brovelli, A.; Baechler, S.; Rossi, L.; Barry, D. A.
Integrated simulation of horizontal flow constructed wetlands

A0305; EGU2008-A-08208; HS7.3-1TU5P-0305
Doubkova, M.; Bartsch, A.; Sabel, D.; Pathe, C.; Wagner, W.
Okavango Wetland Phenology studied with MODIS Operational Products and ENVISAT ASAR Wetness Product

A0306; EGU2008-A-11415; HS7.3-1TU5P-0306
Globevnik, L.; Božic, G.; Vilhar, U.
Linkage between river hydromorphological characteristics and ecological status of *Populus nigra* – development of a modeling framework for riverain ecosystem

A0307; EGU2008-A-11747; HS7.3-1TU5P-0307
Rodriguez-Iturbe, I.; Tamea, S.; D'Odorico, P.; Laio, F.; Ridolfi, L.
Stochastic water table dynamics in groundwater-dependent ecosystems (solicited)

A0308; EGU2008-A-12091; HS7.3-1TU5P-0308
Kjaergaard, C.
Effects of wetland hydrology and biogeochemical processes on phosphorus dynamics in a restored wet meadow

A0309; EGU2008-A-12409; HS7.3-1TU5P-0309
Tosatto, O.; Comerlati, A.; Putti, M.; Marani, M.
Ecohydrological interactions in oxygen-limited vegetation ecosystems

HS9.2 Subsurface assessment and characterisation of flow, transport, and fate using physical, chemical, and isotopic tools (co-listed SSS)

Convener: Bloem, E.
Co-Convener(s): Elsner, M., Penning, H.
Lecture Room 29
Chairperson: ELSNER, M

15:30–15:45; EGU2008-A-06471; HS9.2-1TU4O-001
Thullner, M; Kampara, M; Richnow, H. H.; Harms, H; Wick, L. Y.
Impact of substrate bioavailability on stable isotope fractionation during biodegradation in environmental systems

15:45–16:00; EGU2008-A-01114; HS9.2-1TU4O-002
Sakaguchi-Söder, K.; Jager, J.; Matthäus, F.; Schüth, C.; Scholz-Muramatsu, H
Investigating abiotic and biotic degradation processes of chlorinated compounds using a new method for compound-specific stable chlorine isotope analysis

16:00–16:15; EGU2008-A-06979; HS9.2-1TU4O-003
Amaral, H.; Aeppli, C.; Berg, M.; Kipfer, R.
Application of CSIA and groundwater dating to assess the natural attenuation of chlorinated ethenes in the field: potentials and limitations

16:15–16:30; EGU2008-A-09184; HS9.2-1TU4O-004
Blessing, M.; Pooley, K. E.; Prommer, H.; Haderlein, S. B.; Schmidt, T. C.
Aerobic biodegradation of chlorinated ethenes in a fractured bedrock aquifer: quantitative assessment by compound-specific isotope analysis

16:30–16:45; EGU2008-A-06289; HS9.2-1TU4O-005
Siebert, C.; Möller, P.; Geyer, S.
Tracking flow-paths by REE+Y and stable isotopes: the Golan Heights

16:45–17:00; EGU2008-A-09873; HS9.2-1TU4O-006
Klose, S.; Reichert, B.; Stichler, W.
Assessment of regional groundwater flow patterns by geochemical tracers in the Middle Drâa Basin (South Morocco)

17:00–17:15; EGU2008-A-11213; HS9.2-1TU4O-007
Kralik, M.; Humer, F.; Grath, J.; Darsow, A.; Hofmann, T.; Suckow, A.; Groening, M.
Implementation of the EU-Water Framework Directive: “Groundwater Ages” and Pollution close to Vienna, Austria

17:15–17:30; EGU2008-A-09584; HS9.2-1TU4O-008
Grandel, S.; Dahmke, A.
A comparison of different combinations of geochemical, microbiological and modelling methods to assess natural attenuation processes for site remediation at six chlorinated solvent field sites

HS9.4 Fissured and karstified aquifers

Convener: Graf, T.
Co-Convener(s): Birk, S., Gabrovsek, F., Maloszewski, P.
Lecture Room 32
Chairperson: GRAF, T.

8:30–8:45; EGU2008-A-09788; HS9.4-1TU1O-001
Winkler, G.; Reichl, P.
Hydraulic properties of fractured crystalline rocks with internal fault zones: examples from the Upper and Lower Austro-Alpine (Austria)

8:45–9:00; EGU2008-A-03843; HS9.4-1TU1O-002
Blessent, D.; Therrien, R.
Integration of 3D geological and numerical models to investigate fractured geological media

9:00–9:15; EGU2008-A-10298; HS9.4-1TU1O-003
Graf, T.; Simmons, C.T.
Quantification of variable-density groundwater flow and solute transport in fractured rock: a modification of the Tang et al. [1981] problem

9:15–9:30; EGU2008-A-05543; HS9.4-1TU1O-004
Attila Kovacs, A.K.; Pierre Perrochet, P.P.
A quantitative approach to spring hydrograph decomposition

9:30–9:45; EGU2008-A-06269; HS9.4-1TU1O-005
Birk, S.; Hergarten, S.
A fractal model of fissured and karstified aquifers applied to spring hydrographs

9:45–10:00; EGU2008-A-05475; HS9.4-1TU1O-006
Geyer, T.; Birk, S.; Liedl, R.; Sauter, M.
Estimation of temporal distribution of recharge from spring hydrographs on the example of a karst spring

10:00 END OF SESSION

HS9.6 Shallow and deep geothermal energy

Convener: Blum, P.
Co-Convener(s): Kolditz, O., McDermott, C.
Lecture Room 32
Chairperson: BLUM, P.

13:30–13:45; EGU2008-A-02001; HS9.6-1TU3O-001
Lee, Y.; Kim, J.; Hwang, S.; Koo, M-H
Heat flow, Heat Production, and Mantle Heat Flow in Korea

13:45–14:00; EGU2008-A-03086; HS9.6-1TU3O-002
Munoz, G.; Ritter, O.; Krings, T.; Moeck, I.
Electrical conductivity models of the Gross Schönebeck geothermal reservoir obtained from magnetotellurics

14:00–14:15; EGU2008-A-05665; HS9.6-1TU3O-003
Philipp, S.L.; Meier, S.; Reyer, D.; Hoffmann, S.; Hemes, S.; Luensdorf, N.K.; Oelrich, A.R.I
Structural geological field analysis in outcrop analogues as a tool to understand permeability development in geothermal reservoirs

14:15–14:30; EGU2008-A-10940; HS9.6-1TU3O-004
Ghergut, I.; Behrens, H.; Licha, T.; **Sauter, M.;** Fischer, S.
Tracer-assisted characterization of deep geothermal reservoirs: some German experiences

14:30–14:45; EGU2008-A-03546; HS9.6-1TU3O-005
Vetter, A.; Mangelsdorf, K.; Vieth, A.
Biogeochemical characterisation of geothermally used groundwater systems

14:45–15:00; EGU2008-A-07946; HS9.6-1TU3O-006
Hähnlein, S.; Grathwohl, P.; Bayer, P.; Blum, P.
Cold plumes of ground source heat pumps: Their length and legal situation

15:00 END OF SESSION

HS9.7 Groundwater stochastic hydrology

Convener: Guadagnini, A.
Co-Convener(s): Sanchez-Vila, X.
Lecture Room 32
Chairperson: GUADAGNINI, A., SANCHEZ-VILA, X.

10:30–10:45; EGU2008-A-01290; HS9.7-1TU2O-001
Cirpka, O.A.; Schwede, R.L.
Statistical distributions of concentration in heterogeneous domains: why the mean and variance are not enough (solicited)

10:45–11:00; EGU2008-A-01352; HS9.7-1TU2O-002
Neuman, S.P.; Tartakovsky, D.M.
Perspective on theories of anomalous transport in heterogeneous media (solicited)

11:00–11:15; EGU2008-A-02150; HS9.7-1TU2O-003
Berkowitz, B.; Scher, H.
Continuous time random walk description of non-Fickian transport (solicited)

11:15–11:30; EGU2008-A-05603; HS9.7-1TU2O-004
Castagna, M.; Becker, M. W.; **Bellin, A.**
Characterization of the spatial variability of hydraulic parameters by inverse modeling (solicited)

11:30–11:45; EGU2008-A-10957; HS9.7-1TU2O-005
Gómez-Hernández, J.J.
Inverse conditional stochastic modeling (solicited)

11:45–12:00; EGU2008-A-06718; HS9.7-1TU2O-006
Copt, N.; Trinchero, P.; Sanchez-Vila, X.; Sarioglu, S.; Findikakis, A.
Impact of heterogeneity on the analysis of pumping test in leaky aquifers (solicited)

12:00–12:15; EGU2008-A-03119; HS9.7-1TU2O-007
Bodin, J.
Dealing with heterogeneity in limestone aquifers: insights from five years of field and modelling studies at the Hydrogeological Experimental Site (HES) of Poitiers, France. (solicited)

12:15–12:30; EGU2008-A-04646; HS9.7-1TU2O-008
Davy, P.; Bour, O.; Darcel, C.; de Dreuzy, J.R.; Le Goc, R.
Correlation lengths of fracture networks, and consequences for flow modeling (solicited)

12:30 END OF SESSION

HS9.7 Groundwater stochastic hydrology – Posters

Convener: Guadagnini, A.
Co-Convener(s): Sanchez-Vila, X.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: GUADAGNINI, A.; SANCHEZ-VILA, X.

A0310; EGU2008-A-02836; HS9.7-1TU5P-0310
Fernandez-Garcia, D.; **Sanchez-Vila, X.;** Guadagnini, A.
Reaction rates in randomly heterogeneous stratified formations

A0311; EGU2008-A-03791; HS9.7-1TU5P-0311
Zavala, V.; Dentz, M.; Sanchez-Vila, X.; Jesus Carrera, J.
Characterization of Mixing and Spreading in a Bounded Stratified Medium

A0312; EGU2008-A-03918; HS9.7-1TU5P-0312
Main, I.G.; Greenhough, J.; Heffer, K.; Koutsebaloulis, N.; Zhang, X.
Spatio-temporal evolution of oilfield flow rate in complex reservoirs

A0313; EGU2008-A-03929; HS9.7-1TU5P-0313
Dentz, M.; Le Borgne, T.; Carrera, J.
Heterogeneity-Induced Non-Fickian Transport: Long Correlations versus Broad Disorder Distributions (solicited)

A0314; EGU2008-A-04327; HS9.7-1TU5P-0314
de Dreuzy, J.-R.; Beaudoin, A.; Erhel, J.
Asymptotic dispersion in 2D heterogeneous porous media

A0315; EGU2008-A-04372; HS9.7-1TU5P-0315
Hendricks Franssen, H.J.
A comparison of Ensemble Kalman Filtering and Monte-Carlo type transient inverse modeling for mildly to strongly heterogeneous formations

A0316; EGU2008-A-05375; HS9.7-1TU5P-0316
Le Borgne, T.; Dentz, M.; Carrera, J.; De Dreuzy, J.-R.; Davy, P.
Lagrangian velocity correlation and effective transport models for highly heterogeneous permeability fields

A0317; EGU2008-A-06117; HS9.7-1TU5P-0317
Suciu, N.; Vamos, C.; Vereecken, H.; Sabelfeld, K.; Knabner, P.
Lagrangian stationarity and memory effects for dispersion in ergodic velocity fields

A0318; EGU2008-A-06154; HS9.7-1TU5P-0318
Suciu, N.; Vamos, C.
Fast computation of macrodispersion coefficients for transport in ergodic velocity fields

A0319; EGU2008-A-06372; HS9.7-1TU5P-0319
Vassena, C.; Giudici, M.; Frigerio, F.
Stochastic modelling of flow in an alluvial aquifer

A0320; EGU2008-A-07494; HS9.7-1TU5P-0320
Bolster, D.; Dentz, M.; Carrera, J.
Enhanced Mixing in Heterogeneous Buckley Leverett Flow due to Temporal Fluctuations

A0321; EGU2008-A-08723; HS9.7-1TU5P-0321
Bonomi, B.; Canepa, C.; **Del Rosso, D.**
Reconstruction of subsoil heterogeneity on provincial scale in Lombardy Region (Italy), using a well database.

A0322; EGU2008-A-09459; HS9.7-1TU5P-0322
Llopis-Albert, C.; Capilla, J. E.
Changes of the a priori stochastic structure in the conditional simulation of transmissivity fields

A0323; EGU2008-A-10990; HS9.7-1TU5P-0323
Llerar-Meza, G.; Fernández-Garcia, D.; Gómez-Hernández, J. J.
Can we use mass transfer models to upscale non-reactive solute transport phenomena in heterogeneous formations?

A0324; EGU2008-A-11029; HS9.7-1TU5P-0324
Morillas-Jurado, F. G.; Fernández-Garcia, D.; Gómez-Hernández, J. J.
Validity of local equilibrium in heterogeneous formations: Relative importance of mass transfer processes and physical heterogeneity

HS10.1 The ungauged catchment problem - a benchmark assessment

Convener: Blöschl, G.
Co-Convener(s): McDonnell, J.
Lecture Room 31
Chairperson: BLÖSCHL, G.

15:30–15:45; EGU2008-A-05066; HS10.1-1TU40-001

Soulsby, C.; Tetzlaff, D.

Towards predicting mean residence times in ungauged basins using conservative tracers and soil distributions

15:45–16:00; EGU2008-A-01751; HS10.1-1TU40-002

van Dijk, A.; Guerschman, J.-P.; Liu, Yi

Satellite-derived evapotranspiration and soil moisture estimates can improve streamflow estimation for Australian catchments

16:00–16:15; EGU2008-A-09626; HS10.1-1TU40-003

Mediero, L.; Jiménez, A.

Comparison of regionalization methods in poorly gauged basins by Monte Carlo simulations

16:15–16:30; EGU2008-A-11824; HS10.1-1TU40-004

Tøfte, L.S.; Engeland, K.; Kolberg, S.A.

Comparison of regional and catchment specific calibration of a distributed hydrological model

16:30–16:45; EGU2008-A-05765; HS10.1-1TU40-005

Woods, R.; Henderson, R.; Hendrikx, J.; Schmidt, J.; Clark, M.; Ibbitt, R.; Rupp, D.; Tait, A.

Establishing the benchmark: five methods for estimating mean annual runoff of New Zealand catchments

16:45–17:00; EGU2008-A-07381; HS10.1-1TU40-006

Wagener, T.; Freer, J.; Schafl, B.; Clark, M

The Role of Uncertainty in PUB Benchmark Assessment

17:00–17:15; EGU2008-A-05958; HS10.1-1TU40-007

Sivapalan, M.

A candidate model for PUB benchmark assessment based on cross-cutting themes

17:15 END OF SESSION

HS10.1 The ungauged catchment problem - a benchmark assessment – Posters

Convener: Blöschl, G.
Co-Convener(s): McDonnell, J.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: BLÖSCHL, G.

A0325; EGU2008-A-02371; HS10.1-1TU5P-0325

Crespo, P.; Bücker, A.; Breuer, L.; Vaché, K.; Feyen, J.; Cisneros, F.; Frede, H.-G.

Using 18O and 2H isotopes to identify water dynamics and origin in a tropical montane cloud forest, Ecuador

A0326; EGU2008-A-03595; HS10.1-1TU5P-0326

Zvolensky, M.; Parajka, J.; Hlavcova, K.; Kohnova, S.; Szolgay, J.

Quantitative comparison of estimation methods for rainfall-runoff model parameters in ungauged basins

A0327; EGU2008-A-03769; HS10.1-1TU5P-0327

Winsemius, H.; Schaefli, B.; Savenije, H.; Bastiaanssen, W.
Stepped calibration of a PUB model using evaporation and discharge spectral properties

A0328; EGU2008-A-03969; HS10.1-1TU5P-0328

Buytaert, W.; Beven, K.

A learning framework for regionalisation

A0329; EGU2008-A-04784; HS10.1-1TU5P-0329

Weiler, M.; Rosin, K.

Assessing Sensitivity to Forest Disturbance in Ungauged Basins

A0330; EGU2008-A-05642; HS10.1-1TU5P-0330

Zinevich, A.; Rayitsfeld, A.; Messer, H.; Alpert, P.

High-resolution frontal rainfall detection by a cellular communication network

A0331; EGU2008-A-06189; HS10.1-1TU5P-0331

Salvai, L.; Bevilacqua, I.; Canone, D.; Previati, M.; Haverkamp, R.

Evaluation of soil water storage with time in mountain areas taking into account the influence of vegetation

A0332; EGU2008-A-06288; HS10.1-1TU5P-0332

Moretti, G.; Montanari, A.

Inferring the flood frequency distribution for an ungauged basin using a spatially distributed rainfall-runoff model

A0333; EGU2008-A-07208; HS10.1-1TU5P-0333

Havlicek, V.; Hermanovsky, M.; Hanel, M.; Redinova, J.; Maca, P.

Possibilities of runoff forecast by black-box models in ungauged basins

A0334; EGU2008-A-07329; HS10.1-1TU5P-0334

Blöschl, G.

Towards a benchmark report on Predictions in Ungauged Basins (PUB)

A0335; EGU2008-A-07507; HS10.1-1TU5P-0335

Baumgartl, T.; Mulligan, D.; Haymont, R

Infiltration rate as a mean for the prediction of runoff in high-intensity rainfall environments

A0336; EGU2008-A-09817; HS10.1-1TU5P-0336

Castellarin, A.

Physiographical space-based interpolation as a tool for predictions in ungauged basins

A0337; EGU2008-A-10505; HS10.1-1TU5P-0337

Carriero, D.; Fiorentino, M.

Analysis of soil moisture variability at different soil depths

A0338; EGU2008-A-11539; HS10.1-1TU5P-0338

Borja, P.; Iñiguez, V.; Crespo, P.; Cisneros, P.; Cisneros, F.; Feyen, J

Hydraulic characterization of Andean Andosols and Histosols

A0339; EGU2008-A-11547; HS10.1-1TU5P-0339

Iñiguez, V.; Borja, P.; Crespo, P.; Cisneros, P.; Cisneros, F.; Feyen, J

Experimental assessment of the hillslope hydrology in an Ecuadorian páramo ecosystem: preliminary results

A0340; EGU2008-A-11946; HS10.1-1TU5P-0340

Singh, P.K.; Mishra, S.K.; Jain, M.K.; Bhunya, P.K.

A review on synthetic unit hydrograph methods

A0341; EGU2008-A-12219; HS10.1-1TU5P-0341

Gan, T Y.; Burges, S

Assessment of soil-based and calibrated parameters of the Sacramento model and parameter transferability to ungauged river basins

HS10.2 Objective and process-based catchment classification as a tool for prediction in ungauged basins

Convener: Claps, P.
Co-Convener(s): Aryal, S., Woods, R., Castellarin, A., Troch, P.
Lecture Room 31
Chairperson: WOODS, R.

13:30–13:45; EGU2008-A-08153; HS10.2-1TU30-001

Blöschl, G.; Merz, R.
Thoughts on a process-based catchment classification (solicited)

13:45–14:00; EGU2008-A-05355; HS10.2-1TU30-002

Harman, C.; Sivapalan, M.
Classification and the role of topography, recharge and boundary conditions on the effects of heterogeneity on subsurface flow in hillslopes

14:00–14:15; EGU2008-A-05719; HS10.2-1TU30-003

Rosin, K.; Ilchmann, N.; Asadian, Y.; Weiler, M.
Catchment Classification Based on Runoff-Generation Processes for Different Climate Regimes

14:15–14:30; EGU2008-A-07318; HS10.2-1TU30-004

Ganora, D.; Claps, P.; Laio, F.
Use of basin descriptors and distance measures in non-parametric flow duration curves estimation in ungauged catchments

14:30–14:45; EGU2008-A-05787; HS10.2-1TU30-005

Wagener, T.; Sivapalan, M.; Troch, P.; Woods, R.
The Search for a Catchment Classification System for Hydrology

14:45–15:00; EGU2008-A-05447; HS10.2-1TU30-006

Hauhs, M.
A coalgebraic Approach of Runoff Classification

15:00 END OF SESSION

HS10.2 Objective and process-based catchment classification as a tool for prediction in ungauged basins – Posters

Convener: Claps, P.
Co-Convener(s): Aryal, S., Woods, R., Castellarin, A., Troch, P.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: CASTELLARIN, A.

A0342; EGU2008-A-00475; HS10.2-1TU5P-0342

Castiglioni, S.; Montanari, A.
Autocorrelation of river flows as a tool for classifying the river flow regime and optimising hydrological models (solicited)

A0343; EGU2008-A-07061; HS10.2-1TU5P-0343

Di Lazzaro, M.
Evaluation of the role of dispersion mechanisms at different basin scales

A0344; EGU2008-A-10230; HS10.2-1TU5P-0344

Zehe, E.; Sivapalan, M.
Threshold nonlinearities in hydrological and environmental systems: implications for observability and predictability

A0345; EGU2008-A-09907; HS10.2-1TU5P-0345

Margreth, M.; Naef, F.; Kienzler, P.
Why do steep catchments often react delayed to heavy rainfall?

A0346; EGU2008-A-12050; HS10.2-1TU5P-0346

Pradhan, N.R.; Ogden, F.; Tachikawa, Y.; Takara, K.
Development of saturation dynamics factor and geomorphic scaling methods for catchment classification

A0347; EGU2008-A-12048; HS10.2-1TU5P-0347

Claps, P.; the CUBIST team
Development of an Information System of the Italian basins for the CUBIST project

A0348; EGU2008-A-09349; HS10.2-1TU5P-0348

Gigante, V.; Iacobellis, V.
Regional analysis of flow duration curves for mediterranean ungauged basins

A0349; EGU2008-A-09034; HS10.2-1TU5P-0349

Fiorentino, M.; Manfreda, S.; Onorati, B.
Runoff Generation Mechanisms in an Experimental Basin

A0350; EGU2008-A-05892; HS10.2-1TU5P-0350

Woods, R.
Evaluation of a simple similarity index method for estimating global runoff

A0351; EGU2008-A-09488; HS10.2-1TU5P-0351

Rigon, R.
Which hydrological information is written in the morphology of the catchments ?

A0352; EGU2008-A-03801; HS10.2-1TU5P-0352

Samaniego, L.; Kumar, R.
Streamflow prediction in ungauged catchments using a copula-based similarity measure

A0353; EGU2008-A-06881; HS10.2-1TU5P-0353

He, Y.; Bárdossy, A.
Using a transformation matrix based algorithm to achieve a novel catchment classification scheme

A0354; EGU2008-A-12015; HS10.2-1TU5P-0354

Toth, E.; **Castellarin, A.**
Catchment classification coupling Canonical Correlation Analysis and Self Organising Maps

HS10.3 Catchment structure and connectivity - observations, analysis and modelling (co-listed in BG, GM & SSS)

Convener: Bogaart, P.
Co-Convener(s): Skøien, J., Tetzlaff, D., Kirkby, M.
Lecture Room 31
Chairperson: KIRKBY, M.; TETZLAFF, D.

8:30–8:45; EGU2008-A-08886; HS10.3-1TU10-001

Lane, S.N.; Odoni, N.
Dynamic channel networks and non-linear runoff response

8:45–9:00; EGU2008-A-04746; HS10.3-1TU10-002

Anderson, A.; Weiler, M.
Tracer based investigation of a hillslope subsurface flow network

9:00–9:15; EGU2008-A-11084; HS10.3-1TU10-003

Kienzler, P.; Naef, F.
Experimental study of subsurface stormflow formation

9:15–9:30; EGU2008-A-04396; HS10.3-1TU10-004

Weiler, M.; McDonnell, J.J.
Emergence of Preferential Flow Networks at the Hillslope Scale

9:30–9:45; EGU2008-A-11449; HS10.3-1TU10-005

Bogaart, P.; McDonnell, J..
Mechanistic modelling of macropore evolution

9:45–10:00; EGU2008-A-04618; HS10.3-1TU1O-006
Hellebrand, H.; Seeger, M.; Müller, C.; Hoffmann, L.; Pfister, L.
Regionalization of dominant runoff generation processes by means of a statistical and a simple GIS-based approach

10:00 COFFEE BREAK

Chairperson: BOGAART,P.; SKOEN, J.

10:30–10:45; EGU2008-A-11067; HS10.3-1TU2O-001
Grabs, T.; Bishop, K.; Blomberg, M.; Laudon, H.; Seibert, J.
Linking topographic indices to riparian peat soils and streamwater chemistry in the Krycklan boreal catchment, Northern Sweden

10:45–11:00; EGU2008-A-04173; HS10.3-1TU2O-002
Cerdan, O.; Govers, G.; van Oost, K.; Le Bissonnais, Y.
Spatial heterogeneity and overland flow: do we always gain from distributed modelling?

11:00–11:15; EGU2008-A-05691; HS10.3-1TU2O-003
Gascuel-odoux, C.; Weiler, M.; Molenat, J.
Effect of different spatial distributions of the physical properties on water table depth and stream discharge

11:15–11:30; EGU2008-A-08654; HS10.3-1TU2O-004
Di Domenico, A.; Laguardia, G.; Fiorentino, M.
On the relation between critical point and catchment organization

11:30–11:45; EGU2008-A-08985; HS10.3-1TU2O-005
Tetzlaff, D.; Seibert, J.; McGuire, K.J.; Laudon, H.; Dunn, S.M.; Burns, D.; McGlynn, B.; Soulsby, C.
Comparing the influence of catchment architecture on catchment residence times in different geomorphic provinces

11:45–12:00; EGU2008-A-10571; HS10.3-1TU2O-006
Tarboton, D. G.; Baker, M. E.; Schreuders, K A T
Terrain analysis and the modeling of catchment architecture

12:00 END OF SESSION

HS10.3 Catchment structure and connectivity - observations, analysis and modelling (co-listed in BG, GM & SSS) – Posters

Convener: Bogaart, P.

Co-Convener(s): Skøien, J., Tetzlaff, D., Kirkby, M.

Display Time: Tuesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: BOGAART, P.; KIRKBY, M.; SKOEN, J.; TETZLAFF, D.

A0355; EGU2008-A-08558; HS10.3-1TU5P-0355
Gerke, H.H.; Maurer, T.; Klauke, A.; Dominik, R.; Dimitrov, M.; Biemelt, D.; Badorreck, A.
Modelling the initial 3D sediment structure of an artificially constructed hydrological catchment

A0356; EGU2008-A-08017; HS10.3-1TU5P-0356
Baggaley, N.; Mayr, T.; Bellamy, P.
Combining soils and terrain data for modelling soil moisture

A0357; EGU2008-A-08224; HS10.3-1TU5P-0357
MOUSSA, R
Shortcomings of Horton-Strahler ratios and definition of new equivalent ratios for the derivation of the Geomorphological Instantaneous Unit Hydrograph

A0358; EGU2008-A-11733; HS10.3-1TU5P-0358

Helliwell, R.; Baggaley, N.; Lilly, A.

Hydrological and hydrochemical responses of the Allt a' Mharcaidh: inferences from experimental plots

A0359; EGU2008-A-08606; HS10.3-1TU5P-0359

Laranjeira, M. M.; **Pereira, A. R.**

Effect of fragment area and isolation on plant species distribution patterns in trampled foredunes (northwest coast of Portugal)

A0360; EGU2008-A-02466; HS10.3-1TU5P-0360

Antoine, M.; Biielders, C.; Javaux, M.

Comparative study of connectivity indicators in surface hydrology

A0361; EGU2008-A-03198; HS10.3-1TU5P-0361

Meerkerk, A.; van Wesemael, B.; Bellin, N.

Overland flow in semi-arid catchments: the impact of terrace failure on hydrological connectivity

A0362; EGU2008-A-03581; HS10.3-1TU5P-0362

Berger, C.; Schulze, M.; Rieke-Zapp, D.; Schlunegger, F.

Rill network development and soil erosion: a laboratory study of rainfall intensity and slope angle

A0363; EGU2008-A-05954; HS10.3-1TU5P-0363

Mizugaki, S.; Onda, Y.; Gomi, T.; Nanko, K.; Asai, H.; Nagamine, M.; Hiramatsu, S.

Sediment transport by surface erosion in a mountain catchment draining Japanese cypress forest – understanding connectivity of sediment from hillslope to channel -

A0364; EGU2008-A-03936; HS10.3-1TU5P-0364

Santiago, A.; **Benito, R.M.**

An extended formalism for growing heterogeneous complex networks with preferential attachment

A0365; EGU2008-A-09887; HS10.3-1TU5P-0365

Benito, R. M.; Santiago, A.

Preferential attachment in heterogeneous complex networks

A0366; EGU2008-A-04674; HS10.3-1TU5P-0366

Seeger, M.; Müller, C.; Hellebrand, H.

Certainties and uncertainties when mapping dominant runoff processes

A0367; EGU2008-A-05814; HS10.3-1TU5P-0367

Lin, L.

Hydrological processes of different land use systems and water budget in a small catchment of the low hilly region

A0368; EGU2008-A-11983; HS10.3-1TU5P-0368

Birkel, C.; Salas Gonzalez, D.

A runoff generation process tool developed for a tropical headwater catchment with scarce data

A0369; EGU2008-A-00662; HS10.3-1TU5P-0369

Nezlobin, D.; Sinai, G.; Rubin, H.; Lavee, H.; Pariente, S.; Sachs, E.

Critical dependence of surface runoff on generating and intercepting covers relative areas

A0370; EGU2008-A-06440; HS10.3-1TU5P-0370

Kiesel, J.; **Hörmann, G.;** Fohrer, N.

Sinks in the DEM - useful for hydrologic modeling?

A0371; EGU2008-A-02841; HS10.3-1TU5P-0371

Liu, M.; Bardossy, A.

Topographic Effects on Spatial Distribution of Soil Moisture

A0372; EGU2008-A-07110; HS10.3-1TU5P-0372

Grabs, T.; **Seibert, J.;** Jencso, K.; McGlynn, B.

Distributed assessment of contributing area and riparian buffering along stream networks: a new approach to separate contributions from different sides

A0373; EGU2008-A-07900; HS10.3-1TU5P-0373
Skøien, J.O.; Gottschalk, L.; Leblois, E.
Interpolation with irregular support – a simplification

A0374; EGU2008-A-08449; HS10.3-1TU5P-0374
Herbst, M.; Diekkrüger, B.; Vanderborght, J.
The effect of the spatial variation of soil hydraulic properties on runoff generation at the small catchment scale

A0375; EGU2008-A-05563; HS10.3-1TU5P-0375
Grundmann, J.; Schmitz, G.H.
Impact of catchment size and rainfall intensity on uncertainty in distributed rainfall-runoff modelling

A0376; EGU2008-A-01194; HS10.3-1TU5P-0376
Sheridan, G.; Lane, P
Effect of spatial correlation and variance of saturated conductivity on overland flow connection between hillslope and stream (cancelled)

A0377; EGU2008-A-05627; HS10.3-1TU5P-0377
Loos, M.; Elsenbeer, H.
Spatial and temporal patterns of overland flow generation during a dry-to-wet season transition

HS10.18 Linking catchment hydrological and biogeochemical processes across spatial scales

Convener: Laudon, H.
Co-Convener(s): Lyon, S.
Lecture Room 33
Chairperson: N.N.

8:30–8:45; EGU2008-A-00708; HS10.18-1TU10-001
Krause, S.; Heathwaite, L.; Binley, A.; Kaeser, D.
Scrutinising the scale dependent efficiency and uncertainty of predicting nutrient attenuation in the riparian and hyporheic corridor

8:45–9:00; EGU2008-A-04188; HS10.18-1TU10-002
Tetzlaff, D.; Soulsby, C.
Sources of baseflow in larger catchments – using tracers to develop a holistic understanding of runoff generation across multiple scales

9:00–9:15; EGU2008-A-07108; HS10.18-1TU10-003
Evans, C
Upscaling biogeochemical processes from plot to catchment to country (or, why small catchments might not be such bad places to work after all) (solicited)

9:15–9:30; EGU2008-A-09502; HS10.18-1TU10-004
Brooks, P.; Kostzewski, J.; Troch, P.; Lyon, S.; Litvak, M.; Liu, F.; Vivoni, E.; McDowell, N.; McConnell, J.; Small, E
A predictive framework for coupling Hydrology, Biogeochemistry, and Ecology (solicited)

9:30–9:45; EGU2008-A-11173; HS10.18-1TU10-005
Bishop, K.; Buffam, I.; Fölster, J.; Laudon, H.; Seibert, J.; Temnerud, J.
Pushing back the frontiers of Aqua Incognita: A strategy for assessing headwaters

9:45 END OF SESSION

HS10.18 Linking catchment hydrological and biogeochemical processes across spatial scales – Posters

Convener: Laudon, H.
Co-Convener(s): Lyon, S.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0378; EGU2008-A-00469; HS10.18-1TU5P-0378
Speed, M.; Tetzlaff, D.; Dawson, J.; Hrachowitz, M.; Dunn, S.; Malcolm, I.; Waldron, S.; Soulsby, C
Upscaling understanding of the hydrological and biogeochemical functioning of larger catchments

A0379; EGU2008-A-02361; HS10.18-1TU5P-0379
Bücker, A.; Crespo, P.; Breuer, L.; Vaché, K.; Frede, G.-H.
The biogeochemical role of watersheds in a tropical cloud forest ecosystem of Ecuador

A0380; EGU2008-A-02740; HS10.18-1TU5P-0380
Lischeid, G.; Krám, P.; Weyer, C.
Tracing biogeochemical processes in small catchments using non-linear statistics

A0381; EGU2008-A-03143; HS10.18-1TU5P-0381
Rusjan, S.; Mikoš, M.
Modelling the seasonal Dynamics of hydrologically induced Nitrate flushing

A0382; EGU2008-A-04586; HS10.18-1TU5P-0382
Temnerud, J.; Bishop, K.; Fölster, J.
Spatial variation and modelling of Organic Matter in Swedish Watercourses

A0383; EGU2008-A-04860; HS10.18-1TU5P-0383
Mellander, P.-E.; Hofer, M.; Stähli, M.; Norström, S.H.; Bylund, D.; Lundström, U.S.
Coupling groundwater discharge with water chemistry: a quasi two-dimensional model approach in a boreal hill slope

A0384; EGU2008-A-05487; HS10.18-1TU5P-0384
Clark, J.M.; Evans, C.D.; Bottrell, S.; Monteith, D.T.; Ratcliffe, M.; Chapman, P.J.
Can increased DOC in streams and lakes be explained by changes in acid sulphate and seasalt deposition in catchment soils?

A0385; EGU2008-A-05846; HS10.18-1TU5P-0385
Lohse, K.; Sanderman, J.; Amundson, R
Influence of hydrological flow paths on carbon and nitrogen transformations and loss pathways in a small Mediterranean catchment

A0386; EGU2008-A-06955; HS10.18-1TU5P-0386
Oulehle, F.; McDowell, W.H.; Aitkenhead-Peterson, J.A.; Krám, P.; Hruška, J.; Navrátil, T.; Buzek, F.; Fottová, D
Long-term trends in stream nitrate concentrations and losses across watersheds undergoing recovery from acidification in the Czech Republic

A0387; EGU2008-A-08551; HS10.18-1TU5P-0387
Wallin, M.; Öquist, M.; Buffam, I.; Laudon, H.; Bishop, K
Carbon dioxide evasion from Boreal Headwaters

A0388; EGU2008-A-08597; HS10.18-1TU5P-0388
Chahinian, N.; Tournoud, M.G.; Perrin, J.L.; Picot, B.
Rebuilding point data to model the nutrient dynamics of an intermittent river.

A0389; EGU2008-A-10888; HS10.18-1TU5P-0389
Hruška, J.; Fottová, D.; Krám, P.
Recovery from acidification as predicted by the MAGIC model for 14 forest catchments in the Czech Republic

A0390; EGU2008-A-11472; HS10.18-1TU5P-0390

Whitfield, C.; Aherne, J.; Watmough, S.

Examining the geochemistry of the Athabasca Oil Sands Region: towards dynamic modeling of acid-sensitive landscapes

A0391; EGU2008-A-11598; HS10.18-1TU5P-0391

Jackson, B.; Francis, O.; Frogbrook, Z.; Marshall, M.; McIntyre, N.; Reynolds, B.; Solloway, I.; Wheeler, H

Impacts of land management on flood risk: a multiscale experimental and modelling investigation in an upland Welsh catchment

Wednesday

HS1.1 Science impact in hydrology: interaction between research and applied engineering (invited speakers only)

Convener: Montanari, A.

Co-Convener(s): Porporato, A.

Lecture Room 29

Chairperson: MONTANARI, A.

13:30–13:35 Introduction by A. Montanari

13:35–14:05; EGU2008-A-06079; HS1.1-1WE3O-002

Rinaldo, A.; Muneeppeerakul, R.; Bertuzzo, E.; Rodriguez-Iturbe, I.

River networks as ecological corridors for biodiversity, populations and waetr-borne disease (solicited)

14:05–14:35; EGU2008-A-12414; HS1.1-1WE3O-003

Kirchner, J.W.

Simple models for complex hydrologic behavior: a challenge for basic research and engineering (solicited)

14:35–15:05; EGU2008-A-12418; HS1.1-1WE3O-004

Rutschmann, P.

Benefits from Hydrodynamic Simulations for Hydrology (solicited)

15:05 COFFEE BREAK

Chairperson: PORPORATO, A.

15:30–16:00; EGU2008-A-10943; HS1.1-1WE4O-001

Kinzelbach, W.

Hydrological science and engineering: the yin and yang of water resources management (solicited)

16:00–16:30; EGU2008-A-08175; HS1.1-1WE4O-002

Blöschl, G.

Synergies of fundamental and applied research: a personal perspective (solicited)

16:30–17:00; EGU2008-A-12136; HS1.1-1WE4O-003

Parker, G.; Belmont, P.; Gran, K.; Jennings, C.; Lauer, J.; Perg, L.; Viparelli, E.; Wilcock, P.

Effect on rivers of massive changes in hydrologic regime due to human intervention (solicited)

17:00 END OF SESSION

HS1.4 Recent Advances in Global Energy and Water Cycle Research – Posters

Convener: van Oevelen, P.

Co-Convener(s): Roads, J.

Display Time: Wednesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0163; EGU2008-A-05107; HS1.4-1WE5P-0163

van Oevelen, P.; Roads, J.; Lawford, R.; Sorooshian, S.; Kummerow, C.; Jakob, C.; Koike, T.; Rossow, B.

GEWEX Global Data Sets: An Overview and Perspective

A0164; EGU2008-A-10131; HS1.4-1WE5P-0164

Fiedler, K.; Döll, P.; Hunger, M.

Global-scale modeling of groundwater recharge

A0165; EGU2008-A-01922; HS1.4-1WE5P-0165

Mecklenburg, S.; Kerr, Y.; Font, J.; Hahne, A

The Soil Moisture and Ocean Salinity Mission – An overview

A0166; EGU2008-A-01338; HS1.4-1WE5P-0166

Teuling, A.J.; Hirschi, M.; Seneviratne, S.I.

Evaporation from the atmospheric water balance during the 2003 European heat wave

A0167; EGU2008-A-01207; HS1.4-1WE5P-0167

Fauchereau, N.; **Pegram, G.;** Sinclair, S.

Empirical Mode Decomposition on the sphere with application to the spatial scales of global surface temperature variations

A0168; EGU2008-A-00954; HS1.4-1WE5P-0168

Li, Y.; Zhang, L.; Zhang, H.

Analysing surface hydrological processes in China simulated by a land-surface model

A0169; EGU2008-A-00953; HS1.4-1WE5P-0169

Zhang, H.; Zhang, L.

The simulations of energy, water and carbon cycle by an Australian land-surface model

A0170; EGU2008-A-04478; HS1.4-1WE5P-0170

Nakouma, S.; Télesphore, B.; Beltrando, G.

Anthropogenic activities and current dynamics of forest cover in the National Park of the Ehotilé islands and its periphery (Côte d'Ivoire)

A0171; EGU2008-A-05075; HS1.4-1WE5P-0171

Chiang, J. L.; Yang, H. C.; Huang, K. C.; Tsai, K. J.; Yeh, C. H.

The Potential Impact of Climate Change on Water Resources and Suspended Sediment in Southern Taiwan

A0172; EGU2008-A-05782; HS1.4-1WE5P-0172

Ackerman, M; **Oglesby, R.;** Hu, Q

Precipitation Relationships between the Great Plains, U.S. Southwest, and Mexican Monsoons

IS23 - HS2.3/NH2.7/CL53 Climatic and hydrological perspectives on long-term changes (co-organised by HS, NH & CL)

Convener: Mudelsee, M.

Co-Convener(s): Georgakakos, K., Lins, H.

Lecture Room 32

Chairperson: MONTANARI, A.

8:30–8:45; EGU2008-A-06381; IS23 - HS2.3/NH2.7/CL53-1WE1O-001

Mudelsee, M.

Long-term changes in climatic and hydrological systems: some questions

8:45–9:15; EGU2008-A-11804; IS23 - HS2.3/NH2.7/CL53-1WE1O-002

Koutsoyiannis, D.; Cohn, T. A.

The Hurst phenomenon and climate (solicited)

9:15–9:30; EGU2008-A-07377; IS23 - HS2.3/NH2.7/CL53-1WE1O-003

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

Testing for deterministic trends in climate time series

9:30–10:00; EGU2008-A-06942; IS23 - HS2.3/NH2.7/CL53-1WE1O-004

Benestad, R.E.; Nordli, Ø.; Nesje, A.; Roald, L.A.; Lie, Ø.; Hanssen-Bauer, I.

Climatic and Hydrological perspectives on long-term changes: a northern European view (solicited)

10:00 COFFEE BREAK

Chairperson: MUDELSEE, M.

10:30–10:45; EGU2008-A-07171; IS23 - HS2.3/NH2.7/CL53-1WE2O-001

Petrov, T.; **Merz, B.**

Flood trends in Germany in the period 1951-2002

10:45–11:00; EGU2008-A-01317; IS23 - HS2.3/NH2.7/CL53-1WE2O-002

Mackey, R

Solar variability and climate dynamics: A framework for analysis

11:00–11:15; EGU2008-A-08326; IS23 - HS2.3/NH2.7/CL53-1WE2O-003

Simonov, Y.; Khristoforov, A.

Estimation of possible climate induced arctic rivers water runoff change

11:15–11:30; EGU2008-A-04801; IS23 - HS2.3/NH2.7/CL53-1WE2O-004

Stahl, K.; Hisdal, H.; Tallaksen, L.M.; van Lanen, H.A.J.; Hannaford, J.; Sauquet, E.; Demuth, S.

Trends in low flows and droughts in small undisturbed rivers across Europe

11:30–12:00; EGU2008-A-00932; IS23 - HS2.3/NH2.7/CL53-1WE2O-005

Moulines, E.

Statistical perspectives on long-term changes (solicited)

12:00 END OF SESSION

IS23 - HS2.3/NH2.7/CL53 Climatic and hydrological perspectives on long-term changes (co-organised by HS, NH & CL) – Posters

Convener: Mudelsee, M.

Co-Convener(s): Georgakakos, K., Lins, H.

Display Time: Wednesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: MUDELSEE, M.

A0173; EGU2008-A-04480; IS23 - HS2.3/NH2.7/CL53-1WE5P-0173

Cong, C.; Yang, Y.; Lei, L.

Did evaporation paradox disappear after 1980s? A case study for China

A0174; EGU2008-A-04644; IS23 - HS2.3/NH2.7/CL53-1WE5P-0174

Yang, D.; Yang, H.

Predicting regional hydrological response to climate change using a water-energy coupled balance model based on the Budyko and Bouchet hypotheses

A0175; EGU2008-A-05832; IS23 - HS2.3/NH2.7/CL53-1WE5P-0175

Han, S.; Hu, H.; Tian, F.

Evaluation of the different climate and hydrological changes in the headstream areas and oases of Tarim River Basin with the complementary relationship

A0176; EGU2008-A-06015; IS23 - HS2.3/NH2.7/CL53-1WE5P-0176

Chen, S.T.; Du, R.H.; Yu, P.S.

Trends and variability of historical and projected droughts in Taiwan

A0177; EGU2008-A-01371; IS23 - HS2.3/NH2.7/CL53-1WE5P-0177

Rutten, M.M.; van de Giesen, N.C.; Mata, L.J.

Persistence in precipitation time series from AR4 general circulation models for historical and future time slices.

A0178; EGU2008-A-02370; IS23 - HS2.3/NH2.7/CL53-1WE5P-0178

Ward, P.J.; Renssen, H.; Aerts, J.C.J.H.

Strong increase in the flood frequency of the River Meuse in response to Holocene and future climate and land use change: a new perspective for long-term modelling

A0179; EGU2008-A-03632; IS23 - HS2.3/NH2.7/CL53-1WE5P-0179

Dankers, R.; Feyen, L.

Estimating extreme river discharge at European scale under present and future climate conditions

A0180; EGU2008-A-05617; IS23 - HS2.3/NH2.7/CL53-1WE5P-0180

Bokoye, A.I.; Dibike, Y.; Lefaivre, L.; Casati, B.

Statistical downscaling techniques and the spatial coherence of daily rainfall variations: A case study over Chaudiere watershed in Quebec

A0181; EGU2008-A-06409; IS23 - HS2.3/NH2.7/CL53-1WE5P-0181

Pistocchi, A.; Weissteiner, C.; Bouraoui, F.; Terres, JM

An analysis of constraints to agriculture due to aridity in continental Europe: current conditions and future scenarios

A0182; EGU2008-A-05687; IS23 - HS2.3/NH2.7/CL53-1WE5P-0182

Hirabayashi, Y.; Kanae, S.; Emori, S.; Oki, T.; Kimoto, M.

Estimating trends of annual maximum daily discharge in the twentieth-century

A0183; EGU2008-A-09074; IS23 - HS2.3/NH2.7/CL53-1WE5P-0183

Koutsoyiannis, D.; Mamassis, N.; Christofides, A.; Efstratiadis, A.; Papalexiou, S. M.

Assessment of the reliability of climate predictions based on comparisons with historical time series

A0184; EGU2008-A-09870; IS23 - HS2.3/NH2.7/CL53-1WE5P-0184

MOULINES, E.; FAY, G.; ROUEFF, F.; TAQQU, M.

Estimators of Long-Memory: a review of recent advances (solicited)

A0185; EGU2008-A-05095; IS23 - HS2.3/NH2.7/CL53-1WE5P-0185

Scheid, A.; Rust, H. W.; Bronstert, A.; Kurths, J.

Impact of climate change on hydrological extremes

A0186; EGU2008-A-05126; IS23 - HS2.3/NH2.7/CL53-1WE5P-0186

Khaliq, M.N.; Ouara, T.; Gachon, P.; Sushama, L.

Identification of temporal trends in Canadian low flow indices in the presence of short- and long-term persistence

A0187; EGU2008-A-11082; IS23 - HS2.3/NH2.7/CL53-1WE5P-0187

Mancarella, D.; **Simeone, V.**

Climatic changes in Taranto area

A0188; EGU2008-A-11676; IS23 - HS2.3/NH2.7/CL53-1WE5P-0188

Massei, N.; Laignel, B.; Motelay-Massei, A.; Deloffre, J. Variability of precipitation and discharge in the Seine river basin (France) over the past 60 years and relation to the North Atlantic Oscillation

A0189; EGU2008-A-12043; IS23 - HS2.3/NH2.7/CL53-1WE5P-0189

Castellari, A.; Montanari, A.

Local and regional assessment of the possible presence of non-stationarity in extreme rainfall in northern Italy

A0190; EGU2008-A-07727; IS23 - HS2.3/NH2.7/CL53-1WE5P-0190

Pandzic, K.; Trninic, D.; Likso, T.; Bosnjak, T.

Time-spatial variations of the water balance components for Croatia

A0191; EGU2008-A-06338; IS23 - HS2.3/NH2.7/CL53-1WE5P-0191

Ostrožlik, M.

Some characteristics of precipitation at Skalná Pleso

A0192; EGU2008-A-09077; IS23 - HS2.3/NH2.7/CL53-1WE5P-0192

Taucher, W.; Kellerer-Pirklbauer, A.; Lieb, G.K.; Avian, M. Temperature Trends at high Mountain Sites of Central Austria during the Period 1961-2006

A0193; EGU2008-A-09277; IS23 - HS2.3/NH2.7/CL53-1WE5P-0193

Yang, W.; Andréasson, J.; Rosberg, J.; Wetterhall, F

Scaling method for applying RCM to climate change impact study on a rainfall-runoff model

Chairperson: ABRAHART, B.

15:30–15:45; EGU2008-A-05647; HS6.1-1WE4O-001

Gronz, O.; **Casper, M.;** Gemmar, P.

Automatic Analysis of hydrologic Time Series using Time Series Knowledge Mining to identify System States

15:45–16:00; EGU2008-A-11783; HS6.1-1WE4O-002

Solomatine, D.; **Corzo, G.;** de Wit, M.; Werner, M.; Uhlenbrook, S.; Price, R

Integrating and combining semi-distributed conceptual and data-driven models in flow forecasting: application to the Meuse river basin

16:00–16:15; EGU2008-A-08739; HS6.1-1WE4O-003

Vrugt, J.A.; Robinson, B.A.; Hyman, J.M.

Self-Adaptive MultiMethod Search For Global Optimization of Hydrologic Model Parameters

16:15–16:30; EGU2008-A-01778; HS6.1-1WE4O-004

Weijs, S.V.; van de Giesen, N.C.

Minimum relative entropy update of ensemble probabilities to reflect forecast information

16:30–16:45; EGU2008-A-05204; HS6.1-1WE4O-005

Pakosch, S.; Disse, M.; Bárdossy, A.

Flood forecasting in meso-scale catchments using a fuzzy rule-based expert system

16:45–17:00; EGU2008-A-11121; HS6.1-1WE4O-006

Karssen, D.; de Jong, K.; Schmitz, O.

A software environment for stochastic spatio-temporal modelling

17:00 END OF SESSION

HS6.1 Hydroinformatics: computational intelligence and technological developments in water science applications

Convener: Solomatine, D.

Co-Convener(s): See, L., Toth, E., Abrahart, R.

Lecture Room 32

Chairperson: SOLOMATINE, D.P.

13:30–13:45; EGU2008-A-08434; HS6.1-1WE3O-001

Abrahart, R.J.; Dawson, C.W.

M5P modelling of non-linear processes and hydrometeorological thresholds

13:45–14:00; EGU2008-A-05984; HS6.1-1WE3O-002

Coulbaly, P.

Data-driven approach to Great Lakes water levels forecasting

14:00–14:15; EGU2008-A-11941; HS6.1-1WE3O-003

Brandimarte, L.; Toth, E.

Estimation of scour depth around bridge piers with artificial neural networks: the impact of training data

14:15–14:30; EGU2008-A-07055; HS6.1-1WE3O-004

Dawson, C.; Abrahart, R

Categorisation of hidden unit activity in a neurohydrological model

14:30–14:45; EGU2008-A-01512; HS6.1-1WE3O-005

El-Baroudy, I.; Elshorbagy, A.; Carey, S.K.; Giustolisi, O.; Savic, D.

Predictive data-driven models of the evapotranspiration process

14:45–15:00; EGU2008-A-00593; HS6.1-1WE3O-006

Chaipimonplin, T.; See, L.; Kneale, P

Neural network Prediction of Flooding in Chiang Mai, Thailand: Comparison of Input Determination Techniques

15:00 COFFEE BREAK

HS6.1 Hydroinformatics: computational intelligence and technological developments in water science applications – Posters

Convener: Solomatine, D.

Co-Convener(s): See, L., Toth, E., Abrahart, R.

Display Time: Wednesday, 08:00–19:30

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

Poster Area Hall A

Chairperson: TOTH, E.

A0194; EGU2008-A-06602; HS6.1-1WE5P-0194

Dawson, C.; Abrahart, R

Hydroinformatics Challenge II: comparison of results and construction of ensemble forecasts (solicited)

A0195; EGU2008-A-08394; HS6.1-1WE5P-0195

Abrahart, R.J.; Dawson, C.W.

Hydroinformatics Challenge II: standard comparisons

A0196; EGU2008-A-00282; HS6.1-1WE5P-0196

Bravo, J. M.; Uvo, C. B.; Collischonn, W.

Improvements on river flow forecast by additional predictors using artificial neural networks

A0197; EGU2008-A-06569; HS6.1-1WE5P-0197

Dawson, C.; Abrahart, R

Backpropagation of error modelling applied to the River Ouse Dataset

A0198; EGU2008-A-08686; HS6.1-1WE5P-0198

Fischer, Ch.; Kralisch, S.

Rainfall-Runoff Modelling using Gaussian Processes

A0199; EGU2008-A-00152; HS6.1-1WE5P-0199

Zahabiyou, B.; Sharafati, A.

A model for estimating water equivalent of snow using Genetic Algorithm

A0200; EGU2008-A-01834; HS6.1-1WE5P-0200

Xu, M.

Model predictive control on irrigation canals, application on the central main canal in arizona

A0201; EGU2008-A-02374; HS6.1-1WE5P-0201

Landeras, G.; Ortiz, A.; López, J.J.

Implementation of artificial neural networks as an alternative to local calibration of temperature and relative humidity-based equations for daily reference evapotranspiration estimation.

A0202; EGU2008-A-03102; HS6.1-1WE5P-0202

Herbst, M.; **Casper, M.C.**

Self-Organizing Maps as a tool for model time series evaluation

A0203; EGU2008-A-10273; HS6.1-1WE5P-0203

Szabó, Sz

An efficient hybrid optimization procedure of adaptive partition-based search and downhill simplex methods for calibrating water resources models

A0204; EGU2008-A-03851; HS6.1-1WE5P-0204

Schoups, G.; van de Giesen, N.C.

Balancing Model Complexity and Data Availability for Hydrologic Prediction

A0205; EGU2008-A-05525; HS6.1-1WE5P-0205

Mavrova-Guirguinova, M.

A Study of Wind Waves Forecasting in the Black Sea Shallow Waters by Neural Network Modelling

A0206; EGU2008-A-07071; HS6.1-1WE5P-0206

Dawson, C.; Abrahart, R

Neural network modelling of two river flow systems in Iceland

A0207; EGU2008-A-08477; HS6.1-1WE5P-0207

Abrahart, R.J.; Dawson, C.W.

Time marching forward testing of two neural network rainfall-runoff models

A0208; EGU2008-A-12310; HS6.1-1WE5P-0208

Sorichetta, A.; Sterlacchini, S.; Poli, S.; Masetti, M.; Blahut, J.

Groundwater Vulnerability Assessment: using the Weight of Evidence model with positive and negative evidences of contamination

A0209; EGU2008-A-05675; HS6.1-1WE5P-0209

Trepos, R.; **Gascuel-Oudou, C. ;** Cordier, M.O.; Masson, V. Symbolic learning of relationships between agricultural activities and water quality from simulations for decision support

A0210; EGU2008-A-06910; HS6.1-1WE5P-0210

Jegathambal, P

Chromium Transport Simulation in sub surface media using a Stochastic Algorithm and Cellular Automata

A0211; EGU2008-A-05134; HS6.1-1WE5P-0211

Sundarambal, P.; Tkalic, P; Balasubramanian, R

Numerical assessment of atmospherically promoted seawater phytoplankton production: Significance of wet deposition events of nitrogen compounds

A0212; EGU2008-A-07953; HS6.1-1WE5P-0212

Limantseva, O.A.; Cherkasova, E.V.

Thermodynamic modeling of underground water chemical composition and model R/W parameter

A0213; EGU2008-A-08060; HS6.1-1WE5P-0213

Lisenkov, A.B.; Limantseva, O.A.

Algorithm of an estimation of an influence of the hydrogeological, geotectonical and technogenic factors complex on formation of groundwater chemical composition

A0214; EGU2008-A-04486; HS6.1-1WE5P-0214

Wang, L.; Cheng, Q.

Web-based hydrological modeling system for flood forecasting and risk mapping

A0215; EGU2008-A-04221; HS6.1-1WE5P-0215

Molkenthin, F.; Zehe, E.; Hinkelmann, R.

Web-based Information System for Multi-Scale Physical State Variables

A0216; EGU2008-A-05059; HS6.1-1WE5P-0216

Tumwesigye, E.; O'Kane, P

Approaches to mass diffusion of knowledge and tools in Hydroinformatics.

A0217; EGU2008-A-09594; HS6.1-1WE5P-0217

Rigon, R.; Antonello, A; Franceschi, S

GEOFRAME: a state-of-art system for doing hydrology and geomorphology by computer

A0218; EGU2008-A-09665; HS6.1-1WE5P-0218

Rigon, R.; Giacomelli, D; Antonello, A; Ghesla, E; Franceschi, S

J-Hydro, an implementation of the digital watershed concept

A0219; EGU2008-A-09771; HS6.1-1WE5P-0219

Antonello, A.; Hamm, A; Rigon, R

The JGrass console

HS7.1 Climate-soil and vegetation interactions in ecological-hydrological processes

Convener: Manfreda, S.

Co-Convener(s): Montaldo, N., Sivapalan, M., Iacobellis, V.

Lecture Room 31

Chairperson: MANFREDA, S.

8:30–8:45; EGU2008-A-07504; HS7.1-1WE1O-001

Cortis, C.; Montaldo, N.; Katul, G.

Impact of the plant competition for water use on the Soil Water Balance of a Water-limited Mediterranean Ecosystem

8:45–9:00; EGU2008-A-07154; HS7.1-1WE1O-002

Ripullone, F.; Magnani, F; Borghetti, M

Impact of climate change on Mediterranean forests: acclimation or vulnerability?

9:00–9:15; EGU2008-A-07553; HS7.1-1WE1O-003

Schymanski, S. J.; Kleidon, A.; Narula, J.; Stieglitz, M.

Maximum Entropy Production, Optimality and Pattern Formation in semiarid Vegetation

9:15–9:30; EGU2008-A-05949; HS7.1-1WE1O-004

Raz Yaseef, N.; Yakir, D.

Ecohydrological Controls over ET Partitioning at a Semi-Arid Forest

9:30–9:45; EGU2008-A-05881; HS7.1-1WE1O-005

Drewry, D.; Kumar, P.; Long, S.; Sivapalan, M.; Liang, X.

Coupling Soil-Canopy Processes to Nitrogen Dynamics: Impacts of Root Moisture Uptake and Hydraulic Redistribution

9:45–10:00; EGU2008-A-09706; HS7.1-1WE1O-006

Moggridge, H.

The establishment and growth of Salicaceae in a dynamic, near-natural river

10:00 COFFEE BREAK

Chairperson: FIORENTINO, M.

10:30–10:45; EGU2008-A-06680; HS7.1-1WE2O-001

Manfreda, S.; Fiorentino, M.

Probability Distributions of the Relative Saturation and Saturated Areas of a River Basin

10:45–11:00; EGU2008-A-10041; HS7.1-1WE2O-002
G. Mayor, A.; Bautista, S.; E. Small, E.; Dixon, M.; Bellot, J.
Flowlength, a new spatial metric for measuring the connectivity of runoff-source areas in drylands considering vegetation pattern and topography

11:00–11:15; EGU2008-A-05638; HS7.1-1WE2O-003
Barnard, H.R.; Brooks, J.R.; McDonnell, J.J.
Resolving the tree-water-stream water paradox in a humid, upland catchment

11:15–11:30; EGU2008-A-09234; HS7.1-1WE2O-004
Bertoldi, G.; Kustas, W. P.; Albertson, J. D.
On the opposing roles of air temperature and wind speed variability in flux estimation over partially vegetated landscapes

11:30–11:45; EGU2008-A-06448; HS7.1-1WE2O-005
Tietjen, B.; Zehe, E.; Jeltsch, F.
Modelling coupled Dynamics of Water and Vegetation in Drylands under Climate Change

11:45–12:00; EGU2008-A-10493; HS7.1-1WE2O-006
Brolsma, R.; van Beek, R.; Bierkens, M.
Climate change effects on groundwater dependent temperate forest ecosystems

12:00 END OF SESSION

HS7.1 Climate-soil and vegetation interactions in ecological-hydrological processes – Posters

Convener: Manfreda, S.
Co-Convener(s): Montaldo, N., Sivapalan, M., Iacobellis, V.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Hall A
Chairperson: MONTALDO, N.

A0220; EGU2008-A-01534; HS7.1-1WE5P-0220
SHARMA, U. C.; SHARMA, V.
Socio-economic aspects of climate-soil-vegetation interactions in hydrological processes in the northeastern region of India (solicited)

A0221; EGU2008-A-06214; HS7.1-1WE5P-0221
Viola, F.; Pumo, D.; Noto, L.V.; Cannarozzo, M.; Porporato, A.
Olive yield as a function of soil moisture dynamics (solicited)

A0222; EGU2008-A-06849; HS7.1-1WE5P-0222
Botter, G.; Daly, E.; Porporato, A.; Rodriguez-Iturbe, I.; Rinaldo, A.
A simplified analytical model of the probabilistic dynamics of soil nitrate (solicited)

A0223; EGU2008-A-09247; HS7.1-1WE5P-0223
Iacobellis, V.; Fiorentino, M.; Gioia, A.; Manfreda, S.
Effects of runoff thresholds on flood frequency distributions (solicited)

A0224; EGU2008-A-00298; HS7.1-1WE5P-0224
Borgogno, F.; D'Odorico, P.; Laio, F.; Ridolfi, L.
Level crossing properties of eco-hydrological systems driven by dichotomic Markov noise (solicited)

A0225; EGU2008-A-08791; HS7.1-1WE5P-0225
De Michele, C.; Vezzoli, R.; Pavlopoulos, H.; Scholes, R. J.
Coupled stochastic dynamics of soil water and vegetation in water-limited ecosystems: a minimal model (solicited)

A0226; EGU2008-A-11805; HS7.1-1WE5P-0226
Ciobanas, A. I.; Rousseau, A. N.
A thermodynamic analysis of the evapotranspiration phenomenon

A0227; EGU2008-A-02342; HS7.1-1WE5P-0227
Noorduijn, S. L.; Vogwill, R.; **Smettem, K.;** Ghadouani, A.
Water Balance Analysis of an Australian Alley Farming Trial, Toolibin Lake

A0228; EGU2008-A-02775; HS7.1-1WE5P-0228
Houcine, A.; Bargaoui, Z.; Habaieb, H.
Reducing the uncertainty of the BBH water balance model using the Budyko framework

A0229; EGU2008-A-07353; HS7.1-1WE5P-0229
Llorens, P.; Poyatos, R.; Latron, J.; Delgado, J.; Gallart, F.
Analysis of three severe droughts (1995-2006) and their effect on Pinus sylvestris transpiration and physiological response in a montane Mediterranean research catchment (Vallcebre, Spain).

A0230; EGU2008-A-07566; HS7.1-1WE5P-0230
Mueller, E. N.; Francke, T.; Batalla, R. J.
The effects of vegetation dynamics and land-use change on runoff, suspended sediment and bedload flux generation in a mountainous Mediterranean catchment: A modelling study

A0231; EGU2008-A-02900; HS7.1-1WE5P-0231
Bachu, L.; **Elshorbagy, A.;** Carey, S; Barr, A
Evaluation of comparative hydrological sustainability of reconstructed and natural watersheds

A0232; EGU2008-A-03146; HS7.1-1WE5P-0232
Sraj, M.; Lah, A.; Brilly, M.
Measurement and analysis of intercepted precipitation of coniferous and deciduous trees

A0233; EGU2008-A-03465; HS7.1-1WE5P-0233
Nanko, K.; Onda, Y; Ito, A; Ito, S; Mizugaki, S; Moriwaki, H
Variability of surface runoff and infiltration rate under a tree canopy: indoor rainfall experiment using a stand of Japanese cypress (solicited)

A0234; EGU2008-A-04467; HS7.1-1WE5P-0234
Shan, Wei.; Guo, Ying
Water content changing in shallow soil cut-slope of highway in seasonal frozen regions

A0235; EGU2008-A-05159; HS7.1-1WE5P-0235
Manna, P.; Basile, A.; Bonfante, A.; De Mascellis, R.; Langella, G.; Terribile, F.
Stochastic analysis of field-scale hydraulic behaviour sensitivity to measured and estimated hydraulic properties (solicited)

A0236; EGU2008-A-05637; HS7.1-1WE5P-0236
Kaleris, V.; Tzoumaka, K.; Disse, M.; Bardossy, A.
Considering the heat flow in the unsaturated zone for estimations of soil water budgets

A0237; EGU2008-A-06550; HS7.1-1WE5P-0237
Kollet, S.; Schüttemeier, D.; Maxwell, R.M.; Moene, A.
The influence of heat convection in the subsurface energy transport equation on the ground heat flux and the energy balance at the land surface

A0238; EGU2008-A-09588; HS7.1-1WE5P-0238
Jackisch, C.; Hildebrandt, A.; Samaniego, L.
Hydrologic and Crop Models in the Mesoscale: Review and Integration Proposal (solicited)

A0239; EGU2008-A-10886; HS7.1-1WE5P-0239
Weckström, J.; Välranta, M.; Seppä, H.; Alkio, J.; Juutinen, S.; Tuittila, E.-S.
Long-term changes in aquatic environment, wetland dynamics and vegetation in Lake Kipojärvi area, Finnish Lapland

A0240; EGU2008-A-10761; HS7.1-1WE5P-0240
Onorati, B.; Celano, G.; Carriero, D.; Manfreda, S.; Margiotta, M.R.; Rivelli, A.R.; Telesca, V.; Fiorentino, M.
Integrated Measurements of Soil Moisture over an Experimental Transect

A0241; EGU2008-A-01454; HS7.1-1WE5P-0241
Smettem, K.; Waring, R.; Callow, N.; Mu, Q
Interannual variation in satellite-derived estimates of leaf-area index reflect measured changes in annual catchment water balances across southwestern Australia, 2000-2006 (solicited)

A0242; EGU2008-A-11767; HS7.1-1WE5P-0242
Solans Vila, J.P.; Barbosa, P.
Vegetation re-growth detection in the lythrodontas region (centre Cyprus) after a forest fire using Landsat tm and ETM+ data

A0243; EGU2008-A-11972; HS7.1-1WE5P-0243
Simoniello, T. ; Lanfredi, M.; Liberti, M.; Coppola, R.; Macchiato, M.
Identification of homogeneous phenological patterns for the characterization of vegetation recovery times on climatic scales (solicited)

HS8.1 Monitoring and Modelling for Transfer Processes in the Soil-Plant-Atmosphere Continuum (co-listed in SSS)

Convener: Romano, N.
Co-Convener(s): Van der Ploeg, M., Angulo-Jaramillo, R.
Lecture Room 31
Chairperson: MINASNI, B.

13:30–13:45; EGU2008-A-11887; HS8.1-1WE3O-001
Zhezherun, A.; Flynn, D.; O’Kane, J.P.
Improved model of discontinuous flow through porous media using ODEs with Preisach operator

13:45–14:00; EGU2008-A-03359; HS8.1-1WE3O-002
Tuzet, A.; Perrier, A.
A coupled model of stomatal conductance, photosynthesis and transpiration

14:00–14:15; EGU2008-A-07753; HS8.1-1WE3O-003
Corradini, C.; Govindaraju, R.S.; Morbidelli, R.; Saltalippi, C.; Flammini, A.
On the representation of infiltration from the local to the hillslope scale

14:15–14:30; EGU2008-A-08538; HS8.1-1WE3O-004
Zimmermann, A.; Disse, M.; Auerswald, K.
Modelling infiltration into crusted soils by a modified Horton equation

14:30–14:45; EGU2008-A-10020; HS8.1-1WE3O-005
Ceres, F.; Nasta, P.; Chirico, G.B.; De Vita, P.; Romano, N.
Monitoring hillslope subsurface stormflow and overland flow initiation in an experimental catchment of South Italy

14:45–15:00; EGU2008-A-02617; HS8.1-1WE3O-006
Cuenca, R.;
Monitoring soil and vegetation dynamics in large-scale experiments (solicited)

15:00–15:15; EGU2008-A-08513; HS8.1-1WE3O-007
Boivin, P.;
Relationships between soil constituents, soil life, and the soil physical properties as assessed with shrinkage modelling: goals, insights and issues. (solicited)

15:15 COFFEE BREAK

Chairperson: FERRARIS, S.

15:30–15:45; EGU2008-A-09891; HS8.1-1WE4O-001
Gårdenäs, A.; Eckersten, H.; Reinlert, A.; Gustafsson, D.; Ekström, P.-A.; Greger, M.; Jansson, P.-E.; Avila, R.
Modelling long-term Accumulation of Radionuclides in the Soil-Plant-System originating from continuous Groundwater Contamination – a Sensitivity Analysis

15:45–16:00; EGU2008-A-09618; HS8.1-1WE4O-002
Garcia, L.; Bedos, C.; Géniermont, S.; Cellier, P.
Accounting for surface hydric and thermal conditions in a volatilisation model.

16:00–16:15; EGU2008-A-06480; HS8.1-1WE4O-003
Hernández-Santana, V.; Martínez-Fernández, J.; Martínez-Vilalta, J.; Cano, A.
Assessing deep water uptake in a Mediterranean oak forest under soil water deficit

16:15–16:30; EGU2008-A-06819; HS8.1-1WE4O-004
Kasteel, R.; Vanderborght, J.; Vereecken, H.
Explaining Soil Moisture Variability as a Function of Mean Moisture Content: Numerical Simulations in Three-Dimensional Heterogeneous Porous Media

16:30–16:45; EGU2008-A-08460; HS8.1-1WE4O-005
Ermolaeva, O.; Zeiliger, A.
Inversion technique to derive soil moisture profile from overlapping measurements with TDR Trime FM3 tube sensor-probe

16:45–17:00; EGU2008-A-11425; HS8.1-1WE4O-006
Oswald, S.E.; Esser, H.; Carminati, A.; Vetterlein, D.; Vogel, H.-J.; Vontobel, P.
Imaging of water infiltration in soil-plant-atmosphere systems by neutron radiography

17:00–17:15; EGU2008-A-11403; HS8.1-1WE4O-007
Spongrova, K.; Kechavarzi, C.; Dresser, M.; Matula, S.; Godwin, R.J.
Design factors of an automated tension infiltrometer affecting accuracy of the measurement

17:15 END OF SESSION

HS8.1 Monitoring and Modelling for Transfer Processes in the Soil-Plant-Atmosphere Continuum (co-listed in SSS) – Posters

Convener: Romano, N.
Co-Convener(s): Van der Ploeg, M., Angulo-Jaramillo, R.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Hall A
Chairperson: FERRARIS, S.

A0244; EGU2008-A-03833; HS8.1-1WE5P-0244
Mirzaei, M.R.; Ruy, S.; Khaledian, M.R.
Is soil homogeneous and uniform at a small scale ?

A0245; EGU2008-A-05516; HS8.1-1WE5P-0245
Lassabatere, L.; Angulo-Jaramillo, R.; Haverkamp, R.
Numerical modelling of Beerkan infiltration tests and related estimation of unsaturated soil hydraulic properties

A0246; EGU2008-A-10983; HS8.1-1WE5P-0246
De Mascellis, R.;
An automated system for tension infiltrometer measurements: design, test and data analysis

A0247; EGU2008-A-03399; HS8.1-1WE5P-0247
Emerstorfer, N.; Klik, A.; Kammerer, G.
Determination of soil hydraulic properties in a stony soil from field monitoring and lab experiments

- A0248;** EGU2008-A-04284; HS8.1-1WE5P-0248
Canone, D.; Prevati, M.; Salvai, L.; Calderón Vega, M. F.; Ferraris, S.; Haverkamp, R.
 Coaxial probe for water content measurements in forest floor litter by time domain reflectometry technique
- A0249;** EGU2008-A-01080; HS8.1-1WE5P-0249
Boussadia, Olfa; Ben Mariem, Fethi; Boussetta, Wafa; Braham, M.; Ben El hadj, Salem
 soil properties and nutritional statute in Tunisian olive tree orchards
- A0250;** EGU2008-A-12169; HS8.1-1WE5P-0250
van den Broek, A.M.W.; Meeussen, J.C.L.; van der Zee, S.E.A.T.M.
 Multicomponent geochemical transport modeling in the unsaturated zone using ORCHESTRA
- A0251;** EGU2008-A-05533; HS8.1-1WE5P-0251
 Goutaland, D; **Angulo-Jaramillo, R.;** Winiarski, T; Dubé, JS; Delolme, C; Perrodin, Y; Pollacco, JAP
 HYDRUS-3D flow model to investigate urban vadose zone hydrology
- A0252;** EGU2008-A-06259; HS8.1-1WE5P-0252
Heuer, A. ; Casper, M.
 Different approaches to map soil water balance: comparison of two soil-plant-atmosphere-continuum models, STICS and DAISY
- A0253;** EGU2008-A-07120; HS8.1-1WE5P-0253
 Medina, H.; **Chirico, G.B.;** Romano, N.
 A new assimilation scheme of near-surface soil moisture to identify effective soil hydraulic parameters
- A0254;** EGU2008-A-09515; HS8.1-1WE5P-0254
Torres, E. A.; Calera, A.; Rubio, E.; Gonzalez, J.
 Hydrological satellite assisted model for regional scale assessment. Case study in south of Spain
- A0255;** EGU2008-A-04100; HS8.1-1WE5P-0255
Gascoin, S.; Ducharme, A.; Ribstein, P.; Perroy, E.; Wagnon, P.
 Establishing the relationship between bare soil albedo and surface soil moisture on the moraine of the Zongo glacier (Bolivia) from in-situ measurements
- A0256;** EGU2008-A-01081; HS8.1-1WE5P-0256
Chhab, Hechm; Ben Mariem, Fethi; Braham, M; Ben El Hady, Salem
 Sap flow and hydraulic conductance of Olive trees
- A0257;** EGU2008-A-07068; HS8.1-1WE5P-0257
MUBARAK, I.; Angulo-Jaramillo, R.; Mailhol, J.C.; Boivin, P.; Ruelle, P.; Khaldian, M.R.; Kradia, L.
 Identification of a temporal variability of soil hydraulic properties under drip irrigation using Beerkan infiltration method
- A0258;** EGU2008-A-10913; HS8.1-1WE5P-0258
Bonfante, A.; Basile, A.; Manna, P.; Orefice, N.; Terribile, F.
 The procedure of calibration of SWAP model in the complexity of vertical soil variability in six Italian cases study.
- A0259;** EGU2008-A-03823; HS8.1-1WE5P-0259
Mirzaei, M.R.; Ruy, S.; Darboux, F.; Gaudu, J.C.; Renaux, B.
 Assessing the influence of the variability of soil surface characteristics on infiltration and runoff: an experimental approach in the lab
- A0260;** EGU2008-A-04281; HS8.1-1WE5P-0260
Bevilacqua, I.; Ferraris, S.; Calderón Vega, M. F.; Canone, D.; Haverkamp, R.
 Measured soil water content data and water balance predictions for ESAs method improvement
- A0261;** EGU2008-A-06332; HS8.1-1WE5P-0261
Heuer, A. ; Casper, M.; Herbst, M.
 Using Monte Carlo simulation to isolate specific parameter ranges: exemplified by the crop model STICS
- A0262;** EGU2008-A-04285; HS8.1-1WE5P-0262
Calderon Vega, M. F.; Ferraris, S.; Prevati, M.; Bevilacqua, I.; Canone, D.; Haverkamp, R.
 Diurnal behavior of the evaporative fraction at local scale observed at Grugliasco, Italy
- A0263;** EGU2008-A-04468; HS8.1-1WE5P-0263
Shan, Wei; Guo, Ying
 Water content changing in shallow soil cut-slope of highway in seasonal frozen regions
- A0264;** EGU2008-A-09779; HS8.1-1WE5P-0264
Krauss, L.; Hauck, C.; Kalthoff, N.; Kottmeier, C.
 Atmosphere-ground interaction in the context of convective precipitation using a soil moisture and energy balance network during COPS
- A0265;** EGU2008-A-01047; HS8.1-1WE5P-0265
Schaaf, W.; Gerwin, W.; Veste, M.; Biemelt, D.
 Monitoring of S-P-A patterns and processes in an artificial catchment
- A0266;** EGU2008-A-09830; HS8.1-1WE5P-0266
Vogel, T.; Tesar, M.; Dusek, J.; Dohnal, M.; Sir, M.
 Water fluxes in spruce tree SPA system - numerical modeling
- A0267;** EGU2008-A-09838; HS8.1-1WE5P-0267
Gärdenäs, A.; Eckersten, H.; Reinlert, A.; Gustafsson, D.; Ekström, P-A.; Greger, M.; Jansson, P-E.
 Tracey, a Simulation Model of Trace Element Fluxes in the Soil-Plant System for long-term Assessment of Groundwater Contamination
- A0268;** EGU2008-A-10636; HS8.1-1WE5P-0268
 Conrad, Y.; Hörmann, G.; Fohrer, N.
 Modeling of nitrogen dynamics in sandy soils under grassland in northern Germany
- A0269;** EGU2008-A-11652; HS8.1-1WE5P-0269
Gonzalez-Piqueras, J.; Balbontin, C.; Campos, I.; Lopez, Ll.; Calera, A.; Torres, E. A.
 Energy and CO2 fluxes over vineyard in southern Spain
- A0270;** EGU2008-A-10745; HS8.1-1WE5P-0270
Kuhnert, M.; Köstner, B.
 Effects of different climatic conditions on the site potential of Norway spruce, common beech and grassland assessed by modelling photosynthesis

HS8.3 Unsaturated zone flow and transport processes: from science to soil and water management

Convener: Vanclooster, M.
 Co-Convener(s): Ferraris, S., Coppola, A.
 Lecture Room 33
 Chairperson: N.N.

- 10:30–10:45;** EGU2008-A-11517; HS8.3-1WE2O-001
Matula, S.; Mojrova, M.; Spongova, K.
 Application of PTFs for soil water retention curves estimation and soil water retention curves database.
- 10:45–11:00;** EGU2008-A-08287; HS8.3-1WE2O-002
 Baetens, J.M.; **Cornelis, W.M.;** Verbist, K.; González, E.; Soto, G.; Gabriels, D.
 Estimating the water retention curve of stony soils from on-the-spot tension infiltrometry

11:00–11:30; EGU2008-A-11076; HS8.3-1WE2O-003
Muerth, M.; Mauser, W.
Effects of a coupled soil water and heat transfer model on simulated winter runoff in mesoscale catchments (solicited)

11:30–11:45; EGU2008-A-08316; HS8.3-1WE2O-004
Mattern, S.; Vanclooster, M.
Factors affecting groundwater pollution by nitrate in a sandy aquifer

11:45–12:00; EGU2008-A-11127; HS8.3-1WE2O-005
Maggio, F.; Mancarella, D.; **Simeone, V.**
Analysis of the response to rainfall of Apulian aquifer in relation to their geological characters

12:00 END OF SESSION

HS8.3 Unsaturated zone flow and transport processes: from science to soil and water management – Posters

Convener: Vanclooster, M.
Co-Convener(s): Ferraris, S., Coppola, A.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0271; EGU2008-A-01591; HS8.3-1WE5P-0271
Rezanezhad, F.; Roth, K.
Unstable Fingering Flow Visualization and Quantification Using Light Transmission Method

A0272; EGU2008-A-03967; HS8.3-1WE5P-0272
Beltman, WHJ; Boesten, JJI; **van der Zee, SEATM**
Leaching of pesticides and implications for pesticide screening

A0273; EGU2008-A-04080; HS8.3-1WE5P-0273
Zumr, D.; Císlarová, M.; Gvoždík, L.; Vogel, T.
Comparing pore water dynamics in earth dam using two different model approaches

A0274; EGU2008-A-04252; HS8.3-1WE5P-0274
Prevati, M.; Bevilacqua, I.; Salvai, L.; Calderón, F.; Haverkamp, R.
Hydrodynamics of slope water management in Tunisia: field survey and prediction model.

A0275; EGU2008-A-04303; HS8.3-1WE5P-0275
Salvai, L.; Canone, D.; Prevati, M.; Bevilacqua, I.; Haverkamp, R.
Comparison between the efficiency of different irrigation methods applied in the Piedmont area of Italy

A0276; EGU2008-A-08556; HS8.3-1WE5P-0276
Khlosi, M.; Cornelis, W.M.; Gabriels, D.
Describing the soil-water retention curve between saturation and oven-dryness

A0277; EGU2008-A-10037; HS8.3-1WE5P-0277
Mpulila, T.S.; **Cornelis, W.M.;** Van Ranst, E.
Pedotransfer functions to predict the water retention curves of eastern and northern Tanzanian soils

A0278; EGU2008-A-10136; HS8.3-1WE5P-0278
Shokri, N.; Lehmann, P; Vontobel, P; Or, D
Effects of wettability on evaporation behavior from porous media

A0279; EGU2008-A-09856; HS8.3-1WE5P-0279
Baroni, G.; Facchi, A.; Gandolfi, C.; Ortuani, B.
Analysis of the performances of methods for the evaluation of soil hydraulic parameters and of their application in two hydrological models

HS8.4 Reconciling Theory, Simulation, and Observations in Subsurface Flow and Transport Modeling

Convener: Vrugt, J.
Co-Convener(s): Vereecken, H., Huisman, S., Ferre, T.
Lecture Room 33
Chairperson: N.N.

8:30–8:45; EGU2008-A-02153; HS8.4-1WE1O-001
Cirpka, O.A.; Li, W.
Geostatistical Inverse Modeling: Success Stories and Remaining Challenges (solicited)

8:45–9:00; EGU2008-A-02030; HS8.4-1WE1O-002
Bittelli, M.; Pistocchi, A.; Tomei, F.; Flury, M.; Brooks, E. S.; Boll, J.
Development and testing of a physically-based, three-dimensional model of surface and subsurface hydrology

9:00–9:15; EGU2008-A-02501; HS8.4-1WE1O-003
Le Goc, R.; de Dreuzy, J.-R.; Davy, P.
Identification of main flow structures for highly channelled flow in fractured media by solving the inverse problem

9:15–9:30; EGU2008-A-05628; HS8.4-1WE1O-004
Graeff, T; Bronstert, A; Bauer, A; Morgner, M; **Zehe, E**
Spatio-temporal development of water content assessed with STDR-technique and hydrological simulation

9:30–9:45; EGU2008-A-11930; HS8.4-1WE1O-005
Flynn, D.P.; O’Kane, J.P.; Pokrovskii, A.V.
The prediction and identification problems for hysteretic multiphase flow through porous media

9:45–10:00; EGU2008-A-10104; HS8.4-1WE1O-006
Walvoort, D.J.J.; Heijkers, W.J.M
Quantification of the accuracy of groundwater characteristics predicted by a linked ‘soil – groundwater – surface water’ model

10:00 END OF SESSION

HS8.4 Reconciling Theory, Simulation, and Observations in Subsurface Flow and Transport Modeling – Posters

Convener: Vrugt, J.
Co-Convener(s): Vereecken, H., Huisman, S., Ferre, T.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0280; EGU2008-A-03037; HS8.4-1WE5P-0280
Schneider, K.; Mie, M; Roth, K
Dynamics of the Capillary Fringe with a Fluctuating Water Table

A0281; EGU2008-A-07656; HS8.4-1WE5P-0281
Mohnke, O.; Fehr, A.; Klitzsch, N.; Clauser, C.
Numerical simulation of NMR responses of coupled pore systems using 3D FEM modelling.

A0282; EGU2008-A-06000; HS8.4-1WE5P-0282
Delmas, P.; Duwig, C.; MÄ¹/₄ller, K.; Prado, B.; Baez, A.
Infiltration of a Fluorescent Dye in Allophanic Soils using Image Analysis: Calibration Procedure

A0283; EGU2008-A-06248; HS8.4-1WE5P-0283
Peters, A.; Durner, W.
A simple Model for describing hydraulic Conductivity in unsaturated porous Media accounting for film and capillary Flow

A0284; EGU2008-A-05918; HS8.4-1WE5P-0284
Dohnal, M.; Dusek, J.; Vogel, T.
 On estimation of topsoil near-saturated hydraulic conductivity by mini-disk infiltrometer

A0285; EGU2008-A-08365; HS8.4-1WE5P-0285
Nimcová, R.; Císlarová, M.; Snihota, M.
 The effect of initial saturation on infiltration process in an undisturbed soil sample

A0286; EGU2008-A-08758; HS8.4-1WE5P-0286
 Dusek, J.; **Dohnal, M.;** Vogel, T.
 Evaluation of ponded infiltration experiments in structured soils by numerical modeling

A0287; EGU2008-A-08909; HS8.4-1WE5P-0287
Iden, S. C.; Durner, W.
 Estimating soil hydraulic properties by Wind's method using free-form functions

A0288; EGU2008-A-11096; HS8.4-1WE5P-0288
Sobotkova, M.; Snehota, M.; Dohnal, M.; Císlarová, M.
 Evaluation of solute transport experiment done under ponded infiltration conditions

A0289; EGU2008-A-09118; HS8.4-1WE5P-0289
Cirkel, D.G.; Witte, J.P.M.; van der Zee, S.E.A
 Effects of data availability and system properties on both sensitivity and accuracy of calculated seepage fluxes in wetlands

HS9.3 Hydrogeophysics in subsurface hydrology

Convener: Vereecken, H.
 Co-Convener(s): Ferre, T., Yaramanci, U.
 Lecture Room 29
 Chairperson: N.N.

8:30–8:45; EGU2008-A-04465; HS9.3-1WE1O-001
Looms, M.C.; Binley, A.; Nielsen, L.; Jensen, K.H.
 The use of “integrated data fusion” to determine unsaturated flow parameter from geophysical measurements (solicited)

8:45–9:00; EGU2008-A-07547; HS9.3-1WE1O-002
 Dafflon, B.; Irving, J.; **Holliger, K.**
 Hydrogeophysical characterization of heterogeneous aquifers: data integration and implications for hydrological predictions (solicited)

9:00–9:15; EGU2008-A-08027; HS9.3-1WE1O-003
Furche, M.; Günther, T.; Altfelder, S.; Noell, U.; Grisse-mann, Ch.
 3D imaging of infiltrating water in a lysimeter using electrical resistivity tomography (ERT)

9:15–9:30; EGU2008-A-08283; HS9.3-1WE1O-004
Minet, J.; Besson, A.; Vanclooster, M.; Lambot, S.
 Analysis of a frequency domain reflectometry forward and inverse modelling technique for complete characterization of a water content profile

9:30–9:45; EGU2008-A-10748; HS9.3-1WE1O-005
Soldovieri, F.; Persico, R.; Prisco, G.
 A microwave tomography based strategy for the determination of the dielectric permittivity of a lossy soil

9:45–10:00; EGU2008-A-10286; HS9.3-1WE1O-006
Mitreiter, I.; Schoenfelder, W.; Oswald, S.E.; Stallmach, F.
 What NMR can tell us about biodegradation in sediments?

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-05896; HS9.3-1WE2O-001
Ferre, T.P.A.; Hinnell, A.C.; Huisman, S.A.; Vrugt, J.A.
 Sequential, Joint, and Coupled Inversion: from the State of the Practice toward Improved Hydrogeophysical Assessment (solicited)

10:45–11:00; EGU2008-A-01632; HS9.3-1WE2O-002
 Meles, G.A.; Ernst, J.R.; **van der Kruk, J.;** Green, A.G.; Maurer, H.R.; Holliger, K.
 Recent developments in full-waveform inversion of georadar data (solicited)

11:00–11:15; EGU2008-A-03250; HS9.3-1WE2O-003
Sato, M.; Takahashi, K.; Zhou, H.
 Inversion Approaches in Cross-Hole Borehole Radar

11:15–11:30; EGU2008-A-08280; HS9.3-1WE2O-004
Mangué, M.; Perroud, H.; Rousset, D.
 Inversion of a small number of parameters in cross-well GPR tomography: comparison to GPR velocity obtained from surface acquisition

11:30–11:45; EGU2008-A-11656; HS9.3-1WE2O-005
Fielitz, D.; Kemna, A.; Zimmermann, E.; Glaas, W.; Cassiani, G.; Vereecken, H.
 Model response curves and surveying aspects in crosshole MMR

11:45–12:00; EGU2008-A-01396; HS9.3-1WE2O-006
 Cassiani, G.; Crosta, G.B.; Franco, D.; Frattini, P.; **Godio, A.;** Stocco, S.; Villa, A.
 Monitoring steep slopes hydrological behaviour through controlled infiltration test

12:00 END OF SESSION

HS9.3 Hydrogeophysics in subsurface hydrology – Posters

Convener: Vereecken, H.
 Co-Convener(s): Ferre, T., Yaramanci, U.
 Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
 Poster Area Hall A
 Chairperson: N.N.

A0290; EGU2008-A-01370; HS9.3-1WE5P-0290
Cordua, K.S.; Nielsen, L.; Looms, M.C.; Hansen, T.M.; Binley, A.
 Influence of correlated data errors on the resolution of ground penetration radar cross-borehole tomograms

A0291; EGU2008-A-01906; HS9.3-1WE5P-0291
Lo, WC; Yeh, CL; Jan, CD
 Effect of soil texture on the propagation and attenuation of acoustic waves at saturated conditions

A0292; EGU2008-A-02014; HS9.3-1WE5P-0292
 Abd Alla, moham
 Integrated geophysical methods to delineate the contamination

A0293; EGU2008-A-02018; HS9.3-1WE5P-0293
 Abd Alla, M
 Effect of salt water intrusion on the groundwater resources at Delta of Wadi Kiraf area , Shalten ,

A0294; EGU2008-A-02227; HS9.3-1WE5P-0294
Jahr, T.; Jentzsch, G.; Weise, A.
 Highresolution tilt observations of subsurface hydrological signals at the Geodynamic Observatory Moxa/Germany

- A0295;** EGU2008-A-03227; HS9.3-1WE5P-0295
Sato, M.; Takayama, T.
Development and Evaluation of Directional Borehole Radar with Passive Receiver Units
- A0296;** EGU2008-A-04220; HS9.3-1WE5P-0296
Dyck, M. F.; Kachanoski, R. G.
Measurement of local soil water flux in layered soils using vertical TDR probes
- A0297;** EGU2008-A-04461; HS9.3-1WE5P-0297
Looms, M.C.; Haarder, E.B.; Nielsen, L.; Jensen, K.H.; Rasmussen, K.R.
Hydrogeophysical investigations of spatial flow patterns in unsaturated sandy alluvial sediments
- A0298;** EGU2008-A-05137; HS9.3-1WE5P-0298
Koch, K.; Suski, B; Kemna, A; Holliger, K
Use of the spectral induced polarization method to characterise hydrological parameters: Results from laboratory measurements for a range of sandy materials under saturated conditions
- A0299;** EGU2008-A-05903; HS9.3-1WE5P-0299
Rice, A.; **Ferre, T.P.A.;** Desilets, D.; Zreda, M.
Predicting the Likely Value of Cosmic-Ray Neutron Measurements to Estimate Soil Hydraulic Property and ET E
- A0300;** EGU2008-A-07369; HS9.3-1WE5P-0300
Chalikakis, K.; Nielsen, M.R.; Legchenko, A.
Efficiency of magnetic resonance soundings (MRS) for groundwater mapping and modelling in sedimentary aquifers in Denmark
- A0301;** EGU2008-A-07396; HS9.3-1WE5P-0301
Soliman, M.; Mousa, S; Ragab, E
Contribution of TEM, DC and GPR to resolve the Environmental problem (Seawater intrusion) in northern coast of Egypt
- A0302;** EGU2008-A-07427; HS9.3-1WE5P-0302
Hwang, S.; Shin, J.; Oh, H.; Lee, B.J.; Chi, S.; Park, K.G.
Integrating geophysical well logs, long-term monitoring, and hydrogeochemical data to characterize saltwater intrusion of fractured rock on Yeonggwang-gun, Korea
- A0303;** EGU2008-A-07597; HS9.3-1WE5P-0303
Rapti-Caputo, D.; Bratus, A.; Yabar Nieto, D.; Santarato, G.
Hydrogeophysical investigations of alluvial deep aquifer system: results from a test area in northern Italy
- A0304;** EGU2008-A-07629; HS9.3-1WE5P-0304
Cousin, I.; Séger, M.; Giot, G.; Mahu, F.; Boizard, H.; Richard, G.
Characterisation of the structural heterogeneity of the soil tilled layer in the field by 3D electrical resistivity measurements
- A0305;** EGU2008-A-07651; HS9.3-1WE5P-0305
Boucher, M.; Favreau, G.; Vouillamoz, J.M.; Legchenko, A.
Relationship between the MRS water content and the specific yield measured by pumping tests in south-west Niger
- A0306;** EGU2008-A-07674; HS9.3-1WE5P-0306
Van Gilse, N. C.; Looms, M. C.; Nielsen, L.; Villholth, K. G.
Hydrogeophysical investigations to assess the carrying capacity of the fresh groundwater resources in the Kalpitiya Peninsula, Sri Lanka
- A0307;** EGU2008-A-08110; HS9.3-1WE5P-0307
Rumpel, H.-M.; Binot, F.; Gabriel, G.; Siemon, B.; Steuer, A.; Wiederhold, H.
Contribution of geophysical data to 3D aquifer modelling: A case study of the Quaternary buried valley Cuxhavener Rinne
- A0308;** EGU2008-A-08255; HS9.3-1WE5P-0308
Oh, H.; Hwang, S.; Shin, J.
Interpretation of geophysical well logs in coastal aquifer, Yeonggwang-gun, Korea
- A0309;** EGU2008-A-08933; HS9.3-1WE5P-0309
Hannich, D.; Hoetzel, H.; Ali, W.
New geophysical insights concerning the interfaces between fresh, brackish and saline water in the Ein-Fashkha area at the north-western Dead Sea shore
- A0310;** EGU2008-A-09082; HS9.3-1WE5P-0310
Clément, R.; Descloitres, M.; Günther, T.
Influence of shallow infiltration on time-lapse ERT
- A0311;** EGU2008-A-09492; HS9.3-1WE5P-0311
Rizzo, E.; Straface, S.; Chidichimo, F.; Votta, M.; Lapenna, V.
First hydrogeophysical controlled experiments in the large lab-scale Hydrogeosite Laboratory (IMAA-CNR)
- A0312;** EGU2008-A-09499; HS9.3-1WE5P-0312
Jadoon, K.Z.; Slob, E.C.; Vereecken, H.; Lambot, S.
Determination of unsaturated soil hydraulic properties through integrated hydrogeophysical inversion of time-lapse proximal GPR data
- A0313;** EGU2008-A-09825; HS9.3-1WE5P-0313
Garza-Rocha, D.; Galván-Aguilar, E. L.; Guerrero-Castro, J. A.; Méndez-Delgado, S.
Shallow geoelectrical and seismic refraction survey for the determination of the thicknesses of the gravel channels in the Cañón de La Huasteca, Santa Catarina Nuevo León, México
- A0314;** EGU2008-A-10083; HS9.3-1WE5P-0314
Aiuppa, A.; Cosentino, P.; D'Alessandro, A.; Di Maio, R.; Luzio, D.; Martorana, R.; **Messina, N.**
Geophysical study of the hydrothermal reservoir in the Panza area (Ischia, Italy)
- A0315;** EGU2008-A-11191; HS9.3-1WE5P-0315
Hauck, C.; Rings, J.
Application of hydrogeophysical methods to monitor and quantify the subsurface ice and water content in frozen regions
- A0316;** EGU2008-A-12208; HS9.3-1WE5P-0316
Mekhemer, H.M.
Geochemical evaluation and hydrochemical zonation for the Nubia aquifer in the Ganah area, El-Kharga Oasis, Egypt
-
- HS9.5 Urban impacts on soils and groundwater – Requirement of groundwater management**
- Convener: Mohrlök, U.
Co-Convener(s): Karatzas, G., Schiedek, T.
Lecture Room 33
Chairperson: U. MOHRLOK
- 13:30–13:45;** EGU2008-A-05371; HS9.5-1WE3O-001
Jeppesen, J.; Christensen, S.; Ladekar, U.
Simulation of the historical development of the water cycle of the Copenhagen area, Denmark
- 13:45–14:00;** EGU2008-A-03561; HS9.5-1WE3O-002
Musolff, A.; Leschik, S.; Strauch, G.; Reinstorf, F.; Schirmer, M.
Emerging contaminants in the aquatic environment at the watershed scale
- 14:00–14:15;** EGU2008-A-00455; HS9.5-1WE3O-003
Du, X.Q.
Study on impact of artificial recharge on groundwater quality

14:15–14:30; EGU2008-A-01886; HS9.5-1WE3O-004
Trichakis, I.; Nikolos, I.K.; **Karatzas, G.P.**
Estimation of well hydraulic heads in a karstic aquifer using
a neural network model

14:30–14:45; EGU2008-A-03663; HS9.5-1WE3O-005
Blunier, P.; Parriaux, A.
Deep City: toward combined uses of the urban underground
resources

14:45–15:00; EGU2008-A-03438; HS9.5-1WE3O-006
Paleologos, E.K.
A Novel Paradigm for Accounting for the Cost of Ground-
water Pollution

15:00 END OF SESSION

HS9.5 Urban impacts on soils and groundwater – Re- quirement of groundwater management – Posters

Convener: Mohrlök, U.
Co-Convener(s): Karatzas, G., Schiedek, T.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0317; EGU2008-A-09260; HS9.5-1WE5P-0317
Bonomi, B.; Canepa, C.; Del Rosso, D.
Groundwater variation volumes according to piezometric
level trend.

A0318; EGU2008-A-06318; HS9.5-1WE5P-0318
Le Delliou, A.-L.; Rodriguez, F.; Andrieu, H.
Modeling of sewer network impacts on urban groundwater

A0319; EGU2008-A-03325; HS9.5-1WE5P-0319
Leschik, S.; Musolff, A.; Reinstorf, F.; Strauch, G.;
Schirmer, M.
Assessment of the effects of leaky sewers on groundwater
quality

A0320; EGU2008-A-10860; HS9.5-1WE5P-0320
Pollacco, J.A.P.; Winiarski, T.; Angulo-Jaramillo, R.; Gouta-
land, D.; Delolme, C.; Bedell, JP; Perrodin, Y.; Barraud, S;
Lipeme-kouyi, G; Malard, F
Discussion of the estimation of the water fluxes, sediments
and heavy metals in a retention-infiltration basin

A0321; EGU2008-A-10848; HS9.5-1WE5P-0321
EL TABACH, E.; schertzer, D.; tchiguirinskaia, I.
New methodology to design a combined trough canal
drain-trench system to manage stormwater runoff in urban
area for a sustainable development

A0322; EGU2008-A-11829; HS9.5-1WE5P-0322
Dubé, J.-S.; Winiarski, T.; Boudreault, J.-P.; Goutaland, D.;
Chouteau, M.; Angulo, R.; Arambourou, H.; Bièvre, G.;
Giroux, B.; Hardy, E.
Environmental geophysics in urban areas

A0323; EGU2008-A-12070; HS9.5-1WE5P-0323
Schiedek, T.; Beier, M.; Ebhardt, G.
Monitoring urban impact on groundwater quality – Statisti-
cal analyses in Darmstadt, Germany

A0324; EGU2008-A-10897; HS9.5-1WE5P-0324
Mohrlök, U.; Bethge, E.
Balancing spatial and temporal variability of infiltration pro-
cesses as basis for urban soil and groundwater management

A0325; EGU2008-A-09748; HS9.5-1WE5P-0325
Reinstorf, F.; Leschik, S.; Musolff, A.; Strauch, G.; Osen-
brück, K.; Schirmer, M.
Mass fluxes and integrated modelling of urban micropollu-
tants

HS10.13 Hydrological measurements: experimental catchments of different scales for interdisciplinary research – Posters

Convener: Pfister, L.
Co-Convener(s): Brilly, M.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0326; EGU2008-A-01830; HS10.13-1WE5P-0326
Gerrits, A.M.J.; Pfister, L.; Savenije, H.H.G
Uncertainties in canopy and forest floor interception

A0327; EGU2008-A-02979; HS10.13-1WE5P-0327
Vidmar, A.; **Brilly, M**
Water level measurement by self-sufficient equipment

A0328; EGU2008-A-05414; HS10.13-1WE5P-0328
Johst, M.; Casper, M.
Different approaches to investigate flood generating mecha-
nisms in the low mountain range basin Frankelbach

A0329; EGU2008-A-06535; HS10.13-1WE5P-0329
Angeli, N.; Dambrine, E.; Boudot, J.P.; Viville, D.; Nys, C.;
Richter, C.; Party, J.P.; Pollier, B.; Guérol, F.; probst, A.
Stream water composition changes in the Vosges Mountains
(NE France): long-term study and liming experiment.

A0330; EGU2008-A-06991; HS10.13-1WE5P-0330
Gallart, F.; Latron, J.; Llorens, P.; Butturini, A
Comparing different methods to assess baseflow contribu-
tion to streamflow in a small mountain Mediterranean basin
(Vallecebre, Eastern Pyrenees).

A0331; EGU2008-A-08162; HS10.13-1WE5P-0331
Wrede, S.; Pfister, L.; Krein, A.; Juilleret, J.; Bogaard, T.A.;
Uhlenbrook, S.
Investigation of runoff generation processes at the headwater
scale: a multidisciplinary comparative approach

A0332; EGU2008-A-09258; HS10.13-1WE5P-0332
Molénat, J.; **Gascuel-Oudoux, C.**; Aquilina, L.; Martin, C.;
Ayraud, V.; Ruiz, L.; Labasque, T.; Faucheux, M.; Davy, P.;
Mérot, P.
Comparison of three approaches to estimate residence
and transit times in headwater catchments (Environmental
Research Observatory AgrHyS, France)

A0333; EGU2008-A-09290; HS10.13-1WE5P-0333
Seeling, S.; Meyer, B.; Bierl, R.
An experimental catchment setup to investigate opportuni-
ties to strength multifunctionality of small urban rivers – an
interdisciplinary approach

A0334; EGU2008-A-10550; HS10.13-1WE5P-0334
Carriero, D.; Onorati, B.; Fiorentino, M.
Study of the hydrological behaviour of an experimental basin

A0335; EGU2008-A-11627; HS10.13-1WE5P-0335
Kulhavy, Z.; Tlapakova, L.; Dolezal, F.
Integrated monitoring, real-time modelling and forecasting
of hydrological processes in small agricultural and forest
catchments

HS11.1 Remote sensing retrieval techniques and data assimilation

Convener: Verhoest, N.
Co-Convener(s): Tedesco, M., Wood, E.
Lecture Room 33
Chairperson: N.N.

15:30–15:45; EGU2008-A-00651; HS11.1-1WE4O-001
Galleguillos, M.; Jacob, F.; Prevot, L.; Lagacherie, P.
Estimating grapevine hydric status within heterogeneous Mediterranean vineyards from high spatial resolution optical remote sensing.

15:45–16:00; EGU2008-A-10959; HS11.1-1WE4O-002
Braun, M.; Mauser, W.
Segmentation of moderate resolution reflectances using high resolution land cover information and a priori knowledge on reflectance properties

16:00–16:15; EGU2008-A-07698; HS11.1-1WE4O-003
Marzahn, P.; Ludwig, R.
Derivation of soil surface roughness dynamics from multi temporal and multi parametric airborne PolSAR data (solicited)

16:15–16:30; EGU2008-A-09401; HS11.1-1WE4O-004
van der Tol, C.; Timmermans, J.; van der Tol, S.; Su, Z.; Timmermans, W.
A Bayesian approach to improve remote sensing of sensible and latent heat fluxes

16:30–16:45; EGU2008-A-03479; HS11.1-1WE4O-005
Holmes, T.; **De Jeu, R.;** Parinussa, R.; Walker, J.
Evaluation of Satellite derived Land Surface Temperatures over the NAFE Research Sites.

16:45–17:00; EGU2008-A-09078; HS11.1-1WE4O-006
Gafurov, A.; Bárdossy, A
Water balance modeling using remote sensing data

17:00–17:15; EGU2008-A-07002; HS11.1-1WE4O-007
Werth, S.; Güntner, A.; Petrovic, S.; Schmidt, R.
Multi-objective calibration of a global hydrological model with GRACE and river discharge data

17:15–17:30; EGU2008-A-04598; HS11.1-1WE4O-008
Kpemlie, E.; Courault, D.; Buis, S.; Olioso, A.; Bsaibes, A.
Assimilation of remote sensing data into a coupled land surface - boundary layer model for mapping evapotranspiration and microclimate

17:30 END OF SESSION

Thursday

IS24 - HS2.4/NP3.10 Precipitation: from measurement to modelling and application in catchment hydrology (co-organised by HS & NP, co-listed in AS)

Convener: Cârsteanu, A.
Co-Convener(s): Anagnostou, E., Uijlenhoet, R., Onof, C., Srikanthan, S., Burlando, P., Pegram, G., Berne, A., Troch, P., Krajewski, W., Levizzani, V.
Lecture Room 29
Chairperson: ANAGNOSTOU, E.

8:30–8:45; EGU2008-A-02522; IS24 - HS2.4/NP3.10-1TH1O-001
Alpert, P.; **Rayitsfeld, A**
Rainfall analysis using cellular networking measurements

8:45–9:00; EGU2008-A-03030; IS24 - HS2.4/NP3.10-1TH1O-002
Laviola, S.; **Levizzani, V.**
Rain rate retrieval using the 183-WSL algorithm

9:00–9:15; EGU2008-A-07717; IS24 - HS2.4/NP3.10-1TH1O-003
Schüttemeyer, D.; **Grasselt, R.;** Simmer, C.; Warrach-Sagi, K.; Meetschen, D.
Towards a radar-based operational flood forecast system for river catchments in Germany

9:15–9:30; EGU2008-A-09702; IS24 - HS2.4/NP3.10-1TH1O-004
Heistermann, M.; Kneis, D.; Bronstert, A.
Evaluation of radar-based rainfall estimation by cross validation and runoff simulation

9:30–9:45; EGU2008-A-02237; IS24 - HS2.4/NP3.10-1TH1O-005
Zauli, F.; Biron, D.; Melfi, D.
The precipitation products chain for the EUMETSAT Hydrological Satellite Application Facility

9:45–10:00; EGU2008-A-10466; IS24 - HS2.4/NP3.10-1TH1O-006
Nikolopoulos, E.I.; **Anagnostou, E.N.;** Gebremichael, M.; Borge, M.
The Use of Remotely Sensed Rainfall to Predict Floods in Mountainous Basins

10:00 COFFEE BREAK

Chairperson: KOUTSOYIANNIS, D.

10:30–10:45; EGU2008-A-08767; IS24 - HS2.4/NP3.10-1TH2O-001
Lovejoy, S.; Schertzer, D.; Allaire, V.
Using cascade models to understand TRMM space-time satellite precipitation reflectivities from 20000 to 4km, from days to years

10:45–11:00; EGU2008-A-00011; IS24 - HS2.4/NP3.10-1TH2O-002
Little, M. A.; McSharry, P. E.; Taylor, J. W.
Parsimonious Modeling of UK Daily Rainfall for Density Forecasting

11:00–11:15; EGU2008-A-06771; IS24 - HS2.4/NP3.10-1TH2O-003
Kigobe, M.; McIntyre, N.; Wheeler, H.S.
Use of Generalised Linear Models (GLMs) to analyse the Spatial and Temporal Precipitation patterns in Kyoga basin within the Upper Nile

11:15–11:30; EGU2008-A-03613; IS24 - HS2.4/NP3.10-1TH2O-004
Haberlandt, U.; Ebner von Eschenbach, A.-D.; Buchwald, I.
A hybrid hourly Rainfall Model for derived Flood Frequency Analysis

11:30–11:45; EGU2008-A-04010; IS24 - HS2.4/NP3.10-1TH2O-005
Bardossy, A.; Pegram, G
A copula based multisite model for daily precipitation simulation

11:45–12:00; EGU2008-A-10084; IS24 - HS2.4/NP3.10-1TH2O-006
Onof, C.; Cowpertwait, P.; Isham, V
Progress in single-site Poisson-cluster modelling of rainfall

12:00 LUNCH BREAK

Chairperson: UIJLENHOET, R.

13:30–13:45; EGU2008-A-03807; IS24 - HS2.4/NP3.10-1TH3O-001

Fiener, P.

Farm-scale spatio-temporal variability of rainfall characteristics – do we use the right inputs to develop and test erosion models?

13:45–14:00; EGU2008-A-04734; IS24 - HS2.4/NP3.10-1TH3O-002

Lyon, S.; Volkmann, T.; Hazenberg, P.; Yatheendradas, S.; Schaffner, M.; Pytlak, E.; Unkrich, C.; Goodrich, D.; Troch, P.

Combining radar and rain gauges to capture the space-time variability of monsoon rainfall during an extreme flood event

14:00–14:15; EGU2008-A-05836; IS24 - HS2.4/NP3.10-1TH3O-003

Hugenschmidt, C.; Ingwersen, J.; Sukvanachaiikul, Y.; Uhlenbrook, S.; Streck, T.

Analyzing rainfall-runoff characteristics in an upland river: How to predict transport of agrochemicals in stream water

14:15–14:30; EGU2008-A-00721; IS24 - HS2.4/NP3.10-1TH3O-004

Westerberg, I.; Walther, A.; Guerrero, J-L.; Coello, Z.A.; Halldin, S.; Xu, C-Y.; Chen, D.; Lundin, L-C.

Spatial and temporal precipitation variability in Honduras - data-quality assessment, spatial interpolation and dataset creation

14:30–14:45; EGU2008-A-02438; IS24 - HS2.4/NP3.10-1TH3O-005

Nicotina, L.; Alessi Celegon, E.; Rinaldo, A.; Marani, M.
The impact of rainfall spatial variability on the hydrologic response

14:45–15:00; EGU2008-A-00348; IS24 - HS2.4/NP3.10-1TH3O-006

Pechlivanidis, I.; McIntyre, N.; Wheeler, H.; Moore, R.
Intercomparison of lumped versus distributed hydrological model on the Upper Lee catchment

15:00 END OF SESSION

IS24 - HS2.4/NP3.10 Precipitation: from measurement to modelling and application in catchment hydrology (co-organised by HS & NP, co-listed in AS) – Posters

Convener: Cârsteanu, A.

Co-Convener(s): Anagnostou, E., Uijlenhoet, R., Onof, C., Srikanthan, S., Burlando, P., Pegram, G., Berne, A., Troch, P., Krajewski, W., Levizzani, V.

Display Time: Thursday, 08:00–19:30

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

Poster Area Hall A

Chairperson: CARSTEANU, A.

A0221; EGU2008-A-00506; IS24 - HS2.4/NP3.10-1TH5P-0221

a. Gamboa, a.G.; f. Gamboa, f. G.; d. Martinez, d. M.; c. Perez, c. P.; s. Novo, s. N.

New scheme result of adjustment the radar rainfall estimation in Cuba

A0222; EGU2008-A-01926; IS24 - HS2.4/NP3.10-1TH5P-0222

Chebbi, A.; Da Cunha, M.; Kebaili Bargaoui, Z.

Optimal pluviograph network design using geostatistics and Simulated Annealing

A0223; EGU2008-A-03354; IS24 - HS2.4/NP3.10-1TH5P-0223

Njuakom, F.; Achu, W.; Magha, N.; Kamdem, R.

The use of rights based advocacy and community based volunteers' approaches in managing and resolving water conflicts in Cameroon; 'the case of the North West Province'

A0224; EGU2008-A-06020; IS24 - HS2.4/NP3.10-1TH5P-0224

Hazenberg, P.; Uijlenhoet, R.; Leijnse, H.; Delobbe, L.

Analyzing the spatial and temporal properties of precipitation above the Ourthe catchment and its influence on the flood response

A0225; EGU2008-A-08004; IS24 - HS2.4/NP3.10-1TH5P-0225

Schulz, M.S.; Dr. Berger, F.B.

Determination of rainfall intensities and patterns from the MSG satellite

A0226; EGU2008-A-08522; IS24 - HS2.4/NP3.10-1TH5P-0226

Vermeer, P.A.; Huber, M. ; Möllmann, A.

Case study about the reliability analysis of dike stability

A0227; EGU2008-A-09943; IS24 - HS2.4/NP3.10-1TH5P-0227

Brommundt, J.; Bárdossy, A.

Application of correlation calculated from radar data in a time series generator for precipitation on the ground

A0228; EGU2008-A-10514; IS24 - HS2.4/NP3.10-1TH5P-0228

Diederich, M.; Simmer, C.

A locally adapted multi-sensor precipitation estimate derived from satellite and ground observations for Benin

A0229; EGU2008-A-00859; IS24 - HS2.4/NP3.10-1TH5P-0229

Bussi, G.; Grossi, G.

A stochastic approach to link predicted precipitation fields at different spatial scales

A0230; EGU2008-A-01648; IS24 - HS2.4/NP3.10-1TH5P-0230

Grieser, J.; Jewson, S.

The RMS Hurricane-Rain Model

A0231; EGU2008-A-05498; IS24 - HS2.4/NP3.10-1TH5P-0231

Barbulescu, A.

Modeling the evolution of precipitations in Dobrogea

A0232; EGU2008-A-01915; IS24 - HS2.4/NP3.10-1TH5P-0232

Vandenberghe, S.; Verhoest, N.; De Baets, B.

Copula-based frequency analysis of 105-year 10-minute precipitation data observed at Uccle, Belgium

A0233; EGU2008-A-11338; IS24 - HS2.4/NP3.10-1TH5P-0233

Fiser, O.; Kvicera, V.

Rain rate generator to study rain data processing techniques

A0234; EGU2008-A-11531; IS24 - HS2.4/NP3.10-1TH5P-0234

Guerra-Cobian, V.H.; Ba, K.M.; Diaz-Delgado, C.; Quentin, E.; Carsteanu, A.A.

Conceptual hydrological modeling: evaluating discretization effects from the parameters of a stochastic model

A0235; EGU2008-A-00702; IS24 - HS2.4/NP3.10-1TH5P-0235

Papalexiou, S.M.; Koutsoyiannis, D.

Ombrian curves in a maximum entropy framework

A0236; EGU2008-A-03293; IS24 - HS2.4/NP3.10-1TH5P-0236
Ebner von Eschenbach, A.-D.; Buchwald, I.; Haberlandt, U.
 Modelling of hourly Point Rainfall using an Alternating Renewal Model with 2-Copulas for derived Flood Frequency Analysis

A0237; EGU2008-A-07491; IS24 - HS2.4/NP3.10-1TH5P-0237
Aslan Belli, AB; Hans-Reinhard Verworn, HRV; Henrieke Pampel, HP; Uwe Haberlandt, UH
 Disaggregation of continuous Rainfall Time Series for Applications in Urban Hydrology – a Case Study

A0238; EGU2008-A-09185; IS24 - HS2.4/NP3.10-1TH5P-0238
Hundeche, Y.; Pahlow, M.; Schumann, A.
 Modelling of daily rainfall for flood risk assessment using a mixed distribution

A0239; EGU2008-A-10751; IS24 - HS2.4/NP3.10-1TH5P-0239
Koutsoyiannis, D.
 Long tails of marginal distribution and autocorrelation function of rainfall produced by the maximum entropy principle

A0240; EGU2008-A-11799; IS24 - HS2.4/NP3.10-1TH5P-0240
Campo, M.A.; Cirauqui, J.C.; López, J.J.
 Application of a stochastic rainfall model for disaggregation

A0241; EGU2008-A-02843; IS24 - HS2.4/NP3.10-1TH5P-0241
Verworn, A.; Haberlandt, U.
 Effect of different Approaches for Estimating Semi-variograms on the spatial Interpolation Performance of Precipitation

A0242; EGU2008-A-03390; IS24 - HS2.4/NP3.10-1TH5P-0242
López-Vicente, M.; Navas, A.
 Monthly variations in rainfall and time to ponding in Mediterranean soils: implications on effective runoff generation

A0243; EGU2008-A-05610; IS24 - HS2.4/NP3.10-1TH5P-0243
Evin, G.; Favre, A.-C.
 A non-stationary Neyman-Scott model for rainfall (cancelled)

A0244; EGU2008-A-05766; IS24 - HS2.4/NP3.10-1TH5P-0244
Dunkerley, D.L.
 Rainfall events: importance of the criteria used for their identification in pluviograph records.

A0245; EGU2008-A-08142; IS24 - HS2.4/NP3.10-1TH5P-0245
Mouri, G.; Kanae, S.; Oki, T.
 Long-term change of rainfall-runoff response

A0246; EGU2008-A-09043; IS24 - HS2.4/NP3.10-1TH5P-0246
Anquetin, S.; Manus, C.; Braud, I.; Vandervaere, J.P.; Viallet, P.
 Hydrological response with respect to soil characteristics in a context of Mediterranean extreme events

A0247; EGU2008-A-10386; IS24 - HS2.4/NP3.10-1TH5P-0247
Nord, G.; Cerdan, O.; Bonté, P.; Souchère, V.
 Temporal dynamics of runoff and erosion risk in a cultivated catchment of the loess belt: temporal patterns of rainfall and evolution of soil surface state

A0248; EGU2008-A-02026; IS24 - HS2.4/NP3.10-1TH5P-0248
Nieto, R.; **Trigo, R.;** Gallego, D.; Ribera, P.; Gimeno, L.
 Dynamic identification of moisture sources in the Orinoco Basin in Equatorial South America

A0249; EGU2008-A-11207; IS24 - HS2.4/NP3.10-1TH5P-0249
Grossi, G.; Balistocchi, M.
 Rainfall input spatial characterisation for hydrologic simulation

HS3.1 Predictive probability, uncertainty and data assimilation in hydrological forecasting

Convener: Moore, R.
 Co-Convener(s): Todini, E., Loukas, A., Madsen, H., Thielen-del Pozo, J.
 Lecture Room 32
 Chairperson: MOORE, R.

8:30–8:45; EGU2008-A-08529; HS3.1-1TH1O-001
Vrugt, J.A. ; Ter Braak, C.J.F; Clark, M.P.; Hyman, J.M.; Robinson, B.A.
 Bayesian Treatment of Forcing Error Using Adaptive Markov Chain Monte Carlo Sampling

8:45–9:00; EGU2008-A-04215; HS3.1-1TH1O-002
Mediero, L.; **Garrote, L.;** Molina, M.
 Uncertainty quantification by a probabilistic hydrological forecast

9:00–9:15; EGU2008-A-06389; HS3.1-1TH1O-003
Reszler, Ch.; Komma, J.; Blöschl, G.; Gutknecht, D.
 Plausibility check of spatially distributed flood forecasting models by dominant processes and event types

9:15–9:30; EGU2008-A-11553; HS3.1-1TH1O-004
Moradkhani, H. ; Hsu, K.; Sorooshian, S.
 How to Improve the Hydrologic Predictability: From Bayesian Model Averaging to Sequential Bayesian Model Combination

9:30–9:45; EGU2008-A-07464; HS3.1-1TH1O-005
Shrestha, D.L.; **Solomatine, D.**
 Novel method to estimate predictive uncertainty of flow forecasting

9:45–10:00; EGU2008-A-06635; HS3.1-1TH1O-006
Leedal, D T; **Beven, K J;** Young, P C; Romanowicz, R
 Data assimilation and adaptive real-time forecasting of water levels in the river Eden catchment, UK.

10:00 COFFEE BREAK

Chairperson: THIELEN-DEL POZO, J.

10:30–10:45; EGU2008-A-06110; HS3.1-1TH2O-001
Madsen, H.; Sørensen, J.V.T
 A general filtering framework for data assimilation in large scale forecasting systems

10:45–11:00; EGU2008-A-12270; HS3.1-1TH2O-002
Weerts, A.H.
 Ensemble Kalman Filtering for improving operational flood forecasting with a 1D-hydraulic model: a case study for the River Rhine

11:00–11:15; EGU2008-A-04366; HS3.1-1TH2O-003
Hendricks Franssen, H.J.; Kuhlman, U.; Kaiser, H.P.; Stauffer, F.; Kinzelbach, W.
 The Ensemble Kalman Filter for real-time groundwater Flow Modeling of the upper Limmat aquifer in Zurich (Switzerland)

11:15–11:30; EGU2008-A-05726; HS3.1-1TH2O-004
Bessière, H.; Dartus, D.
A variational data assimilation technique for flash flood forecasting

11:30–11:45; EGU2008-A-10119; HS3.1-1TH2O-005
Cole, S.J.; Moore, R.J.
Initialisation and data assimilation of a distributed flood forecasting model

11:45–12:00; EGU2008-A-10852; HS3.1-1TH2O-006
Schaake, J
A post-processor for hydrologic ensemble forecasts

12:00 END OF SESSION

HS3.1 Predictive probability, uncertainty and data assimilation in hydrological forecasting – Posters

Convener: Moore, R.
Co-Convener(s): Todini, E., Loukas, A., Madsen, H., Thielen-del Pozo, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: LOUKAS, A.

A0250; EGU2008-A-11546; HS3.1-1TH5P-0250
Ebtehaj, M.; **Moradkhani, H.**
An alternative scheme in generating the forcing data ensemble for improved ensemble streamflow prediction

A0251; EGU2008-A-10385; HS3.1-1TH5P-0251
Ebert, C.; Bárdossy, A.; Bliefernicht, J.
A heteroscedastic error model and its operational application for flood forecasting

A0252; EGU2008-A-04131; HS3.1-1TH5P-0252
Ceppi, A.; Ravazzani, G.; Mancini, M.
Hydro-meteorological chain for flood forecasting in the alpine region: a multi-model comparison

A0253; EGU2008-A-08468; HS3.1-1TH5P-0253
Zhang, X.; **Hörmann, G. ;** Fohrer, N.
Parameter calibration and uncertainty estimation of a simple rainfall-runoff model in two case studies

A0254; EGU2008-A-07817; HS3.1-1TH5P-0254
Zhang, X.; **Hörmann, G.;** Fohrer, N.
Structural uncertainty assessment in a discharge simulation model ensemble

A0255; EGU2008-A-04369; HS3.1-1TH5P-0255
Faybishenko, B.; Neuman, S.P.
Quantifying epistemic and parameter uncertainties in predictions of evaporation and net infiltration, using maximum likelihood Bayesian model averaging

A0256; EGU2008-A-08613; HS3.1-1TH5P-0256
Vandenbergh, V.; Huygens, M.; Vanneuville, W.
Influence of measurement uncertainties on results of hydrological models

A0257; EGU2008-A-03053; HS3.1-1TH5P-0257
Pande, S.; McKee, M.; Bastidas, L.; Kemblowski, M.; Walker, W.
Robust hydrologic prediction based on complexity

A0258; EGU2008-A-05578; HS3.1-1TH5P-0258
Reichert, P
Dynamic Emulators as Tools for Improving Calibration and Uncertainty Analysis in Hydrology

A0259; EGU2008-A-09933; HS3.1-1TH5P-0259
Teza, G.; Scotton, P.; Genevois, R.; Galgaro, A.
Short term river flood forecast by artificial neural networks and numerical modelling

A0260; EGU2008-A-03151; HS3.1-1TH5P-0260
Thirel, G.; Martin, E.; Mahfouf, J.-F.; Bouriquet, B.; Massart, S.; Noilhan, J.; Habets, F.
A data assimilation system to improve streamflow predictions

A0261; EGU2008-A-07552; HS3.1-1TH5P-0261
Ramos, M-H.; Andréassian, V.; Lerat, J.; Perrin, C.; Tangara, M.
Sensitivity analysis of data assimilation strategies on flow prediction using a conceptual rainfall-runoff model for hydrological forecasting

A0262; EGU2008-A-01868; HS3.1-1TH5P-0262
Moradkhani, H.; Ebtehaj, M.
Advances in Data Assimilation and Ensemble Hydrologic Forecasting: From Ensemble Kalman Filter to Particle Filter

A0263; EGU2008-A-04554; HS3.1-1TH5P-0263
Ma, H.; Yang, D.; Xu, J.
A Combination Method for Improving the Flood Predictability in the Three Gorges Region, China

A0264; EGU2008-A-10919; HS3.1-1TH5P-0264
Boukharouba, K.; **Kettab, A.**
Stream flow data predictions by Kalman filtering approach - a case study-

A0265; EGU2008-A-01206; HS3.1-1TH5P-0265
Sinclair, S.; Pegram, G.; Viscel, T.
Computing spatially distributed reference evapotranspiration using forecast fields from a meteorological model

A0266; EGU2008-A-05667; HS3.1-1TH5P-0266
Treebushny, D.
Data Assimilation in the guaranteed uncertainty estimation. Affine Arithmetics and Kalman-like filter

HS3.3 Medium and long-term hydrological forecasting for water management and water allocation

Convener: Toth, E.
Co-Convener(s): Aronica, G., Butts, M., Loukas, A.
Lecture Room 32
Chairperson: TOTH, E.

13:30–13:45; EGU2008-A-00239; HS3.3-1TH3O-001
Gelati, E.; Madsen, H.; Rosbjerg, D.
Hidden Markov models for non-stationary runoff modelling conditioned on El Niño information

13:45–14:00; EGU2008-A-07863; HS3.3-1TH3O-002
Di Mauro, G.; **Bonaccorso, B.;** Cancelliere, A.; Rossi, G.
Potential of North Atlantic Oscillation Index to forecast drought in Sicily

14:00–14:15; EGU2008-A-08458; HS3.3-1TH3O-003
Vasiliades, L.; **Loukas, A.**
Meteorological drought forecasting models

14:15–14:30; EGU2008-A-02103; HS3.3-1TH3O-004
Danhelka, J.
Implementing medium to long range hydrological forecasting in the Czech Republic

14:30–14:45; EGU2008-A-06885; HS3.3-1TH3O-005
Panagoulia, D.
Soil moisture forecasting via two different hydrological models

14:45–15:00; EGU2008-A-10475; HS3.3-1TH3O-006
Ngo, L. A.; Barontini, S.; Buzzi, A.; Drofa, O.; Thuy, L. T.; Vu, M. C.; Hoang, T. T.; Ranzi, R.
A hydrometeorological flood forecast system for the Red River (China – Vietnam)

15:00 END OF SESSION

HS3.3 Medium and long-term hydrological forecasting for water management and water allocation – Posters

Convener: Toth, E.
Co-Convener(s): Aronica, G.; Butts, M.; Loukas, A.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0267; EGU2008-A-08069; HS3.3-1TH5P-0267
Niemyer, S.; Laguardia, G.; Kurnik, B.; Rossi, S.
On the predictability of droughts over Europe by means of the Standardized Precipitation Index and the ECMWF monthly forecasts

A0268; EGU2008-A-02265; HS3.3-1TH5P-0268
Switanek, M.; **Troch, P.A.;** Castro, C.
Quantifying the hydrologic effect of climate variability in the lower Colorado

A0269; EGU2008-A-09501; HS3.3-1TH5P-0269
Hattermann, F.F.; Conradt, T.; Kaltofen, M.; Koch, H.; Krysanova, V.; Wechsung, F.
Quantification of climate change impacts on water resources in Central Europe: changes in flow regimes and uncertainty

A0270; EGU2008-A-11772; HS3.3-1TH5P-0270
Lavers, D.A.; **Hannah, D.M.;** Prudhomme, C.; Troccoli, A.
Seasonal river flow forecasting using multi-model ensemble climate data

A0271; EGU2008-A-03060; HS3.3-1TH5P-0271
Pozzoni, M.; Salvadé, G.
An hydrological model to optimize hydropower production

A0272; EGU2008-A-07304; HS3.3-1TH5P-0272
Aronica, G.T.; Arena, C.; Franza, F.
Predicting daily streamflow using a parsimonious rainfall-runoff model with rainfall forecasts finalised to water resources allocation in a Sicilian catchment

A0273; EGU2008-A-05501; HS3.3-1TH5P-0273
Komorníková, M.; **Szolgay, J.;** Svetlíková, D.; Szökeová, D.
Combined deterministic – stochastic forecasting of monthly river flows

A0274; EGU2008-A-07984; HS3.3-1TH5P-0274
Faticchi, S.; Caporali, E.
A comparison between a physical based and conceptual snowpack modeling to improve hydrological simulations

A0275; EGU2008-A-06943; HS3.3-1TH5P-0275
Panagoulia, D.
Snow melt forecasting from incomplete meteorological data

A0276; EGU2008-A-11897; HS3.3-1TH5P-0276
Win Zin, Win
Runoff simulation using simple conceptual HBV model in chindwin river basin

A0277; EGU2008-A-00182; HS3.3-1TH5P-0277
Kebede Gurmessa, T.
A principal components regression approach to model the spatio-temporal bed evolution of reservoirs

HS3.4 Hydrological Forecasting Open Session. Local, regional and national hydrological forecasting systems. Real-world case studies

Convener: Balint, G.
Co-Convener(s): Blöschl, G.; Reggiani, P.; Szolgay, J.
Lecture Room 32
Chairperson: BÁLINT, G.

15:30–15:45; EGU2008-A-06423; HS3.4-1TH4O-001
Reszler, Ch.; Blöschl, G.; Komma, J.
Hydrological flood forecasts for the Kamp catchment - experiences from the 2006 and 2007 events

15:45–16:00; EGU2008-A-02037; HS3.4-1TH4O-002
Danhelka, J.
Hydrometeorological forecasting and warning system in the Czech Republic

16:00–16:15; EGU2008-A-02978; HS3.4-1TH4O-003
Stravs, L.; Vidmar, A.; Brilly, M.
System for seven-day low flow forecast developed by the recession limb of the hydrograph

16:15–16:30; EGU2008-A-09918; HS3.4-1TH4O-004
Montanari, A.; **Grossi, G.**
A statistical tool to assess uncertainty in hydrological forecasting

16:30–16:45; EGU2008-A-05512; HS3.4-1TH4O-005
Szolgay, J.; Danáčová, M.
Multilinear flood routing model for flood forecasting on alluvial rivers

16:45–17:00; EGU2008-A-11286; HS3.4-1TH4O-006
Akanda, A
Role of seasonal streamflow forecasting in the Ganges-Brahmaputra-Meghna basin

17:00 END OF SESSION

HS3.4 Hydrological Forecasting Open Session. Local, regional and national hydrological forecasting systems. Real-world case studies – Posters

Convener: Balint, G.
Co-Convener(s): Blöschl, G.; Reggiani, P.; Szolgay, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: BÁLINT, G.

A0278; EGU2008-A-05951; HS3.4-1TH5P-0278
Hlavcova, K.; Szolgay, J.; Kohnova, S.; Kubes, R.
Assessing performance of flood forecasting system based on medium range numerical weather forecasts and rainfall-runoff modelling in Slovakia

A0279; EGU2008-A-12107; HS3.4-1TH5P-0279
Leskova, D.; Babiakova, G.; **Roncak, P.;** Wendlova, V.; Benko, M.
Flood warning and forecasting system of the Slovak Republic

A0280; EGU2008-A-12350; HS3.4-1TH5P-0280
Gauzer, B.; **Csik, A.;** Bartha, P.; Konecsny, K.; Lucza, Z.; Balint, G.
Development of the upper Tisza flood forecasting system

A0281; EGU2008-A-12233; HS3.4-1TH5P-0281
Komma, J. ; Blöschl, G.; Reszler, Ch.
Design of the Kamp flood forecasting model

A0282; EGU2008-A-07286; HS3.4-1TH5P-0282
Fordinal, I.; Komma, J.; Schindler, H.; Gutknecht, D.
Coupling an event based and continuous rainfall runoff model for rapid flood warning

A0283; EGU2008-A-04602; HS3.4-1TH5P-0283
Gartsman, B.I.; Tegai, N.D.; Blöschl, G.; Parajka, J.
Comparative testing of rainfall-runoff models in different climate and landscape conditions of Austria and Russia

A0284; EGU2008-A-02318; HS3.4-1TH5P-0284
McMillan, H. K.; Clark, M. P.; Ibbitt, R. P.
Calibration strategies for distributed hydrological models using qualitative knowledge of spatially variable process characteristics.

A0285; EGU2008-A-04185; HS3.4-1TH5P-0285
Toll, D.; Cosgrove, B.; Houser, P.; Dong, J.; de Goncalves, L.
Planned multi-model ensemble hydrologic forecasts in support of NOAA NWSRFS

A0286; EGU2008-A-05833; HS3.4-1TH5P-0286
Chen, N.C.; Lee, K.T.; Gartsman, B.I.; **Bugaets, A.N.**
Applications of kinematic-wave based geomorphologic IUH model for rain floods prediction in Taiwan and Russia

A0287; EGU2008-A-07038; HS3.4-1TH5P-0287
Villeta, M.; Valencia, J.L.; Vicente, M.L.
Dynamic regression to determine length and intensity of the effect of flow increase in salts concentration in Ebro river (Spain).

A0288; EGU2008-A-07697; HS3.4-1TH5P-0288
Maca, P.; Redinova, J.; Hanel, M.; Horacek, S.; Kulhavy, Z.; Hermanovsky, M.; Havlicek, V.; Pavlasek, J.
Application of chosen black box models for flood forecasting purposes in the small basins

A0289; EGU2008-A-11356; HS3.4-1TH5P-0289
Versace, P.; Biondi, D.
The real-time warning system for hydrogeological risk mitigation of the Calabria region

A0290; EGU2008-A-04892; HS3.4-1TH5P-0290
Lihua, Tang; Xianbi, Lv; Sicong, Zhang; Chuang, Chen; Yuefen, Zhao; Junmei, Liu
An urban flood model based on two-layer water flow and its application

A0291; EGU2008-A-11596; HS3.4-1TH5P-0291
Wang, Y.-C.; Chen, S.-T.; Li, M.-X.; Yu, P.-S.
Updating real-time flood forecasts of a grid-based distributed rainfall-runoff model

A0292; EGU2008-A-12352; HS3.4-1TH5P-0292
Stanev, K.
Upper Mesta river basin runoff modeling (solicited)

HS8.5 Investigating and understanding soil-plant interactions from micro to plot scale (co-listed in SSS)

Convener: Van der Ploeg, M.
Co-Convener(s): Javaux, M., Ursino, N., Vanderborght, J.
Lecture Room 33
Chairperson: JAVAUX, M.

13:30–13:45; EGU2008-A-02872; HS8.5-1TH3O-001
Blum, JD; Hamburg, SP; Yanai, RD; Arthur, MA
Use of foliar Ca/Sr discrimination and $^{87}\text{Sr}/^{86}\text{Sr}$ ratios to determine soil Ca sources to sugar maple and American beech foliage in a northern hardwood forest

13:45–14:00; EGU2008-A-07592; HS8.5-1TH3O-002
Rothfuss, Y.; Bariac, T.; Braud, I.; Durand, J.L.; Biron, P.; Richard, P.; Canale, L.
Linking root extraction depths and plant contribution to evapotranspiration using isotopes of water in controlled conditions

14:00–14:15; EGU2008-A-05460; HS8.5-1TH3O-003
van der Ploeg, MJ; Gooren, HPA; Bakker, G; de Rooij, GH
Investigating root water uptake in dry soil by monitoring the soil water potential with polymer tensiometers

14:15–14:30; EGU2008-A-10107; HS8.5-1TH3O-004
Carminati, A.; Oswald, S.; Esser, H.; Vetterlein, D.; Vogel, H.-J.; Vontobel, P.
Root uptake and water redistribution in soils: neutron radiography and interpretation

14:30–14:45; EGU2008-A-09980; HS8.5-1TH3O-005
Caldwell, T.; Young, M.; Zhu, J.; McDonald, E.
Gradation of Soil Hydraulic Properties from Canopy to Interspace on a Mojave Desert Soil Chronosequence

14:45–15:00; EGU2008-A-06195; HS8.5-1TH3O-006
Montaldo, N.; Vacca, M.; Cortis, C.; Albertson, J. D.
The role of Vegetation Dynamics on the Soil Water Balance of a Water-limited Mediterranean Ecosystem on Sardinia

15:00 END OF SESSION

HS8.5 Investigating and understanding soil-plant interactions from micro to plot scale (co-listed in SSS) – Posters

Convener: Van der Ploeg, M.
Co-Convener(s): Javaux, M., Ursino, N., Vanderborght, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: VAN DER PLOEG, M.

A0293; EGU2008-A-01166; HS8.5-1TH5P-0293
Márton, L.
Crop Mn²⁺ Demand at Juvenile Phenophase of Growth

A0294; EGU2008-A-01195; HS8.5-1TH5P-0294
Márton, L.
Phytoremediation: Fertilization impact on heavy metal translocation from soil to triticales shoot (x Triticoscale W.)

A0295; EGU2008-A-01199; HS8.5-1TH5P-0295
Márton, L.
PHYTOREMEDIATION: NPKCaMg NUTRITION IMPACT ON Al, Ba, Pb, Sr, Ni, and Cd TRANSLOCATION FROM SOIL TO TRITICALE SEED (x Triticoscale W.)

A0296; EGU2008-A-02394; HS8.5-1TH5P-0296
Xu, X.; Stange, C.L.; Richter, A.; Wanek, W.; Kuzyakov, Y.
Light affects competition for inorganic and organic nitrogen between maize and rhizosphere microorganisms

A0297; EGU2008-A-07152; HS8.5-1TH5P-0297
Sturm, M.; Pintar, M.; Zupanc, V.; Kacjan Marsic, N.; Korpar, P.; Urbanc, J.; Lojen, S.
Nitrogen movement in plant-soil-groundwater system in agricultural production

A0298; EGU2008-A-01624; HS8.5-1TH5P-0298
Mirás-Avalos, J.M.; Dunfield, K.E.; Antunes, P.M.; Koch, A.; Khosla, K.; Sande-Fouz, P.
Effects of soil disturbance on arbuscular mycorrhizal fungal communities of soil and plant roots

A0299; EGU2008-A-01677; HS8.5-1TH5P-0299
Eshel, G; Levy, G.J.; Fine, P.; Mingelgrin, U.; Arad, B.; Singer, M.J.
 In-Situ Soil pH and pCO₂

A0300; EGU2008-A-04472; HS8.5-1TH5P-0300
Shan, Wei; Guo, Ying
 Water content changing in shallow soil cut-slope of highway in seasonal frozen regions

A0301; EGU2008-A-05854; HS8.5-1TH5P-0301
Scanlan, C.A.; Hinz, C.
 A conceptual model to quantify plant root induced changes in soil hydraulic conductivity and water retention

A0302; EGU2008-A-09858; HS8.5-1TH5P-0302
Zhu, J.; Caldwell, T.; Young, M.; McDonald, E.
 Implications of Under-Canopy and Interspace Soil Hydraulic Property Distributions in Large Scale Desert Ecosystems

A0303; EGU2008-A-10317; HS8.5-1TH5P-0303
Baudena, M.; Bevilacqua, I.; Canone, D.; Ferraris, S.; Prevati, M.; Provenzale, A.
 Soil moisture during midlatitude continental summers: an experimental and modeling analysis

A0304; EGU2008-A-04180; HS8.5-1TH5P-0304
Srayeddin, I.; Doussan, C.; Revil, A.
 Electrical resistivity tomography imaging: a way for assessing water uptake heterogeneity at the field scale

A0305; EGU2008-A-08398; HS8.5-1TH5P-0305
Moradi, A. B.; Oswald, S. E.; Massner, J. A.; Pruessmann, K. P.; Robinson, B. H.; Schulin, R.
 Dynamic of nickel in the rhizosphere of *Berkheya coddii* using magnetic resonance imaging

A0306; EGU2008-A-08843; HS8.5-1TH5P-0306
Pohlmeier, A.; Vergeldt, F.J.; Gerkema, E.; Vanderborght, J.; Javaux, M.; Vereecken, H.; van As, H.; Menzel, M.I.; van Dusschoten, D.
 Magnetic Resonance Imaging Methods for Monitoring Root Water Uptake and Architecture

A0307; EGU2008-A-09125; HS8.5-1TH5P-0307
Cobos, D.R.; Campbell, C.S; Campbell, G.S.
 Advances in Determining Soil Matric Potential Using an Engineered Porous Ceramic and Dielectric Permittivity

A0308; EGU2008-A-11689; HS8.5-1TH5P-0308
Lazzari, L.; Celano, G.; Amato, M.; al Hagrey, S.; Loperete, A.; Satriani, A.; Lapenna, V.
 Spatial variability of soil root zone properties using electrical imaging techniques in a peach orchard system

A0309; EGU2008-A-04214; HS8.5-1TH5P-0309
Himmelbauer, M. L.; Novák, V.; Majerová, J.
 Effects of different root morphological characteristics on root extraction functions and soil water dynamics for three crops

A0310; EGU2008-A-06829; HS8.5-1TH5P-0310
Schroeder, T.; Vanderborght, J.; Javaux, M.
 How to represent root water uptake below the soil voxel scale?

A0311; EGU2008-A-07806; HS8.5-1TH5P-0311
Szegedi, K.; Vetterlein, D.; Neue, H.-U.; Jahn, R.
 Application of the rhizosphere model RhizoMath for modelling the reactive transport of arsenic in the rhizosphere

A0312; EGU2008-A-10644; HS8.5-1TH5P-0312
Hildebrandt, A.; Attinger, S
 Influence of root length density on vertical water uptake profiles.

HS8.6 Large Lysimeter Studies and Water Budget Prediction of Ungauged Land Surface Elements (co-listed in SSS)

Convener: Durner, W.
 Co-Convener(s): Puetz, T., Fank, J.
 Lecture Room 33
 Chairperson: PUETZ

8:30–8:45; EGU2008-A-04959; HS8.6-1TH1O-001
Fank, J.

Monolithic field Lysimeter – a precise tool to close the gap between laboratory and field scaled investigations

8:45–9:00; EGU2008-A-00935; HS8.6-1TH1O-002
Schroll, R.; Grundmann, S.; Dörfler, U.
 Lysimeter Experiments to investigate the Fate of Chemicals in Soils and how to sufficiently interpret their Results?

9:00–9:15; EGU2008-A-03672; HS8.6-1TH1O-003
Stumpp, C.; Nützmann, G.; Maciejewski, S.; Maloszewski, P.
 A comparative modelling study of a dual tracer experiment in a large lysimeter under natural boundary conditions

9:15–9:30; EGU2008-A-06963; HS8.6-1TH1O-004
Bloem, E.; Hogervorst, F.A.N; de Rooij, G. H.
 Flux measurements during field and laboratory tracer experiments with a novel variable-suction multi-compartment sampler.

9:30–9:45; EGU2008-A-12047; HS8.6-1TH1O-005
Koestel, J.; Kasteel, R.; Javaux, M.; Kemna, A.; Binley, A.; Vereecken, H.
 Quantitative comparison of ERT and photographic images of a dye tracer in a large lysimeter

9:45–10:00; EGU2008-A-01984; HS8.6-1TH1O-006
Bänninger, D.; Bruch, I.; Wunderli, H.; Flühler, H.
 Water content profile retrieval by TDR measurements within lysimeters

10:00 COFFEE BREAK

Chairperson: BARDSLEY, E.

10:30–10:45; EGU2008-A-05936; HS8.6-1TH2O-001
Young, M.; Yu, Z.; Tyler, S.; Chief, K.; Knight, E.; Healey, J.; Zhu, J.; Menon, M.; Mon, J.
 Examining Arid Soil Processes in Nevada USA Using Weighing Lysimeters

10:45–11:00; EGU2008-A-00384; HS8.6-1TH2O-002
Longuevergne, L.; Boy, J.P.; Gascoin, S.; Rinaldi, S.; Fehrat, G.; Viville, D.; Florsch, N.; Hinderer, J.
 Monitoring and quantifying water storage variations thanks to ground gravimeters

11:00–11:15; EGU2008-A-01763; HS8.6-1TH2O-003
Bardsley, E
 Setting the scene for a new global hydrological initiative: Prediction of Ungauged Land Surface Elements (PULSE)

11:15–11:30; EGU2008-A-02252; HS8.6-1TH2O-004
Troch, P.A.
 Terrestrial Water Storage Dynamics and Hydrologic Prediction: The Colorado River Basin Test Case (solicited)

11:30–11:45; EGU2008-A-07119; HS8.6-1TH2O-005
Andersen, O. B.; Bauer-Gottwein, P. ; Smith, R.; Berry, P.; Krogh, P. E.
 Terrestrial Water Storage Monitoring from GRACE and Satellite Altimetry in the Okavango Delta (Botswana) (solicited)

11:45–12:00; EGU2008-A-09259; HS8.6-1TH2O-006
Hinderer, J.; de Linage, C.; Boy, J.-P.; Masson, F.; Gegout, P.; Seguis, L.; Favreau, G.; Genthon, P.
How to combine hydrology and geodesy to investigate water storage changes: the GHYRAF (Gravity and Hydrology in Africa) experiment?

12:00 END OF SESSION

HS8.6 Large Lysimeter Studies and Water Budget Prediction of Ungauged Land Surface Elements (co-listed in SSS) – Posters

Convener: Durner, W.
Co-Convener(s): Puetz, T., Fank, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: FANK, J.

A0313; EGU2008-A-08480; HS8.6-1TH5P-0313
Puetz, T.; Schillings, J.; Sievering, R.; Vereecken, H.
Impact on a soil monolith during lysimeter filling

A0314; EGU2008-A-09892; HS8.6-1TH5P-0314
Semenov, V.; Zeiliger, A.
Observation and analysis of microscale heterogeneity of infiltration and water flow in chernozem and black-chestnut soils

A0315; EGU2008-A-12010; HS8.6-1TH5P-0315
Durner, W.; Fank, J.
Testing fringe effects for bromide transport in high precision weighable field lysimeters

A0316; EGU2008-A-12304; HS8.6-1TH5P-0316
Klier, Ch.; Grundmann, S.; Gayler, S.; **Priesack, E.**
Environmental fate of the herbicide glyphosate: Monitoring and modelling using large-scale weighing lysimeters

A0317; EGU2008-A-05991; HS8.6-1TH5P-0317
Lennartz, B.; Bohne, K.; Lennartz, F.
On the equifinality of Van Genuchten parameter sets as obtained from a sand lysimeter under finger flow conditions

A0318; EGU2008-A-05810; HS8.6-1TH5P-0318
Almond, P.; Buchan, G.; **Carrick, S.**; Smith, N.
In-situ characterisation of soil hydraulic attributes for the individual layers of a multilayered soil column

A0319; EGU2008-A-09014; HS8.6-1TH5P-0319
Durner, W.; Jansen, U.; Iden, S.C.
Effective hydraulic behaviour of lysimeters with layered soils

A0320; EGU2008-A-12049; HS8.6-1TH5P-0320
Scharnagl, B.; **Durner, W.**; Iden, S.C.; Weihermüller, L.; Vereecken, H.
Transferability of hydraulic properties from lab measurements to a lysimeter

A0321; EGU2008-A-07419; HS8.6-1TH5P-0321
Hinz, C.J.; Struthers, I.; Sivapalan, M.
Water balance and growth relations of a pine stand in a large lysimeter in Eastern Germany

A0322; EGU2008-A-08433; HS8.6-1TH5P-0322
Nolz, R.; Cepuder, P.
Evapotranspiration and percolation of a lysimeter

A0323; EGU2008-A-08426; HS8.6-1TH5P-0323
Braèie-Železnik, B.; Zupanc, V.; Pintar, M.
Soil Water Balance for Lysimeter station Kleèe

A0324; EGU2008-A-12046; HS8.6-1TH5P-0324
Fank, J.
Comparison of calculated ET₀ to measured lysimeter grass ET

A0325; EGU2008-A-09726; HS8.6-1TH5P-0325
Hirschi, M.; Seneviratne, S. I.
Terrestrial water storage from basin-scale water-balance diagnostics and GRACE: an updated comparison

A0326; EGU2008-A-02714; HS8.6-1TH5P-0326
Baloutsos, G.; **Bourletsikas, A.**; Baltas, E.
Investigation of interception, throughfall and stemflow of maquis vegetation in eastern Mediterranean region

A0327; EGU2008-A-04902; HS8.6-1TH5P-0327
Yuan, Y.; Cheng, Q.
Design and Implementation a Distributed Computation Framework (OpenHydro) for Streamflow Prediction in Ungauged Basin

A0328; EGU2008-A-03193; HS8.6-1TH5P-0328
Reudink, RHC; Luxemburg, WMJ; Gerrits, AMJ; Klees, R.; Savenije, HHG; Sinnathamby, S.
From in-situ gravitation to water storage

A0329; EGU2008-A-07254; HS8.6-1TH5P-0329
Virtanen, H.; Nordman, M.; Bilker-Koivula, M.; Mäkinen, J.; Virtanen, J.; Vehviläinen, B.; Huttunen, M.; Mäkinen, R.; Peltoniemi, M.; Hokkanen, T.
Superconducting gravimeter as a hydrological tool at Met-sähovi, Finland

A0330; EGU2008-A-12243; HS8.6-1TH5P-0330
Bardsley, E.
Geological weighing lysimeters for accurate undisturbed monitoring of ground surface water budgets in real time

A0331; EGU2008-A-00110; HS8.6-1TH5P-0331
Liu, S.; Mao, L.; Mo, X.; Zhao, W.; Lin, Z.
Quantification of water budget components of land surface elements at provincial and basin scale

HS8.7 Production, transport, and emission of trace gases from the vadose zone to the atmosphere (co-listed in BG)

Convener: Weihermüller, L.
Co-Convener(s): Reichstein, M.
Lecture Room 33
Chairperson: N.N.

15:30–15:45; EGU2008-A-01387; HS8.7-1TH4O-001
Michel, R.; McMahon, P.
Use of carbon-14 and CFCs to study gas movement and reactions in the unsaturated zone

15:45–16:00; EGU2008-A-02033; HS8.7-1TH4O-002
Lazik, D.; Geistlinger, H.; Hagenau, J.; Buchwald, K.
Membrane based measurement technology for in-situ monitoring of trace gases in soil

16:00–16:15; EGU2008-A-07852; HS8.7-1TH4O-003
Borken, W.; Muhr, J.
Change in autotrophic and heterotrophic soil CO₂ efflux following rainfall exclusion in a spruce forest

16:15–16:30; EGU2008-A-03282; HS8.7-1TH4O-004
Graf, A.; Weihermüller, L.; Huisman, J. A.; Herbst, M.; Bauer, J.; Vereecken, H.
A model of errors in field-based temperature sensitivity of heterotrophic soil respiration as introduced by temperature measurement depth

16:30–16:45; EGU2008-A-05372; HS8.7-1TH4O-005

Geistlinger, H.

Gas Transport and Mass Transfer within the Vadose Zone: Tracer Experiments, 1-D Analytical and 2-D Numerical Modeling

16:45–17:00; EGU2008-A-06588; HS8.7-1TH4O-006

Bahn, M.; Schmitt, M.; Brüggemann, N.; Gort, M.; Siegwolf, R.

Linking grassland soil respiratory fluxes and assimilate supply: evidence and open questions

17:00 END OF SESSION

HS8.7 Production, transport, and emission of trace gases from the vadose zone to the atmosphere (co-listed in BG) – Posters

Convener: Weihermueller, L.

Co-Convener(s): Reichstein, M.

Display Time: Thursday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0332; EGU2008-A-01987; HS8.7-1TH5P-0332

Xu, X.; Wanek, W.; Richter, A.; **Kuzyakov, Y**

A new approach to separate root and microbial contributions to soil respiration by non-structural root carbon

A0333; EGU2008-A-03380; HS8.7-1TH5P-0333

Schack-Kirchner, H.; Hildebrand, E.E.

Subsoil nitrous oxide production reveals high spatial heterogeneity

A0334; EGU2008-A-03562; HS8.7-1TH5P-0334

Bauer, J.; Kirschbaum, M.U.F.; **Weihermüller, L.;** Huisman, J.A.; Herbst, M.; Vereecken, H.

Temperature response of wheat decomposition is more complex than the common approaches of most multi-pool models

A0335; EGU2008-A-04182; HS8.7-1TH5P-0335

Lamers, M.; Ingwersen, J.; Streck, T.

Open-N: An open source code for modeling nitrous oxide emission from upland and water-logged soils of a spruce forest ecosystem

A0336; EGU2008-A-07028; HS8.7-1TH5P-0336

Herbst, M.; Hellebrand, H.J.; Huisman, J.A.; Weihermüller, L.; Graf, A.; Vanderborght, J.; Vereecken, H.

Evaluation and inversion of a coupled CO₂ transport and carbon turnover model

A0337; EGU2008-A-08305; HS8.7-1TH5P-0337

Glatzel, S.; Jordan, A

Can we actually regionalize soil respiration data?

A0338; EGU2008-A-08466; HS8.7-1TH5P-0338

Scharnagl, B.; Herbst, M.; Huisman, J.A.; Vereecken, H.

Uncertainty in the ROTHC model for carbon turnover in soil resulting from model initialization

A0339; EGU2008-A-08782; HS8.7-1TH5P-0339

Kiepe, I.; Michalzik, B.; Jordan, A.; **Glatzel, S**

Litter fall as control of soil respiration observed by litter exclusion study and laboratory incubation

A0340; EGU2008-A-11942; HS8.7-1TH5P-0340

Lazik, D.; Geistlinger, H.; Hagenau, J.; Buchwald, K.

Optimization of soil-CO₂ monitoring networks – concept, set-up and first results

A0341; EGU2008-A-12120; HS8.7-1TH5P-0341

Ingwersen, J.; Lamers, M.; Streck, T.

Modeling N₂O emission from forest soils: A procedure for an automatic calibration of the biogeochemical model Forest-DNDC

A0342; EGU2008-A-12168; HS8.7-1TH5P-0342

Schack-Kirchner, H.

Modelling multicomponent soil-gas exchange as a tool for process identification near water saturation

HS10.9 Artificially drained catchments – from monitoring studies towards management approaches

Convener: Lennartz, B.

Co-Convener(s): Tiemeyer, B., Holzmann, H., Dolezal, F.

Lecture Room 29

Chairperson: N.N.

15:30–15:45; EGU2008-A-06095; HS10.9-1TH4O-001

van der Velde, Y.; Rozemeijer, J.; de Rooij, G.H.

Water quality dynamics at field and catchment scale

15:45–16:00; EGU2008-A-09660; HS10.9-1TH4O-002

Billy, C.; Sebiló, M.; Birgand, F.; Billen, G.; Tournebize, J.; Kao, C.

Nitrate retention in a sub-surface artificially drained watershed

16:00–16:15; EGU2008-A-04590; HS10.9-1TH4O-003

Zajicek, A.; Kvitek, T.; Kaplicka, M.

Drainage water temperature as an identifier of tile drainage runoff components

16:15–16:30; EGU2008-A-05530; HS10.9-1TH4O-004

Hacin, J.; **Brenèie, M.;** Bricelj, M.

Tracing experiment in the histosol of the Ljubljana marsh, Slovenia

16:30–16:45; EGU2008-A-05818; HS10.9-1TH4O-005

Smith, D.; Pappas, E.; Huang, C.

Influence of Dredging on Contaminant Fate and Transport

16:45–17:00; EGU2008-A-04129; HS10.9-1TH4O-006

Rieger, W.; Disse, M.

Quantifying the influence of artificial drainage on runoff generation in an agricultural catchment by using WaSiM-ETH 7.9.11

17:00 END OF SESSION

HS10.9 Artificially drained catchments – from monitoring studies towards management approaches – Posters

Convener: Lennartz, B.

Co-Convener(s): Tiemeyer, B., Holzmann, H., Dolezal, F.

Display Time: Thursday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0343; EGU2008-A-08733; HS10.9-1TH5P-0343

Kaplicka, M.; Fucik, P.; Kvitek, T.

Hydrological aspects of tile drainage systems in a small agricultural catchment

A0344; EGU2008-A-08510; HS10.9-1TH5P-0344

Hirt, U.; Wetzig, A.

Assessment of monitored tile drainages discharge data

A0345; EGU2008-A-06155; HS10.9-1TH5P-0345
Henine, H.; Nedelec, N.; Kao, K.; Augeard, A.; Birgand, B.; Chaumont, C.
 Experimental studies of the effects of pipe pressurization on outflow in artificially drained catchments.

A0346; EGU2008-A-09091; HS10.9-1TH5P-0346
Doležal, F.; Zajíček, A.; Kvítek, T.; Kaplická, M.
 Separation of tile drainage runoff components using a temperature mixing model

A0347; EGU2008-A-09480; HS10.9-1TH5P-0347
Kulhavý, Z.; Doležal, F.; Ěmelík, M.; Tlapáková, L.
 Longitudinal small stream flow profiles affected by tile-drainage inflow

A0348; EGU2008-A-03832; HS10.9-1TH5P-0348
Duffková, R.; Kvítek, T.
 Evaluation of actual evapotranspiration influenced by different soil types and crops on tile-drained fields

A0349; EGU2008-A-06715; HS10.9-1TH5P-0349
Fucik, P.; Bystricky, V.; Kvítek, T.; Lexa, M.; Zajicek, A.
 Estimating the water quality of agricultural drainage systems in connection with land use

A0350; EGU2008-A-07585; HS10.9-1TH5P-0350
Bůzek, F.; Bystřický, V.; Kadlecová, R.; Kvítek, T.; Ondr, P.; Zajíček, A.; Žlábek, P.
 Nitrate tracing in tile drainage using 15N and 18O data

A0351; EGU2008-A-07722; HS10.9-1TH5P-0351
Žlábek, P.; Bystřický, V.; Ondr, P.; Zajíček, A.; Kaplická, M.; Fučík, P.; Kvítek, T.
 Nitrogen loss in small tile-drained catchments in the Czech Republic

A0352; EGU2008-A-08798; HS10.9-1TH5P-0352
Tiemeyer, B.; Kahle, P.; Lennartz, B.
 Hydrochemical properties of artificially drained catchments: Results from a six-year study

A0353; EGU2008-A-08403; HS10.9-1TH5P-0353
Kahle, P.; Tiemeyer, B.; Lennartz, B.
 Phosphorus losses from artificially drained lowland catchments in North-Eastern Germany

A0354; EGU2008-A-03691; HS10.9-1TH5P-0354
 Deasy, C.; Brazier, R.E.; Heathwaite, A.L.
 Field drains as dominant pathways of sediment and nutrient transfer in small lowland agricultural catchments

A0355; EGU2008-A-00795; HS10.9-1TH5P-0355
Passeport, E.; Lange, J.; Tournebize, J.; Chaumont, C.; Birgand, F.; Vincent, B.
 Agricultural drained watershed effluents: a tracer experiment for hydraulic characterization of an artificial wetland as pesticide mitigation system

A0356; EGU2008-A-09512; HS10.9-1TH5P-0356
TOURNEBIZE, J.; CHAUMONT, C.; BIRMANT, F.; DUFOUR, F.; LOSINGER, I.; GRAMAGLIA, C.; VINCENT, B.; SAIZONOU, A.
 Co-construction of pesticide mitigation solutions in a subsurface drained watershed to limit groundwater pollution

HS11.1 Remote sensing retrieval techniques and data assimilation – Posters

Convener: Verhoest, N.
 Co-Convener(s): Tedesco, M., Wood, E.

Display Time: Thursday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0357; EGU2008-A-07594; HS11.1-1TH5P-0357

Campo, L.; Castelli, F.

Integration of solar radiation maps from MSG-SEVIRI imagery and ground observations with a statistical copula model

A0358; EGU2008-A-04556; HS11.1-1TH5P-0358

PINTY, B.; Laverigne, T.; Kaminski, T.; Gobron, N.; Taberner, M.

Retrieving land surface parameters from MODIS and MISR albedo products

A0359; EGU2008-A-03525; HS11.1-1TH5P-0359

Conrad, T.

Evaporation patterns in the Elbe River basin – Validating the eco-hydrological model SWIM by remotely sensed surface temperatures

A0360; EGU2008-A-08278; HS11.1-1TH5P-0360

Spiliotopoulos, M.; **Loukas, A.;** Vasiliades, L.

Actual evapotranspiration estimation from satellite-based surface energy balance model in Thessaly, Greece

A0361; EGU2008-A-02339; HS11.1-1TH5P-0361

Yi, Y.; Yang, D.; Huang, J.; Chen, D.

Evaluation of MODIS surface reflectance products for LAI retrieval

A0362; EGU2008-A-11863; HS11.1-1TH5P-0362

Zhao, C.; Xia, J.; Li, Z.

An diurnal land surface evapotranspiration retrieval model based on geostationary satellite data

A0363; EGU2008-A-11841; HS11.1-1TH5P-0363

Tang, T.; Li, L.

A fully remotely sensed parameterization of land surface evapotranspiration and evaporative fraction

A0364; EGU2008-A-00059; HS11.1-1TH5P-0364

Pauwels, V.R.N.; Balenzano, A.; Satalino, G.; Skriver, H.; Verhoest, N.E.C.; Mattia, F.

Retrieval of soil hydraulic parameters from Synthetic Aperture Radar data: an integrated multidisciplinary approach

A0365; EGU2008-A-10826; HS11.1-1TH5P-0365

Pan, M.; Wood, E.; Wójcik, R.; Konings, A.; McLaughlin, D.; Entekhabi, D.

Multi-scale multi-sensor data assimilation for terrestrial water budget estimation: experiment over Red-Arkansas river basin

A0366; EGU2008-A-03101; HS11.1-1TH5P-0366

Lahoz, W.A.; Prata, F.; Orsolini, Y.

Land data assimilation: a tool for improving land surface models and observations

A0367; EGU2008-A-10377; HS11.1-1TH5P-0367

Jutla, A

Estimation of Instantaneous Shortwave Radiation for all Sky Conditions Using MODIS

A0368; EGU2008-A-06396; HS11.1-1TH5P-0368

Muzylev, E.L.; Uspensky, A.B.; Startseva, Z.P.; Volkova, E.V.; Kukharsky, A.V.

Using remote sensing data on land surface characteristics in the water and heat balance components modeling for river basin

A0369; EGU2008-A-06897; HS11.1-1TH5P-0369
Höfle, B.; Pfeifer, N.; Ressl, C.; Rutzinger, M.; Vetter, M.
Water surface mapping using airborne laser scanning elevation and signal amplitude data

A0370; EGU2008-A-07418; HS11.1-1TH5P-0370
Toulios, L.; **Dunkel, Z.**; Stancalie, Gh.; Struzik, P.; Dan-
son, M.; Mika, J.
Satellite climate and biophysical data for warning purposes
for European agriculture

A0371; EGU2008-A-00981; HS11.1-1TH5P-0371
Singh, C K; Shashtri, S; Singh, S K; Mukherjee, S
Quantitative Modeling of Groundwater in Shiwaliks of
Rupnagar district of Punjab using Remote Sensing and
Geographic Information System

A0372; EGU2008-A-10470; HS11.1-1TH5P-0372
Rota Nodari, F.; De Michele, C.; Cislighi, M.
The Land Surface Temperature from MODIS imagery to
estimate the Urban Heat Island (UHI) over the metropolitan
area of Milan

HS11.2 Remote sensing applications in hydrology and water management

Convener: Ludwig, R.
Co-Convener(s): Su, Z., Benveniste, J.
Lecture Room 31
Chairperson: N.N.

8:30–8:45; EGU2008-A-11524; HS11.2-1TH1O-001
Ma, Y.; Ma, W.; Zhong, L.; Tan, Y.; Ze, H.; Su, Z.;
Menenti, M.; Ishikawa, H.; Koike, T.
The progress on the study of land surface heat fluxes over
heterogeneous landscape of the Tibetan Plateau

8:45–9:00; EGU2008-A-11902; HS11.2-1TH1O-002
Jia, L.; Menenti, M
Early drought detection by time series analysis on land
surface temperature and fraction of Absorbed Photosynthet-
ically Active Radiation

9:00–9:15; EGU2008-A-08485; HS11.2-1TH1O-003
Arboleda, A.; Ghilain, N; Gellens-Meulenberghs, F
LSA-SAF evapotranspiration over Europe and Africa:
Current results and comparisons at different scales

9:15–9:30; EGU2008-A-06534; HS11.2-1TH1O-004
Bianchi, R.
The European Space Agency's EO Campaigns Activities
(solicited)

9:30–9:45; EGU2008-A-08547; HS11.2-1TH1O-005
Crétaux, J-F; Leblanc, M.; Tweed, S.; Calmant, S.; Bergé-
Nguyen, M.; Cazenave, A.
Floodplain mapping from remote sensing techniques: radar
altimetry and medium resolution Modis sensors

9:45–10:00; EGU2008-A-11200; HS11.2-1TH1O-006
Berry, P.; **Benveniste, J.**
Remote measurement and monitoring of inland water
heights globally using multi-mission satellite radar altimetry

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-04368; HS11.2-1TH2O-001
Leblanc, M.; **Ramillien, G.**; Tregoning, P.; Tweed, S.
Drought detection in the Murray-Darling basin from space
gravity and hydrologic observations

10:45–11:00; EGU2008-A-07201; HS11.2-1TH2O-002
Güntner, A.; Papa, F.; Frappart, F.
Variations of inundation areas and surface water storage in
large river basins: A comparison of different global data
sources

11:00–11:15; EGU2008-A-06038; HS11.2-1TH2O-003
Voigt, S.; Schneiderhan, T.; Zwenzner, H.; Gähler, M.;
Twele, A.
Improving operational Flood Assessment - Where Satellites
make the Difference (solicited)

11:15–11:30; EGU2008-A-08137; HS11.2-1TH2O-004
Niemeyer, S.; Laguardia, G.; Kurnik, B.; Rossi, S.
Multisource detection of drought events at the European
scale

11:30–11:45; EGU2008-A-11037; HS11.2-1TH2O-005
Conrad, C.; Dech, S.; Lamers, J.P.A.; Martius, C.;
Ruecker, G.
A remote sensing based monitoring concept for irrigation
systems in Central Asia

11:45–12:00; EGU2008-A-08700; HS11.2-1TH2O-006
Dorigo, W.; Hollaus, M.; Wagner, W.; Schadauer, K.;
Maier, B.
Spatializing national forest inventories in mountainous
terrain by use of airborne laser scanner data

12:00 END OF SESSION

HS11.2 Remote sensing applications in hydrology and water management – Posters

Convener: Ludwig, R.
Co-Convener(s): Su, Z., Benveniste, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0373; EGU2008-A-00872; HS11.2-1TH5P-0373
Singh, A. K.; Patel, D. P.
High resolution remote sensing and field measurements for
urban flood mapping

A0374; EGU2008-A-01688; HS11.2-1TH5P-0374
Asadullah, A.; **McIntyre, N.**; Kigobe, M.
Evaluation of remote-sensed data products for precipitation
estimation in Uganda

A0375; EGU2008-A-02523; HS11.2-1TH5P-0375
El Hag El Tahir, M.
Automatic identification of soil erosion areas using Aster
imagery in the Blue Nile, eastern Sudan

A0376; EGU2008-A-02340; HS11.2-1TH5P-0376
Yi, Y.; Yang, D.; Lei, H.
The application of MODIS data in regional evapotranspira-
tion modeling and water deficit monitoring

A0377; EGU2008-A-03461; HS11.2-1TH5P-0377
Sánchez, J. M.; Caselles, V.; Kustas, W. P.; Scavone, G.;
Valor, E.; Coll, C.
Monitoring daily evapotranspiration at a regional scale
combining a two-source patch model with satellite data

A0378; EGU2008-A-01210; HS11.2-1TH5P-0378
Barbagallo, S.; **Consoli, S.**; Russo, A.
A one-layer satellite-based surface energy balance for
estimating evapotranspiration of the semi-arid catania plain
area (italy)

A0379; EGU2008-A-09352; HS11.2-1TH5P-0379
Van der Tol, C.; Verhoef, W.; Verhoef, A.; Houldcroft, C.J.; Timmermans, J.; Su, Z.; Timmermans, W.
Exploring the potential of an integrated radiative transfer and surface energy balance model

A0380; EGU2008-A-09615; HS11.2-1TH5P-0380
Cammalleri, C.; Ciraolo, G.; D'Urso, G.; Minacapilli, M.
Application of Energy Balance Models for Actual Evapotranspiration Assessment by Means of Airborne and Satellite Remote Sensing Data

A0381; EGU2008-A-10382; HS11.2-1TH5P-0381
Mira, M.; Schmutge, T.; Caselles, V.; Valor, E.
Comparison of ASTER and MODIS emissivity observation with ground measurements

A0382; EGU2008-A-07013; HS11.2-1TH5P-0382
Corbari, C.; Turconi, L.; Ravazzani, G.; Horeschi, D.; Mancini, M.
Land surface temperature from remote sensing for the validation of a distributed hydrologic model at basin scale

A0383; EGU2008-A-08504; HS11.2-1TH5P-0383
Jacobs, C.; Roerink, G.J.; Bos, M.G.; Hammani, A.
Crop Water Stress Detection from Remote Sensing using the SSEBI-2 Algorithm: A Case Study in Morocco

A0384; EGU2008-A-01106; HS11.2-1TH5P-0384
Montzka, C.; Canty, M.; Kunkel, R.; Vereecken, H.; Wendland, F.
Assimilation of multispectral remotely sensed data in nitrate modelling

A0385; EGU2008-A-12195; HS11.2-1TH5P-0385
Copertino, V. A.; Telesca, V.; Scavone, G.; Pastore, V.
An integrated management system of field and satellite data for the hydrological cycle components

A0386; EGU2008-A-07274; HS11.2-1TH5P-0386
Santos da Silva, J.; Roux, E.; Calmant, S.; Rotunno Filho, O. C.; Cretaux, J. F.; Seyler, F.
Multi satellite radar altimetry for the study of hydrological cycle within the rio Negro floodplains (Amazon basin)

A0387; EGU2008-A-01413; HS11.2-1TH5P-0387
Pilloni, S.; Heinl, M.; Hammerle, A.; Gianelle, D.; Vescovo, L.; Tappeiner, U.; Wohlfahrt, G.
Estimating the Plant Area Index and Phytomass of Mountain Grasslands from Multi spectral Reflectance

A0388; EGU2008-A-03721; HS11.2-1TH5P-0388
Liebe, J.; van de Giesen, N.; Walter, T.; Steenhuis, T.
Use of radar observations of small reservoirs for calibration of a simple hydrological model in the West African savanna

A0389; EGU2008-A-07726; HS11.2-1TH5P-0389
Niemi, K.; Malve, O.; Pyhälähti, T.; Tattari, S.
Influence of catchment factors on the water quality in Finnish Lakes

A0390; EGU2008-A-10453; HS11.2-1TH5P-0390
Calmant, S.; Cretaux, J-F
Mean Lake Surface by Satellite Altimetry

A0391; EGU2008-A-11559; HS11.2-1TH5P-0391
Jia, L.; Xi, G.; Liu, S.
Estimation of seasonal to annual water demand by wetland vegetations with MODIS data in the Yellow River Delta area

A0392; EGU2008-A-11244; HS11.2-1TH5P-0392
Berry, P.; Smith, R.; **Benveniste, J.**
Representation of global inland water heights within the forthcoming ACE2 GDEM

A0393; EGU2008-A-06577; HS11.2-1TH5P-0393
Mandlbürger, G.
Airborne Laser Scanning as geometric basis for Hydraulic Models

A0394; EGU2008-A-05122; HS11.2-1TH5P-0394
Chiang, J. L.; Yang, H. C.; Liou, J. J.; Cheng, K. S.
Flood boundary delineation using various raster data - a case study in northern Taiwan

A0395; EGU2008-A-04321; HS11.2-1TH5P-0395
Gennaro, M.C.; **Llovel, W.;** Daillet-Rochette, S.; Cretaux, J.F.; Cazenave, A.
Near real time water level on rivers from ENVISAT altimetry

A0396; EGU2008-A-09787; HS11.2-1TH5P-0396
Fiedler, K.; Hunger, M.; Döll, P.
Estimation of global terrestrial water storage change using the WaterGAP Global Hydrological Model

A0397; EGU2008-A-11535; HS11.2-1TH5P-0397
Su, Z.; The EAGLE2006 Team
EAGLE 2006 – Multi-purpose, multi-angle and multi-sensor in-situ and airborne campaigns over grassland and forest

A0398; EGU2008-A-04164; HS11.2-1TH5P-0398
Timmermans, J.; Van der Tol, C.; Verhoef, W.; Vekerdy, Z.; van Laake, P.E.; Su, Z.
Intercomparison of SAIL and DART over a Pine forest using Laserscan derived structural parameters

HS11.5 Soil moisture estimation using field instrumentation, remote sensing and modelling

Convener: Loew, A.
Co-Convener(s): Schmutge, T., de Rosnay, P.
Lecture Room 31
Chairperson: N.N.

13:30–13:45; EGU2008-A-05114; HS11.5-1TH30-001
van Oevelen, P.; Viterbo, P.; Jackson, T.
Activities of the International Soil Moisture Working Group

13:45–14:00; EGU2008-A-04989; HS11.5-1TH30-002
Kerr, Y.H.; Waldteufel, P.; Hahne, A.; Mecklenburg, S.; Wigneron, J.-P.; Cabot, F.
The SMOS project : current status (solicited)

14:00–14:15; EGU2008-A-03509; HS11.5-1TH30-003
De Jeu, R.; De Reus, N.; Van De Vegte, J.; Holmes, T.; Owe, M.
A Web Mapping Service for 30 years of Satellite Derived Soil Moisture

14:15–14:30; EGU2008-A-06301; HS11.5-1TH30-004
Yang, K.; Koike, T.; Kaihotsu, I.
Validation of a dual-pass microwave land data assimilation system at CEOP Mongolian moisture network

14:30–14:45; EGU2008-A-01163; HS11.5-1TH30-005
Wagner, W.; Sabel, D.; Pathe, C.; Doubkova, M.
Temporal Stability of Soil Moisture and Radar Backscatter in Different Climatic Environments (solicited)

14:45–15:00; EGU2008-A-02391; HS11.5-1TH30-006
Vernieuwe, H.; Lievens, H.; Verhoest, N.E.C.; De Baets, B.
Introduction of a theoretical framework for soil roughness uncertainty characterization with respect to soil moisture retrieval from SAR

15:00 COFFEE BREAK

Chairperson: N.N.

15:30–15:45; EGU2008-A-04993; HS11.5-1TH4O-001
Smits, J.; Rutten, M. ; van de Giesen, N.; van Beek, R.;
Heemink, A.; Winsemius, H.; Friesen, J.
Hydrological processes and spatial characteristics influencing
the accuracy of remote sensed soil moisture states: a
west African case study.

15:45–16:00; EGU2008-A-03063; HS11.5-1TH4O-002
Mattia, F.; Satalino, G.; Pauwels, V.R.N; Loew, A.; Tim-
mermans, W.
Soil moisture retrieval from L-band SAR data and hydro-
logic modelling (solicited)

16:00–16:15; EGU2008-A-01325; HS11.5-1TH4O-003
Jackson, T; Cosh, M; Bindlish, R; Gasiewski, A; Yueh, S;
Dinardo, S; Kustas, W
Land surface hydrology in the cloud land surface interaction
campaign (CLASIC) (solicited)

16:15–16:30; EGU2008-A-04329; HS11.5-1TH4O-004
Crow, W.T.; Ryu, D.
A new data assimilation approach for improving streamflow
forecasting using remotely-sensed soil moisture retrievals

16:30–16:45; EGU2008-A-09328; HS11.5-1TH4O-005
Drusch, M.; de Rosnay, P.; Scipal, K.; Balsamo, G.;
Andersson, E.
Analysing land surface parameters for NWP applications:
Developments at ECMWF (solicited)

16:45–17:00; EGU2008-A-04077; HS11.5-1TH4O-006
Gellens-Meulenberghs, F.; Ghilain, N.; Arboleda, A.;
Hasenauer, S.; Wagner, W.
A combination of land surface modelling and remote
sensing: synergy between LSA-SAF and H-SAF for soil
moisture retrieval.

17:00 END OF SESSION

HS11.5 Soil moisture estimation using field instrumenta- tion, remote sensing and modelling – Posters

Convener: Loew, A.
Co-Convener(s): Schmutge, T., de Rosnay, P.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Hall A
Chairperson: N.N.

A0399; EGU2008-A-09209; HS11.5-1TH5P-0399
Cabot, F; Richaume, P; Mialon, A; Kerr, Y
SMOS system performances based on end-to-end simula-
tions

A0400; EGU2008-A-07678; HS11.5-1TH5P-0400
Tittebrand, A.; Stammer, D.; Siebert, S.
The german smos project office

A0401; EGU2008-A-09027; HS11.5-1TH5P-0401
Lacava, T.; Pergola, N.; Tramutoli, V.
Monitoring soil wetness variations by a multi-temporal
passive microwave technique

A0402; EGU2008-A-01754; HS11.5-1TH5P-0402
van Dijk, A.; de Jeu, R.
Interpreting soil moisture from passive microwave remote
sensing - an analysis of published field data

A0403; EGU2008-A-01996; HS11.5-1TH5P-0403
Juglea, JS; Kerr, YHK; Mialon, AM; Baeza-Lopez, EB;
Calvet, JCC; Wigneron, JPW
L-Band brightness temperature simulated from coupled
SVAT model and radiative transfer model over the Valencia
Anchor Station

A0404; EGU2008-A-02803; HS11.5-1TH5P-0404
Paloscia, S.; Pampaloni, P.; Santi, E.; Pettinato, S.; Della
Vecchia, A.; Ferrazzoli, P.; Guerriero, L.
The influence of soil moisture on microwave emission under
forest canopies

A0405; EGU2008-A-11011; HS11.5-1TH5P-0405
Gruhier, C.; de Rosnay, P.; Wigneron, J.-P.
Surface soil moisture retrieval based on brightness tempera-
ture from AMSR-E over a semi-arid region.

A0406; EGU2008-A-11961; HS11.5-1TH5P-0406
Escorihuela, M.J.; Kerr, Y.H.; Chanzy, A.; de Rosnay, P.;
Wigneron, J.P
On the effective penetration depth of L-band radiometry and
the validation of SMOS data: a case study

A0407; EGU2008-A-02779; HS11.5-1TH5P-0407
Wagner, W.; Pathe, C.; Sabel, D.; Doubkova, M.;
Bartsch, A.
The ESA Tiger Innovator project SHARE – Soil moisture
for hydrometeorologic applications in the SADC region

A0408; EGU2008-A-09710; HS11.5-1TH5P-0408
Scipal, K.; Drusch, M.
Soil Moisture from MetOp scatterometer data: First as-
similation results from a numerical weather prediction
experiment

A0409; EGU2008-A-11016; HS11.5-1TH5P-0409
Seeling, S.; Mueller, Ch.; Seeger, M.; Nink, S.
Assimilation of SAR data for mapping of dominant runoff
formation processes on agricultural land

A0410; EGU2008-A-00337; HS11.5-1TH5P-0410
Zhao, D.; Kuenzer, C.; Fu, C.; Wagner, W.
The analysis on ERS scatterometer derived soil water index
data in China.

A0411; EGU2008-A-02407; HS11.5-1TH5P-0411
Schneider, K.; Huisman, J.A.; Breuer, L.; Frede, H.-G.
Soil moisture monitoring in remote catchments: temporal
stability and its use in active microwave remote sensing
validation

A0412; EGU2008-A-04884; HS11.5-1TH5P-0412
Ludwig, R.; Bernier, M.; Filion, R.; Gherboudj, I.; Pani-
coni, C.; Melis, M.; Soddu, A.; Arp, D.; Meyer, S.
Integrating field monitoring, spaceborne SAR and hydro-
logic models to support water resources management and
agricultural practice in Mediterranean areas

A0413; EGU2008-A-10394; HS11.5-1TH5P-0413
Bilodeau, B.; Bélair, S.; Grunmann, P.; Carrera, M.
New Developments in the Canadian Land Data Assimilation
System

A0414; EGU2008-A-00601; HS11.5-1TH5P-0414
Liu, S; Mo, X; Zhang, S; Zhao, W; Mao, L; Wagner, W
The effect of climate change and climate variability to
the Wuding Catchment soil moisture acquired from eco-
hydrological simulation model, in situ observations and
remotely sensing

A0415; EGU2008-A-04471; HS11.5-1TH5P-0415
Shan, Wei; Guo, Ying
Water content changing in shallow soil cut-slope of highway
in seasonal frozen regions

A0416; EGU2008-A-07145; HS11.5-1TH5P-0416
Usovich, B.; Marczewski, W.; Lipiec, J.; Usovich, J. B.;
 Sokołowska, Z.; Dąbkowska-Naskręt, H.; Hajnos, M.;
 Łukowski, M.I
 Soil moisture spatial distribution at the SMOS Cal/Val
 Campaign POLESIE (AO-3275) in Poland

A0417; EGU2008-A-07976; HS11.5-1TH5P-0417
 Coppola, A.; Basile, A.; Buonanno, M.; **Colin, J.;** De
 Mascellis, R.; Di Franco, L.; Esposito, M.; Menenti, M.
 Soil water content maps by remotely-sensed thermal inertia
 data: Calibration and validation procedures

A0418; EGU2008-A-08273; HS11.5-1TH5P-0418
 Araud, Q.; Kergoat, L.; Frappart, F.; **Grippa, M.;** Boone, A.;
 De Rosnay, P.; Lemoine, J.-M.; ALMIP Working Group, the
 Comparison between soil moisture estimations by GRACE
 satellite mission and by land surface models over West Africa

A0419; EGU2008-A-05656; HS11.5-1TH5P-0419
 Graeff, T.; Bronstert, A.; Lück, E.; Creutzfeldt, B.; Thoss, H.;
 Itzerott, S.; **Zehe, E**
 Measurement of water content in different scales and
 geostatistical analysis

A0420; EGU2008-A-10075; HS11.5-1TH5P-0420
Korres, W.; Koyama, C.N.; Fiener, P.; Schneider, K.
 Spatial and temporal patterns of soil moisture in agricultural
 landscapes

A0421; EGU2008-A-10469; HS11.5-1TH5P-0421
Paris, T.; Zribi, M.; Loumagne, C.; Wagner, W.;
 Ducharme, A.; Habets, F.
 Comparison between surface soil moisture obtained by re-
 mote sensing, field experiments, and land surface modelling.

Friday

IS21 - HS1.3/NH2.8/NP3.11 Hydrological Extremes (co-organised by HS, NH & NP; co-listed in GM)

Convener: Laaha, G.
 Co-Convener(s): Tallaksen, L., Castellarin, A., Szolgay, J.
 Lecture Room 32
 Chairperson: CASTELLARIN, A.

13:30–13:45; EGU2008-A-05966; IS21 -
 HS1.3/NH2.8/NP3.11-1FR3O-001
Sivapalan, M.; Samuel, J. M.
 Effects of multi-scale rainfall variability on flood frequency:
 a comparative multi-site analysis of dominant process
 controls (solicited)

13:45–14:00; EGU2008-A-03846; IS21 -
 HS1.3/NH2.8/NP3.11-1FR3O-002
Viglione, A.; Blöschl, G.
 Process controls on the mapping of rainfall to flood return
 periods

14:00–14:15; EGU2008-A-06431; IS21 -
 HS1.3/NH2.8/NP3.11-1FR3O-003
Guse, B.; Thielen, A. H.; Castellarin, A.; Merz, B.
 Probabilistic regional envelope curves in Saxony/Germany
 using two methods to form homogeneous regions

14:15–14:30; EGU2008-A-03947; IS21 -
 HS1.3/NH2.8/NP3.11-1FR3O-004
Uhlemann, S.; Thielen, A.H.; Merz, B.
 A national set of coherent large scale flood events in Ger-
 many

14:30–14:45; EGU2008-A-00253; IS21 -
 HS1.3/NH2.8/NP3.11-1FR3O-005
Renard, B.; Lang, M.
 Nonstationary frequency analysis of hydrological extremes

14:45–15:00; EGU2008-A-00048; IS21 -
 HS1.3/NH2.8/NP3.11-1FR3O-006
Kjeldsen, T. R.; Jones, D. A.
 Model error correlation in a regression model of the median
 annual maximum flood

15:00 COFFEE BREAK

Chairperson: TALLAKSEN, L.M.

15:30–15:45; EGU2008-A-05721; IS21 -
 HS1.3/NH2.8/NP3.11-1FR4O-001
Woods, R.; Henderson, R.; Schmidt, J.
 Estimating low flow statistics in ungauged basins of New
 Zealand using a mechanistic approach (solicited)

15:45–16:00; EGU2008-A-02481; IS21 -
 HS1.3/NH2.8/NP3.11-1FR4O-002
Sauquet, E.; Chopart, S.
 Using spot gauging data to interpolate low flow characteris-
 tics

16:00–16:15; EGU2008-A-08250; IS21 -
 HS1.3/NH2.8/NP3.11-1FR4O-003
Bell, V. A.; Moore, R. J.; Cole, S. J.; Kay, A. L.; Davies, H.
 N.; Jones, R. G.; Reynard, N. S.
 Estimation of extreme river flows over the UK using rainfall
 and potential evaporation estimates from both a Regional
 Climate Model and observations

16:15–16:30; EGU2008-A-04837; IS21 -
 HS1.3/NH2.8/NP3.11-1FR4O-004
Stahl, K.; Moore, R.D.; Allan, D.M.; Whitfield, P.
 Hydroclimatic controls on late-summer low flow in British
 Columbia, Canada

16:30–16:45; EGU2008-A-07912; IS21 -
 HS1.3/NH2.8/NP3.11-1FR4O-005
 Niemeyer, S.; Laguardia, G.; Kurnik, B.; Rossi, S.
 Online pre-operational drought monitoring at the European
 scale

16:45–17:00; EGU2008-A-10211; IS21 -
 HS1.3/NH2.8/NP3.11-1FR4O-006
Hiscock, K.; Sparkes, R.; Hodgson, A.; Martin, J.L.;
 Taniguchi, M.
 Evaluation of future climate change impacts in Europe on
 potential groundwater recharge

17:00 END OF SESSION

IS21 - HS1.3/NH2.8/NP3.11 Hydrological Extremes (co-organised by HS, NH & NP; co-listed in GM) – Posters

Convener: Laaha, G.
 Co-Convener(s): Tallaksen, L., Castellarin, A., Szolgay, J.
 Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 10:30–12:00
 Poster Area Hall A
 Chairperson: N.N.

A0238; EGU2008-A-00448; IS21 - HS1.3/NH2.8/NP3.11-
 1FR2P-0238
Castiglioni, S.; Castellarin, A.; Montanari, A.
 Prediction of low-flow indices in ungauged basins through
 physiographical space-based interpolation

A0239; EGU2008-A-09790; IS21 - HS1.3/NH2.8/NP3.11-
 1FR2P-0239
Longobardi, A.; Villani, P.
 Low flows regional pattern defined by catchment properties
 and climatic forcing

- A0240;** EGU2008-A-00960; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0240
Laaha, G.; Blöschl, G.
An operational predictive low flow model for the Austrian province Burgenland
- A0241;** EGU2008-A-02201; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0241
Wegehenkel, M.; Kersebaum, K.C.
An evaluation of the impact of climate change on the water balance of a mesoscale catchment in northeastern Germany – a case study
- A0242;** EGU2008-A-07044; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0242
Wong, W.K.; Chen, Y.D.; Jiang, T.; Chen, X.H.; Hisdal, H.; Xu, C.-Y.
A statistical study of drought characteristics of the Pearl River Basin, China (cancelled)
- A0243;** EGU2008-A-07302; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0243
Kanellou, E.; Tsiros, E.; Domenikiotis, C.; Dalezios, N.R.
Meteorological and Agrohydrological drought monitoring based on conventional and remotely sensed data
- A0244;** EGU2008-A-09329; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0244
Machlica, A.; Stojkovova, M.; Fendekova, M.
Assessment of hydrological drought occurrence in Nitra River catchment (Slovakia) in the period 1976 – 2005
- A0245;** EGU2008-A-11800; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0245
Malmir, M.; Kholghi, M
Low streamflow frequency analysis and its application in environmental planning
- A0246;** EGU2008-A-02897; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0246
Matthews, D.; Brilly, M.; Gregoric, G.; Polajnar, J.; Houser, P.; Cosgrove, B.; Rodell, M.
Extreme Event Analyses from WaterNet: The NASA Water Cycle Solutions Network
- A0247;** EGU2008-A-03120; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0247
Terink, W.; Hurkmans, R.; Uijlenhoet, R.; Warmerdam, P.; Moors, E.
Hydrological analysis of remote climate scenarios developed for the Rhine river basin
- A0248;** EGU2008-A-03057; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0248
Hurkmans, R.; Terink, W.; Uijlenhoet, R.; Moors, E.; Troch, P.A.
Effects of changes in land cover on streamflow generation in the Rhine basin
- A0249;** EGU2008-A-06210; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0249
Lange, J.; Gunkel, A.; Shadeed, S.; Fischer, C.; Krier, R.; Morin, E.; Grodek, T.; Menzel, L.
New insights into the variability of water resources in the Jordan River Catchment
- A0250;** EGU2008-A-10250; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0250
Kumar, R.; Samaniego, L.
Investigation of seasonal low- and high-flow characteristics in a mesoscale basin using a process-based distributed hydrologic model
- A0251;** EGU2008-A-00049; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0251
Kjeldsen, T. R.; Jones, D. A.
A revised procedure for pooled flood frequency analysis in the UK
- A0252;** EGU2008-A-00672; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0252
Allamano, P.; Claps, P.; Laio, F.
A simple model to assess flood risk in mountainous basins
- A0253;** EGU2008-A-04172; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0253
Blume, T.; Francke, T.; Günther, K.; **Bronstert, A**
Possible flood retention in an alpine landscape: A case study from the Upper Iller, Germany
- A0254;** EGU2008-A-01428; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0254
Bormann, H.; Pinter, N.; Elfert, S.
Hydrological signatures of flood magnification in German rivers
- A0255;** EGU2008-A-08815; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0255
Thorndycraft, V.; Benito, G.; Rico, M.; Sopeña, A.; Sánchez-Moya, Y.; Barriendos, M.; Casas, A.
A long-term perspective on flood response to climatic variability and human impact: Evidence from Spanish palaeoflood records
- A0256;** EGU2008-A-11226; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0256
de Lima, M.I.P
Temporal multifractal signature of river discharge
- A0257;** EGU2008-A-05006; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0257
van Nooijen, R.; Gubareva, T.; Kolechkina, A.; Gartsman, B
Interval Analysis and the Search for local Maxima of the Log Likelihood for the Pearson III distribution
- A0258;** EGU2008-A-03258; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0258
Beven, K.; Blazkova, S.
Estimating the frequency of hydrological extremes with uncertainty: Skalka catchment, Czech Republic
- A0259;** EGU2008-A-04997; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0259
Gubareva, T.; **van Nooijen, R.;** Kolechkina, A.; Gartsman, B.; Blöschl, G.
Extreme flood estimation by different probability distribution laws in different climatic conditions
- A0260;** EGU2008-A-09601; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0260
Tagliaferri, L.; Merz, R.; Castellarin, A.; Blöschl, G.
Probabilistic depth-duration envelope curves for Austria and Italy
- A0261;** EGU2008-A-07716; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0261
Horvat, A.; Rakovec, J.; Kobold, M.; Vertaènik, G.; Primo³/₄iè, M.; Circa, A.; Gor¹ak, D.; Brilly, M.
Probable Maximum Flow Calculation
- A0262;** EGU2008-A-09089; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0262
Pásztor, L.; Pálfai, I.; Bozán, Cs.; Körösparti, J.; Bakacsi, Zs.; Szabó, J.
Regionalization of lowland excess water hazard
- A0263;** EGU2008-A-02413; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0263
Bernardara, P.; Gailhard, J.; Dupeyrat, A.; Paquet, E.; Garçon, R.; Hendrickx, F.
Frequency analysis of daily rainfall in France
- A0264;** EGU2008-A-10258; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0264
Jutla, A
On Probability Distribution of Extreme Precipitation Events

A0265; EGU2008-A-04962; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0265
Lepore, C.; Veneziano, D.; Langousis, A.
Lognormal Upper Tail of Rainfall Intensity and POT Values: Implications on the IDF Curves

A0266; EGU2008-A-05686; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0266
Gaal, L.; Szolgay, J.; Kysely, J.; Lapin, M.
On the possibility of using climatic forcing indices in the ROI method for 1 and 5-day precipitation extremes in Slovakia

A0267; EGU2008-A-00849; IS21 - HS1.3/NH2.8/NP3.11-1FR2P-0267
Grimm, A.; Tedeschi, R.; Pscheidt, I.
The Influence of ENSO and Interdecadal Variability on the Frequency of Extreme Precipitation Events in South America

HS4.1 Integrated water resources assessment and technology transfer, with special focus on developing countries

Convener: Uhlenbrook, S.
Co-Convener(s): van der Zaag, P., Rosbjerg, D., van de Giesen, N., Bathurst, J., Ekstrand, S., Amezcaga, J., Mostert, E.
Lecture Room 29
Chairperson: N.N.

8:30–8:45; EGU2008-A-00320; HS4.1-1FR1O-001
Annor, F. O.; van de Giesen, N.; van der Zaag, P.; Liebe, J. R.; Odai, S. N.; Damali, R. J.
Monitoring of small reservoirs monthly storage using Envisat ASAR, SPOT and ALOS imagery in the Upper East Region of Ghana

8:45–9:00; EGU2008-A-01037; HS4.1-1FR1O-002
Bathurst, J.C.; Cisneros, F.; Gaviño Novillo, M.; Iroumé, A.; Lenzi, M.A.; Mintegui Aguirre, J.; Miranda, M.; Urciuolo, A.
Forests and floods in Latin America: science, management, policy and the EPIC FORCE project

9:00–9:15; EGU2008-A-01604; HS4.1-1FR1O-003
Hanasaki, N; Kanae, S; Oki, T; Masuda, K; Motoya, K; Shen, Y; Tanaka, K; Shirakawa, N
An integrated model for the assessment of global water resources

9:15–9:30; EGU2008-A-06008; HS4.1-1FR1O-004
WeiB, M.; Schaldach, R.
Current and future green and blue water fluxes in Africa under climate and land use change

9:30–9:45; EGU2008-A-01897; HS4.1-1FR1O-005
Steward, DR; Bernard, EA; Kulcsar, LJ; Peterson, JM; Welch, SM
Science and engineering to support societal water-use planning using computational tools and GIScience data

9:45–10:00; EGU2008-A-03130; HS4.1-1FR1O-006
Wriedt, G.; Aloe, A.; Bouraoui, F.
Estimating irrigation requirements in Europe

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-02511; HS4.1-1FR2O-001
Savenije, H
The sustainable village (solicited)

10:45–11:00; EGU2008-A-03993; HS4.1-1FR2O-002
Buytaert, W; De Bièvre, B; Cuesta, F
A blueprint for participatory environmental monitoring

11:00–11:15; EGU2008-A-06785; HS4.1-1FR2O-003
Jewitt, GPW
A framework for the management of land use change for water resources planning

11:15–11:30; EGU2008-A-09161; HS4.1-1FR2O-004
Giertz, S.; Diekkrüger, B.
Water management in Benin in the view of Global Change – National strategies and use of research projects

11:30–11:45; EGU2008-A-09256; HS4.1-1FR2O-005
Mostert, E.; Raadgever, G.T.
The seven rules for hydrologists wanting to make an impact on the water management practice

11:45–12:00; EGU2008-A-11367; HS4.1-1FR2O-006
Kuells, C.; Dahan, O.; Benito, G.; Enzel, Y.; Rhode, R.; Seely, M.; Hoffmann, T.
The WADE experience - twinning European and Southern African dryland hydrology and IWRM

12:00 END OF SESSION

HS4.1 Integrated water resources assessment and technology transfer, with special focus on developing countries – Posters

Convener: Uhlenbrook, S.
Co-Convener(s): van der Zaag, P., Rosbjerg, D., van de Giesen, N., Bathurst, J., Ekstrand, S., Amezcaga, J., Mostert, E.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0268; EGU2008-A-00226; HS4.1-1FR3P-0268
Masih, I.; Uhlenbrook, S.; Ahmad, M.D.; Maskey, S.
Regionalization of a conceptual rainfall runoff model based on similarity of the flow duration curve: a case study from Karkheh river basin, Iran

A0269; EGU2008-A-00304; HS4.1-1FR3P-0269
Xu, J.; Yang, D.; Lei, Z.; Huang, W.; Huo, J.
Application of a distributed hydrological model to the upper Yangtze River basin for drought estimate

A0270; EGU2008-A-01287; HS4.1-1FR3P-0270
Sastri, ASRAS
Estimation of harvestable water in the village tanks of Chhattisgarh State in eastern India during excess, normal and deficit rainfall years

A0271; EGU2008-A-01303; HS4.1-1FR3P-0271
Van der Kraan, A; Van de Giesen, N; Molin, E; Hoes, O; De Jong, IJ
Water storage and poverty in Burkina Faso

A0272; EGU2008-A-01324; HS4.1-1FR3P-0272
Sandwidi, J. P.; Van de Giesen, N.; Bogardi, J. J.; Vlek, P. L.
Long-term balance between domestic water demand and groundwater recharge of the crystalline basement aquifers in the Northern Volta river basin, West Africa

A0273; EGU2008-A-01375; HS4.1-1FR3P-0273
Ertsen, MW; Pramana, KER; Uhlenbrook, S; de Laat, P; Nonner, J
Digging with a needle or soaking into the sand. Water retention in a dry region of Vietnam.

A0274; EGU2008-A-01787; HS4.1-1FR3P-0274

Assaf, H; Malaeb, L

Developing an Interactive Hydro-economic Decision Support Tool for Managing Water Resources in Semi-Arid Regions

A0275; EGU2008-A-01959; HS4.1-1FR3P-0275

Cui, X.; Huang, G.; Chen, W.; Morse, A.

Threatening of climate change on water resources and supply: case study of northwest China

A0276; EGU2008-A-02177; HS4.1-1FR3P-0276

Alam, N.; Olsthoorn, T.N.

Comprehensive evaluation of skimming wells - an alternate technology for environmentally sustainable irrigation in the Indus basin of Pakistan

A0277; EGU2008-A-02986; HS4.1-1FR3P-0277

Brilly, M; Rusjan, S; Koren, S

How to take action for integrated water management

A0278; EGU2008-A-03385; HS4.1-1FR3P-0278

Tugjamba, N; Van der Zaag, P; Bresser, T

Water scarcity and adaptation strategy in Luniriver basin, India

A0279; EGU2008-A-03783; HS4.1-1FR3P-0279

Sonneveld, B.G.J; Keyzer, M.A.; Adegbola, P.; Pande, S.

The impact of climate change on crop production in West Africa: an assessment for the Oueme River Basin in Benin

A0280; EGU2008-A-04660; HS4.1-1FR3P-0280

Jackisch, C.

Hydrology-Based Integrated Modeling of a Peripheral Semi-Arid Human-Eco-System

A0281; EGU2008-A-05499; HS4.1-1FR3P-0281

Hoisingwan, P.; McLaughlin, D.

Water and land limitations on China's food production

A0282; EGU2008-A-05531; HS4.1-1FR3P-0282

Yutsis, V.; de León Gómez, H.; Izaguirre Valdez, F.; Kotsarenko, A.; Masuch Oesterreich, D.; Pola Simuta, C.

Nonlinearity of hydrological cycle of Cerro Prieto water reservoir (NE Mexico) and sub-bottom infiltration: geophysical study

A0283; EGU2008-A-06225; HS4.1-1FR3P-0283

Burak, S.; Gazioglu, C.; Zeki, S.

Sustainability issues of coastal planning in developing countries. A case study: The Marmara Sea Basin

A0284; EGU2008-A-06460; HS4.1-1FR3P-0284

Verma, S.; van der Zaag, P.; Uhlenbrook, S.

Small reservoirs, big impacts? Exploring alternate models of river basin development

A0285; EGU2008-A-06878; HS4.1-1FR3P-0285

Wong, C.L.; Jamil, A.B.M.; Uhlenbrook, S.; Venneker, R.

Analysis of hydrological variability in observed rainfall-runoff patterns in Peninsular Malaysia

A0286; EGU2008-A-07023; HS4.1-1FR3P-0286

Shadeed, S.; Lange, J.; **Gunkel, A.**

Up To Date Hydrological Modeling in Arid and Semi-Arid Catchment, the Case of Faria Catchment, West Bank, Palestine

A0287; EGU2008-A-07350; HS4.1-1FR3P-0287

Love, D; Uhlenbrook, S; Twomlow, S; van der Zaag, P

Changing rainfall and discharge patterns in the northern Limpopo Basin, Zimbabwe

A0288; EGU2008-A-07431; HS4.1-1FR3P-0288

Akkaya, M. A.; Doğan, E.

Examining The Turkish Criminal Code amendment for its utilization in shores in terms of "Liability Law"

A0289; EGU2008-A-07454; HS4.1-1FR3P-0289

Akkaya, M.A.; Burak, S.

Coastal zone management and international financial institution activity

A0290; EGU2008-A-07719; HS4.1-1FR3P-0290

Makurira, H.; Savenije, H.; Uhlenbrook, S.; Lorentz, S.

Field based measurement approaches to better understand soil moisture dynamics in rainfed smallholder systems in Sub-Saharan Africa

A0291; EGU2008-A-08181; HS4.1-1FR3P-0291

García, J.; Güntner, A.; Távara, C.; Tume, P.; Reyes, J.; Merz, B.

Modelling ENSO effects on the water balance and freshwater transport for the Pacific coast of Peru and Northern Chile

A0292; EGU2008-A-08343; HS4.1-1FR3P-0292

Iroume, A.; Gayoso, J.; Bathurts, J.

Voluntary adoption of management practices to reduce the hydrological impacts of forest operation in Chilean plantation: a trade off among hydrological based evidence, forest certifiers and forest companies

A0293; EGU2008-A-10942; HS4.1-1FR3P-0293

Braun, M.; Cyr, J.-F.; Ludwig, R.; Turcotte, R.; Vescovi, L.

Framework design for an integrated watershed model for climate change impact assessment

A0294; EGU2008-A-11370; HS4.1-1FR3P-0294

Železnik, B.; Globevnik, L.

Hydrological and Hydro-geological Elements for protection of drinking water sources of the Ljubljana Moor area

A0295; EGU2008-A-11601; HS4.1-1FR3P-0295

Trelles, A.

Technological Framework for Integrated Water Resources Management

A0296; EGU2008-A-11990; HS4.1-1FR3P-0296

Jawi, AH; Mohammed, YA; Uhlenbrook, S; Tilman, A; Van der Zaag, P

Time series stationarity analysis: the case of the Nile

A0297; EGU2008-A-12021; HS4.1-1FR3P-0297

Ekstrand, S

Technology transfer in the TWINBAS and TWINLATIN projects – experiences

HS4.2 Water science: source of conflict or cooperation?

Convener: van der Zaag, P.

Co-Convener(s): McCulloch, C., O'Connell, P., Salamé, L., Crescimanno, G., Schumann, A.

Lecture Room 29

Chairperson: VAN DER ZAAG, P.

13:30–13:45; EGU2008-A-03132; HS4.2-1FR3O-001

Ganoulis, J.; Skoulikaris, C.; Monget, J.M.

Communicating scientific results to stakeholders to facilitate the decision making process in transboundary water resources management (solicited)

13:45–14:00; EGU2008-A-12280; HS4.2-1FR3O-002

Falkenmark, M.; de Fraiture, C.; Vick, M.

Living with change in transnational river basins – some typical cases

14:00–14:15; EGU2008-A-00358; HS4.2-1FR3O-003

Martinez, M.; Llamas, M.R.

The water footprint knowledge as a framework to water conflict resolution: Guadiana river basin case study (Spain)

14:15–14:30; EGU2008-A-07574; HS4.2-1FR3O-004
Nashipili, N.J.; dos Santos, R.; Noor, Z.Y.; Schwartz, K.; Douven, W.; Jaspers, F.
Performance of river basin organizations: a comparative study of river basin organizations in Namibia, Indonesia and Brazil

14:30–14:45; EGU2008-A-07382; HS4.2-1FR3O-005
Gupta, J.; van der Zaag, P.
The politics of water research

14:45–15:00; EGU2008-A-05422; HS4.2-1FR3O-006
Manful, D.; Kaule, G; Rees, J; Hughes, A; He, Y; van de Giesen, N; Schwarz-von Raumer, H-G; Kirshen, P; Karl, H; Wang, Y; THE NMPI NETWORK
The Numerical Modelling-Policy Interface (NMPI) Network: a global platform to improve the uptake of numerical models in water resources management and policy

15:00 COFFEE BREAK

Chairperson: VAN DER ZAAG, P.

15:30–15:45; EGU2008-A-09337; HS4.2-1FR4O-001
Smidt, E.; Kluytmans, P.; Olsthoorn, Th.
The underground of a land and water conflict

15:45–16:00; EGU2008-A-09642; HS4.2-1FR4O-002
M.K. Saleh, S
The role of science and technical expertise in the development of 'alternative water sources' with the Nile Basin's developmental discourse: a positive-sum endeavour

16:00–16:15; EGU2008-A-01579; HS4.2-1FR4O-003
Rifai, F.; Kibaroglu, A.; Ali, M.
New Framework of Cooperation in the Euphrates Tigris Region Through Epistemic Community Activities: Euphrates Tigris Initiative for Cooperation

16:15–16:30; EGU2008-A-11231; HS4.2-1FR4O-004
Fougeirol, D.; Lyons, E.M.
Capacity building : HydroCONCERT'-Euphrates, a role play for scientists or non-scientists

16:30–16:45; EGU2008-A-08408; HS4.2-1FR4O-005
Brorsen, P.W.; Sokolov, V; Shuyska, A
Transforming Water Conflicts in Central Asia

16:45–17:00; EGU2008-A-06174; HS4.2-1FR4O-006
Lange, M. A.
Water Conflicts and Water Management on Mediterranean Islands

17:00 END OF SESSION

HS4.2 Water science: source of conflict or cooperation? – Posters

Convener: van der Zaag, P.
Co-Convener(s): McCulloch, C., O'Connell, P., Salamé, L., Crescimanno, G., Schumann, A.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 10:30–12:00
Poster Area Hall A
Chairperson: VAN DER ZAAG, P.

A0299; EGU2008-A-08507; HS4.2-1FR2P-0299
Zeil, P. ; Kienberger, S.; Lang, S.; Klug, H.
Water and environmental conflicts – can spatial information support confidence-building?

A0300; EGU2008-A-10589; HS4.2-1FR2P-0300
Wegerich, K.

Passing over the conflict. The Chu Talas basin agreement as an example case for Central Asia?

A0301; EGU2008-A-08076; HS4.2-1FR2P-0301
De Schutter, J.L.G; Dukhovny, V. A.
Aral Sea Basin Management Model

A0302; EGU2008-A-00376; HS4.2-1FR2P-0302
Nandalal, K.D.W
Computer support in resolution of conflicts in water management

A0303; EGU2008-A-11346; HS4.2-1FR2P-0303
s. Koren, s.K.; m. Bricelj, m.B.
Slovenian Cooperation on International Waters – Case Study

A0304; EGU2008-A-11612; HS4.2-1FR2P-0304
Mukerjee, A.
India: A tale of rehabilitation of people displaced due to dam construction

A0305; EGU2008-A-09216; HS4.2-1FR2P-0305
Habereder, C.; Blaschke, A.P.; Hein, T.; The Optima Lobau Team
Optimised Management Perspective for an urban Floodplain exposed to Conflicts of Interests between contradictory ecological and socio-economic Demands

A0306; EGU2008-A-10140; HS4.2-1FR2P-0306
Kubiniok, J.; Neumann, B.
Energy Biomass and Water Quality

A0307; EGU2008-A-11921; HS4.2-1FR2P-0307
Mukerjee, A.
The social side-effects of the upper veda dam project

A0308; EGU2008-A-00901; HS4.2-1FR2P-0308
Bogdanovic, S.B.
Role of Law in Water Disputes Prevention and Fostering Co-operation

A0309; EGU2008-A-00938; HS4.2-1FR2P-0309
Abadi, A.; Kirakosyan, T.
Water management practices in the Palestinian territories and Israel, cooperation in dispute time to tackle the insecurities of water shortage.

A0310; EGU2008-A-01257; HS4.2-1FR2P-0310
Menani, M.R.
Numerical indexing of the risk of conflict around the transboundary water resources

A0311; EGU2008-A-03667; HS4.2-1FR2P-0311
LEE, S; KIM, S
Testing Governance: New River Basin Management in South Korea

A0312; EGU2008-A-05026; HS4.2-1FR2P-0312
de Laat, P.
Does the cooperation of Israelis, Jordanians and Palestinians in EXACT contribute to preventing conflicts in the region?

A0313; EGU2008-A-05175; HS4.2-1FR2P-0313
Simonyan, A.; Tokmajyan, H.
Water law in Armenia: its impacts on water basin management

A0314; EGU2008-A-05208; HS4.2-1FR2P-0314
Markovic, S.B.; Krstic, S.; Svircev, Z.; Gaal, F.F.; Stojanovic, D.
Proposal for postulation and implementation of the fresh-water monitoring system based on WFD principles in the Vojvodina region, Serbia

A0315; EGU2008-A-05493; HS4.2-1FR2P-0315
Movsisyan, A.; Simonyan, A.
 Water management challenges: conflict or cooperation

A0316; EGU2008-A-05948; HS4.2-1FR2P-0316
Bonacci, O.; Lucic, I.
 Karstology – how can it help in sustainable development?

A0317; EGU2008-A-09345; HS4.2-1FR2P-0317
Zessner, M.; Ruzicka, K.; Wegricht, U.; Winkler, St.; Gabriel, O.; Svoldal, K.; Matsche, N.; Kroiss, H.
 Foam: a conflicting transboundary issue

A0318; EGU2008-A-10031; HS4.2-1FR2P-0318
Di Baldassarre, G.; Brandimarte, L.; Brath, A.; Castellarin, A.; Jean Jeune, K.; Perez, R.
 Trans-boundary river basin management: an experience in Haiti and Dominican Republic

A0319; EGU2008-A-11247; HS4.2-1FR2P-0319
Manful, D.; Wang, Y.; Biney, C.; Alfa, B.; He, Y.
 Fostering resilience through evidence-based water policies: the role of river basin authorities

A0320; EGU2008-A-11515; HS4.2-1FR2P-0320
Globevnik, L.; Vidmar, A.; Brilly, M.
 SARIB project: Data base and Tools for the Sava River Basin

A0321; EGU2008-A-11600; HS4.2-1FR2P-0321
Trelles, A.
 Technological Framework for Integrated Water Resources Management

A0322; EGU2008-A-11687; HS4.2-1FR2P-0322
Gorova, R.; Deneva, D
 Transboundary groundwater between Bulgaria and Romania - hydrogeological conditions, qualitative and chemical status

A0323; EGU2008-A-11816; HS4.2-1FR2P-0323
Harou, J.J.; Hansen, K.M.; Lund, J.R.
 Integrating surface-groundwater systems with economic demands to optimize water management – Application to California's Sacramento Valley

A0324; EGU2008-A-12074; HS4.2-1FR2P-0324
Aynekulu, Y.; Mohammed, Y.; Van der Zaag, P.; Fek Ahmed, F
 Decision support system for Lake Tana Basin, Blue Nile, Ethiopia

IS25 - HS10.4/NH2.6 Floodplain mapping and flood prevention techniques (co-organised by HS & NH)

Convener: Di Baldassarre, G.
 Co-Convener(s): Disse, M.
 Lecture Room 33
 Chairperson: N.N.

8:30–9:00; EGU2008-A-07263; IS25 - HS10.4/NH2.6-1FR1O-001
Merz, B.; Thieken, A.
 Flood risk analysis and uncertainty considerations (solicited)

9:00–9:15; EGU2008-A-08341; IS25 - HS10.4/NH2.6-1FR1O-002
Komma, J.; Bloeschl, G.
 Potential of non-structural flood mitigation measures

9:15–9:30; EGU2008-A-00372; IS25 - HS10.4/NH2.6-1FR1O-003
Osti, R.; Gautam, M.
 Flood hazard mapping and its role on flood disaster management cycle

9:30–9:45; EGU2008-A-00100; IS25 - HS10.4/NH2.6-1FR1O-004
Bertermann, D.; Rossner, R.; Schlumprecht, H.
 Optimization of the drain-Regulation in hinterlands of low Mountain ranges under the aspect of natural flood retention

9:45–10:00; EGU2008-A-08575; IS25 - HS10.4/NH2.6-1FR1O-005
Weichel, T.; Schulz, K.
 Floodplain mapping – different models to achieve a common purpose

10:00–10:15; EGU2008-A-08867; IS25 - HS10.4/NH2.6-1FR1O-006
Lane, S.N.; Yu, D.
 Numerical porosity as an alternative to roughness parameterization for urban inundation modeling (solicited)

10:15 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-05604; IS25 - HS10.4/NH2.6-1FR2O-001
Disse, M.; Yörük, A.
 Uncertainties in flood modelling

10:45–11:00; EGU2008-A-08662; IS25 - HS10.4/NH2.6-1FR2O-002
Langhammer, J.
 Use of hydromorphological mapping for location of flood risk reduction measures. Case study: Blanice river basin, Czech Republic

11:00–11:15; EGU2008-A-08472; IS25 - HS10.4/NH2.6-1FR2O-003
 Boni, G; Castelli, F.; Ferraris, L.; Pierdicca, N.; Serpico, B.; Siccardi, F.; Versace, C.
 High resolution COSMO/SkyMed SAR data analysis for flood damage detection: the pilot project Opera for flood damage detection

11:15–11:30; EGU2008-A-10985; IS25 - HS10.4/NH2.6-1FR2O-004
 Schäppi, B.; Perona, P.; Schneider, P.; Burlando, P.
 Integrating river bathymetry data with Digital Terrain Models for improved river flow simulations

11:30–11:45; EGU2008-A-05035; IS25 - HS10.4/NH2.6-1FR2O-005
Hartvich, F.; Jedlicka, J.
 Development of automated floodplain delineation tools in the GIS using progressive change of input parameters

11:45–12:00; EGU2008-A-08481; IS25 - HS10.4/NH2.6-1FR2O-006
 Segoni, S.; Morelli, S.; Kukavicic, M.; Catani, F.
 GPS-based high resolution mapping techniques in the Arno river for a correct flood risk management

12:00–12:15; EGU2008-A-12167; IS25 - HS10.4/NH2.6-1FR2O-007
Kreibich, H.; Poser, K.; Haubrock, S.
 Web-based data acquisition of flood affected people

12:15 END OF SESSION

IS25 - HS10.4/NH2.6 Floodplain mapping and flood prevention techniques (co-organised by HS & NH) – Posters

Convener: Di Baldassarre, G.

Co-Convener(s): Disse, M.

Display Time: Friday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0325; EGU2008-A-00271; IS25 - HS10.4/NH2.6-1FR3P-0325

Brandimarte, L.; Briaud, J-L.; D’Odorico, P.

Bridge scour risk: how to take into account hydrologic uncertainty?

A0326; EGU2008-A-00275; IS25 - HS10.4/NH2.6-1FR3P-0326

Castiglioni, S.

Calibration and validation of a 1D model using airborne SAR imagery

A0327; EGU2008-A-01366; IS25 - HS10.4/NH2.6-1FR3P-0327

Ozdemir, H.

Comparison of drainage morphometry and hydraulic modelling results in the view of flooding on the Havran River (Western Turkey)

A0328; EGU2008-A-02538; IS25 - HS10.4/NH2.6-1FR3P-0328

Mainerici, A.M.

The influence of the hydrotechnic structures in the mitigation of floods.

A0329; EGU2008-A-03614; IS25 - HS10.4/NH2.6-1FR3P-0329

Campedel, M.; Cozzani, V.; Di Baldassarre, G.

Flood risk assessment for industrial plants. A case study

A0330; EGU2008-A-07137; IS25 - HS10.4/NH2.6-1FR3P-0330

Mosaedi, A; Mohammadi, A; **Alaghmand, S**

Assessment of Resources of Error in River Sediment Load Estimation

A0331; EGU2008-A-07199; IS25 - HS10.4/NH2.6-1FR3P-0331

Alaghmand, S; Mohammadi, A

Hydraulic Computer Models for Preparation of River Flood Hazard Map

A0332; EGU2008-A-07289; IS25 - HS10.4/NH2.6-1FR3P-0332

Unger, F.; Rieger, D.

FloodScan – improvement and simplification of hydraulic 2d-modelling

A0333; EGU2008-A-07845; IS25 - HS10.4/NH2.6-1FR3P-0333

BALIN, I.; Nichersu, I.; Memier, M.; Marin, E.; Galisson, L.; Constantin, D.; Libralesso, N.; Mierla, M.; Covasnianu, A.; **Balin, D.**

The high resolution numerical terrain model (DTM) for the whole Romanian Danube plain: a tool for major flood risk assessment (mapping and prevention)

A0334; EGU2008-A-10101; IS25 - HS10.4/NH2.6-1FR3P-0334

Di Baldassarre, G.; Brath, A.

Flood inundation models for reconstructing historical events and for assessing the effects of levee heightening

A0335; EGU2008-A-11663; IS25 - HS10.4/NH2.6-1FR3P-0335

Ferraresi, M.; Cocchi, M.; Telo’, R.

Flood protection analysis in artificially drained basins: lithology, land use and hydrology

A0336; EGU2008-A-11668; IS25 - HS10.4/NH2.6-1FR3P-0336

Ferraresi, M.; Cocchi, M.; Telo’, R.

Flood protection analysis in artificially drained basins: hydrodynamics and ecology

A0337; EGU2008-A-11744; IS25 - HS10.4/NH2.6-1FR3P-0337

Strobl, R.O.; Forte, F.

Comparative Study of Various Techniques for the Estimation of Flood Risk Extent

A0338; EGU2008-A-11786; IS25 - HS10.4/NH2.6-1FR3P-0338

Hajizadeh, A; Raoofian, M

A new idea to alert of Tsunami using of satellites altimetry and MSL

A0339; EGU2008-A-11949; IS25 - HS10.4/NH2.6-1FR3P-0339

Camorani, G.

Numerical analysis for evaluating the effects of land-subsidence on the hydraulic behaviour of an urban drainage network

A0340; EGU2008-A-12260; IS25 - HS10.4/NH2.6-1FR3P-0340

Camorani, G.; Filippi, F.

High resolution DTM for flood inundation models

HS10.5 Monitoring and modeling snow for hydrological purposes (co-listed in CR)

Convener: Parajka, J.

Co-Convener(s): Lehning, M.

Lecture Room 31

Chairperson: N.N.

10:30–10:45; EGU2008-A-03836; HS10.5-1FR2O-001

Egli, L.; Jonas, T.; Magnusson, J.; Meister, R.

Different automatic Methods for estimating Snow Water Equivalent

10:45–11:00; EGU2008-A-06121; HS10.5-1FR2O-002

Kulesa, B.; Chandler, D.

Mapping and monitoring the spatiotemporal Evolution of Water Flow Patterns in Snow using the electrical Self Potential (SP) Method: a Feasibility Study

11:00–11:15; EGU2008-A-07429; HS10.5-1FR2O-003

Popova, V.V.; Simonov, Yu.A.; Shmakina, A.B.

Snow accumulation in four large-scale river basins of Northern Eurasia: relations to the recent climate changes and impact on runoff variations

11:15–11:30; EGU2008-A-10578; HS10.5-1FR2O-004

Dadic, R.; Mott, R.; Lehning, M.; Corripio, J.G.; Burando, P.

Modeling Winter Snow Distribution with ALPINE3D and Parameterization of Snow Erosion and Deposition for Use in Other Applications

11:30–11:45; EGU2008-A-11730; HS10.5-1FR2O-005

Kolberg, S; Gottschalk, L

Bayesian distributed calibration of snow cover parameters

11:45–12:00; EGU2008-A-11160; HS10.5-1FR2O-006

Ranzi, R.; Attinasi, G.; Crepaz, A.; Entekhabi, D.; Paloscia, S.; Pettinato, S.

Hydrological modelling and SAR monitoring of the snow-pack for the avalanche risk prevention

12:00 END OF SESSION

HS10.5 Monitoring and modeling snow for hydrological purposes (co-listed in CR) – Posters

Convener: Parajka, J.

Co-Convener(s): Lehning, M.

Display Time: Friday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0341; EGU2008-A-00891; HS10.5-1FR3P-0341

Zhang, Y.C; Li, B.L; Zhou, C.H

A simple model to map the snow cover under clouds using optical remote sensing data

A0342; EGU2008-A-02088; HS10.5-1FR3P-0342

Parajka, J.; Blöschl, G.

Reduction of cloud coverage by combining Terra and Aqua MODIS snow cover images

A0343; EGU2008-A-02094; HS10.5-1FR3P-0343

Granell, C.; Díaz, L.; Pepe, M.; Parajka, J.; Gould, M.; Rampini, A.; Blöschl, G.

Exposing snow melt models as geoprocessing services

A0344; EGU2008-A-03376; HS10.5-1FR3P-0344

Dadson, S; Parajka, J

Validation of a land-surface climate model using snow cover observations
Validation of a land-surface climate model using snow cover observations

A0345; EGU2008-A-04277; HS10.5-1FR3P-0345

Previali, M.; Godio, A.; Ferraris, S.; Morra di Cella, U.; Diotri, F.; Cremonese, E.

Temporal and spatial variability of snow pack at high elevation. (cancelled)

A0346; EGU2008-A-07058; HS10.5-1FR3P-0346

Previali, M.; Godio, A.; Ferraris, S.; Morra di Cella, U.; Diotri, F.; Cremonese, E.

Temporal and spatial variability of snow pack at high elevation.

A0347; EGU2008-A-04443; HS10.5-1FR3P-0347

Khalsa, S.J.; Aizen, V.

Variability in Central Asia seasonal snow cover during the MODIS period of record

A0348; EGU2008-A-05555; HS10.5-1FR3P-0348

Barthold, FK; Mazurkiewicz, A; Wu, J; Breuer, L; Vache, KB; Frede, HG

Application of SnowModel in a large, semiarid Watershed in Inner Mongolia

A0349; EGU2008-A-07506; HS10.5-1FR3P-0349

Hejduk, A.; Banasik, K.

Snowmelt Floods after Rain-on-snow Events in small, lowland Catchment

A0350; EGU2008-A-09157; HS10.5-1FR3P-0350

Eckart, J.; Reusser, D.E.; Zehe, E.; Bernhofer, C.
Spatial variability of temperature for improved snowmelt forecasting

A0351; EGU2008-A-09171; HS10.5-1FR3P-0351

Macchiavello, G.; Gabellani, S.; Rudari, R.; Boni, G.
Calibration of a snow model with MODIS data for flood simulation

A0352; EGU2008-A-09812; HS10.5-1FR3P-0352

Holzmann, H.; Koboltschnig, G.; Schöner, W.

Monitoring and modeling of snow accumulation and melt for an Austrian Alpine basin

A0353; EGU2008-A-11359; HS10.5-1FR3P-0353

Kellerer-Pirklbauer, A.; Avian, M.; Lieb, G.K.; Pilz, A.
Automatic Digital Photography for Monitoring Snow Cover Distribution, Redistribution and Duration in alpine Areas (Hintereis Langtal Cirque, Austria)

A0354; EGU2008-A-12328; HS10.5-1FR3P-0354

Gan, T.Y.; Balaji, R.; Barry, R.

Changes to North American Snowpacks from 1979-2004 based on the Snow Water

HS10.7 Hydrological change: detecting change of hydrological behaviour (co-listed in NP)

Convener: Lischeid, G.

Co-Convener(s): Lange, H.

Lecture Room 32

Chairperson: N.N.

8:30–8:45; EGU2008-A-06693; HS10.7-1FR10-001

Beven, K J; Romanowicz, R; Young, P C; Rose, S

An event classification approach to the identification of hydrological change

8:45–9:00; EGU2008-A-08104; HS10.7-1FR10-002

Eshleman, K; McCormick, B; Griffith, J; **Townsend, P**

Detecting hydrologic responses of land use change at the river-basin scale

9:00–9:15; EGU2008-A-11508; HS10.7-1FR10-003

Kuells, C.J.; Wenninger, J.; Klaus, J.; Huxol, S.; Moritz, K.; Zabori, J.

Significant trends, underlying processes and indicators - the validation of hydrological change

9:15–9:30; EGU2008-A-05099; HS10.7-1FR10-004

Chen, Y.D.; Zhang, Q; Yang, T

Analysis of hydrologic alternations in the rapidly changing environment in the Pearl River Delta, South China

9:30–9:45; EGU2008-A-07809; HS10.7-1FR10-005

Rossi, A.; Massei, N.; Laignel, B.; Sebag, D.; Copard, Y.; Van Metre, P.C.

The response of the Mississippi River to climate fluctuations and reservoir construction as indicated by wavelet analysis of water and sediment fluxes, 1950-1975

9:45–10:00; EGU2008-A-02690; HS10.7-1FR10-006

Gudmundsson, L.; Lischeid, G.; Lange, H.

In phase or not in phase? Exploring the spatial structure of long term components of multivariate hydrological time series

10:00 END OF SESSION

HS10.7 Hydrological change: detecting change of hydrological behaviour (co-listed in NP) – Posters

Convener: Lischeid, G.

Co-Convener(s): Lange, H.

Display Time: Friday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0355; EGU2008-A-06446; HS10.7-1FR3P-0355

Heyden, H.; Barthel, B.

Analysis of the effects to Groundwater heads in the Upper Danube Catchment due to change in climate and landuse

A0356; EGU2008-A-10880; HS10.7-1FR3P-0356
Birsan, M-V; Zaharia, L.; Branesco, E.; Chendes, V
Trends in Romanian streamflow over the second half of the 20th century

A0357; EGU2008-A-02717; HS10.7-1FR3P-0357
Buchtele, J.; Buchtelova, M.; Fortova, M.; **Koskova, R.**
Tendencies in the flow regime of the Elbe River in the hundred years series

A0358; EGU2008-A-08769; HS10.7-1FR3P-0358
De Girolamo, A. M.; Lo Porto, A.; Abouabdillah, A.; De Luca, D.; Santese, G.
Investigating the hydrological regimes in some Mediterranean streams using a flashiness index

A0359; EGU2008-A-05910; HS10.7-1FR3P-0359
Gao, Y
Development of Representative Indicators of Hydrological Alteration Using Principal Component Analysis

A0360; EGU2008-A-08158; HS10.7-1FR3P-0360
Klaus, J; Kuells, C; Stichler, W
Changes in isotopic composition of precipitation in Germany during the last three decades

A0361; EGU2008-A-06057; HS10.7-1FR3P-0361
Kyoung, MS; Sivakumar, B; Kim, HS; Kim, BS
Nonlinear characteristics of high-resolution rainfall dynamics in Korea

A0362; EGU2008-A-02713; HS10.7-1FR3P-0362
Zgonik, T; Rusjan, S; **Mikoš, M**
Stability of Runoff Regimes of Slovenian Rivers as Determined by the Nováky Entropy Type Index

A0363; EGU2008-A-10111; HS10.7-1FR3P-0363
Fleckenstein, J.H.; Peiffer, S.; Weyer, C.; Lischeid, G.
Identifying Key Processes for optimized modeling of Water and Solute Dynamics in the Lehstenbach Watershed

A0364; EGU2008-A-01017; HS10.7-1FR3P-0364
Bodoque, J.M.; Olivera, F
Urbanization and its effect on runoff generation in the Ripoll River watershed, Spain

A0365; EGU2008-A-01432; HS10.7-1FR3P-0365
Bormann, H.; Klaassen, K.
On the seasonal and land use controlled variability of soil hydraulic model parameterisation

A0366; EGU2008-A-02987; HS10.7-1FR3P-0366
Brilly, M; Horvat, A; Matthews, D; Sraj, M
Climate change impact on mean annual river flows

A0367; EGU2008-A-06411; HS10.7-1FR3P-0367
Jamil, A.B.M; Loong, W.C; Venneker, R.; Uhlenbrook, S.
Land-use change impacts on storm-runoff generation: scenarios of land use change and simulation of hydrological response in urban, agricultural and forested catchment of Peninsular Malaysia

A0368; EGU2008-A-00619; HS10.7-1FR3P-0368
Lotsari, E.; Alho, P.; Käyhkö, J.
The Role of Datasets in assessing fluvial-geomorphic Dynamics of a subarctic Catchment under changing climatic Conditions

A0369; EGU2008-A-04510; HS10.7-1FR3P-0369
Onuchin, A.; Burenina, T.
Forest fire disturbances and river run-off changes in Nizhnee Priangarye

A0370; EGU2008-A-05359; HS10.7-1FR3P-0370
Tetzlaff, D.; Soulsby, C.; Malcolm, I.A.; Brewer, M.J.
Response of emergent behaviour in headwater catchments to environmental change

A0371; EGU2008-A-03603; HS10.7-1FR3P-0371
Hellebrand, H.; Van den Bos, R.; Juilleret, J.; Hoffmann, L.; Krein, A.; Pfister, L.
Spatio-temporal variability of hydrological behavior patterns in meso-scale basins of the Rhineland Palatinate (1972-2002)

A0372; EGU2008-A-09573; HS10.7-1FR3P-0372
Seeling, S.; Hellebrand, H.; Nink, S.; Funkenberg, T.
Afforestation in low mountain ridges, mapped by remote sensing techniques, and it's relation to the hydrological behaviour of Glan tributaries

HS10.8 Hydrological Change: Predicting Variation of Hydrological Behaviour (co-listed in AS & CL)

Convener: Kunstmann, H.
Co-Convener(s): Bari, M., Hagemann, S., Will, A.
Lecture Room 32
Chairperson: HAGEMANN, S.

10:30–10:45; EGU2008-A-07534; HS10.8-1FR2O-001
Smiatek, G.; **Kunstmann, H.;** Knoche, H.R.; Marx, A.
Evaluation of Regional Climate Models for the Alpine Space and Implications for Hydrological Impact Analysis

10:45–11:00; EGU2008-A-04093; HS10.8-1FR2O-002
Frigon, A.; Slivitzky, M.; Music, B.; Caya, D.
Internal variability of the Canadian RCM's hydrologic variables at the basin scale

11:00–11:15; EGU2008-A-03853; HS10.8-1FR2O-003
Dadson, S; Bell, V; Jones, R
Evaluation of a grid-based river flow model using regional climate model output over Europe

11:15–11:30; EGU2008-A-04573; HS10.8-1FR2O-004
Feyen, L.; Dankers, R.
Will Europe see more frequent and severe river flow droughts in the future?

11:30–11:45; EGU2008-A-02827; HS10.8-1FR2O-005
Coppola, E.; Giorgi, F.; Gao, X.; Mariotti, L.; Tomasetti, B.; Verdecchia, M.
Impact of Climate Change in the Po valley: downscaling high resolution RegCM output by coupling with ChYM hydrological model

11:45–12:00; EGU2008-A-00949; HS10.8-1FR2O-006
Joyce, LR; **Bari, MA;** Smettem, KR
The Impacts of Climate Change and Variability in the

12:00 END OF SESSION

HS10.8 Hydrological Change: Predicting Variation of Hydrological Behaviour (co-listed in AS & CL) – Posters

Convener: Kunstmann, H.
Co-Convener(s): Bari, M., Hagemann, S., Will, A.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0373; EGU2008-A-00950; HS10.8-1FR3P-0373
Bari, MA; Charles, SP; Kitsios, A; Coppolina, M; Boniecka, L; Crossley, K; Joyce, LR
Streamflow reduction due to projected climate change in the southwest of Western Australia – a review

A0374; EGU2008-A-01431; HS10.8-1FR3P-0374
Bormann, H.
Assessing the effect of observed climate change on potential evapotranspiration: A comparison of different models

A0375; EGU2008-A-01758; HS10.8-1FR3P-0375
van Dijk, A.; Kirby, M.; Mainuddin, M.; Peña-Arancibia, J.; Guerschman, J.-P.; Liu, Yi; Marvanek, S.
River water balance accounting to assess uncertainty in 2030 water resources projections for the Murray-Darling Basin, Australia

A0376; EGU2008-A-02303; HS10.8-1FR3P-0376
Ludwig, R.; Turcotte, R.; Vescovi, L.; Braun, M.; May, I.; Cyr, J.F.; Fortin, L.G.; Chaumont, D.; Biner, S.; Chartier, I.
The role of hydrological model complexity and uncertainty in climate change impact assessment

A0377; EGU2008-A-03108; HS10.8-1FR3P-0377
Schoups, G.; Hopmans, J.W.; Maurer, E.P.
Projected Impacts of Climate Change on Irrigated Agriculture in the San Joaquin Valley, California

A0378; EGU2008-A-03785; HS10.8-1FR3P-0378
Wagner, S.; Kunstmann, H.; Bárdossy, A.
Propagation of precipitation uncertainties in water balance estimations

A0379; EGU2008-A-04039; HS10.8-1FR3P-0379
Haas, E.; Knoche, H.-R.; **Kunstmann, H.**
Estimation of Precipitation Recycling by Evapotranspiration Tagging

A0380; EGU2008-A-06579; HS10.8-1FR3P-0380
Quintana Seguí, P.; Martin, E.; Habets, F.; Boe, J.; Ribes, A.; Somot, S.; Noilhan, J.
Assessing the impact of Climate Change on continental surface hydrology and discharge in France

A0381; EGU2008-A-08438; HS10.8-1FR3P-0381
Mares, I.; Mares, C.; Stanciu, A.; Chelcea, S.; Mihailescu, M.
A hidden Markov model for downscaling atmospheric circulation patterns to precipitation along Danube basin

A0382; EGU2008-A-08847; HS10.8-1FR3P-0382
Baguis, P.; Roulin, E.
Assessment of RCM climate change scenarios for hydrological impact studies in Belgium

A0383; EGU2008-A-09421; HS10.8-1FR3P-0383
Holzmann, H.; Formayer, H.; Lehmann, Th.
Change of hydrological response due to climate change scenarios for the Lainsitz river basin in Austria

A0384; EGU2008-A-09946; HS10.8-1FR3P-0384
Duethmann, D.; Anthony, S.; Fawcett, L.; King, J.; Shepherd, M.; Whitehead, J.
Impact of Climate Change on the Availability of Surface Water for Irrigation in England and Wales

A0385; EGU2008-A-11798; HS10.8-1FR3P-0385
Radtke, K.; Keuler, K.; Will, A.
Climate change of precipitation derived from an ensemble simulation over Europe with the regional climate model CLM

A0386; EGU2008-A-12375; HS10.8-1FR3P-0386
Saeed, F.; Hagemann, S.
Assessing the Characteristics of the Regional Climate that are essential for studies of hydrological changes over Pakistan

HS10.12 Hydrological measurements: new technologies for characterising hydrological and hydrochemical behaviour

Convener: Buytaert, W.
Co-Convener(s): Freer, J., Krause, S.
Lecture Room 31
Chairperson: N.N.

8:30–8:45; EGU2008-A-10685; HS10.12-1FR1O-001
Zhang, H.

In situ measurements of solutes in aquatic systems (solicited)

8:45–9:00; EGU2008-A-10206; HS10.12-1FR1O-002
Gräff, Th.; Morgner, M.; Bauer, A.; **Zehe, E.;** Schläger, S.; Kreutzfeld, B.; Thoss, H.; Güntner, A.
Spatial TDR a new approach for observing 4d- soil moisture dynamics at the field scale: promise, progress, problems (solicited)

9:00–9:15; EGU2008-A-08180; HS10.12-1FR1O-003
Jordan, P.; Arnscheidt, J.
New insights from high-resolution phosphorus monitoring (solicited)

9:15–9:30; EGU2008-A-01849; HS10.12-1FR1O-004
McIntyre, N.; Marshall, M.
Acoustic Doppler Velocity meters for low-cost multi-site gauging of streamflow

9:30–9:45; EGU2008-A-08115; HS10.12-1FR1O-005
Thamm, H.-P.; Hafeez, M.; Kahn, S.
Derivation of land use / land cover and surface temperature in a high spatial resolution with a remote controlled UAV

9:45–10:00; EGU2008-A-06618; HS10.12-1FR1O-006
Klock, E.; Stadler, H.; Skritek, P.; Kollmitzer, C.
Quality surveillance of hydrological data by an online monitoring system

10:00 END OF SESSION

HS10.12 Hydrological measurements: new technologies for characterising hydrological and hydrochemical behaviour – Posters

Convener: Buytaert, W.
Co-Convener(s): Freer, J., Krause, S.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 13:30–15:00
Poster Area Hall A
Chairperson: N.N.

A0387; EGU2008-A-01939; HS10.12-1FR3P-0387
Gamaro, P
Use of a side looking Doppler velocity meter for measuring discharge on the Parana river for inflow to Itaipu hydroelectric reservoir

A0388; EGU2008-A-02476; HS10.12-1FR3P-0388
Luxemburg, WMJ.; Hoes, AC; Westhoff, MC; van de Giesen, NC
Locating seepage in water courses in polders in the Netherlands by distributed temperature sensing

A0389; EGU2008-A-02959; HS10.12-1FR3P-0389
Barrington, D.; Ghadouani, A
Application of high resolution spectral fluorescence and ELISA to assess the removal of cyanobacteria and cyanobacterial toxins from water systems

A0390; EGU2008-A-03064; HS10.12-1FR3P-0390
Westhoff, M.C.; Bogaard, T.A.; Savenije, H.H.G
Temperature observations of shallow subsurface water inflows in a first order stream using Distributed Temperature Sensing

A0391; EGU2008-A-04000; HS10.12-1FR3P-0391
Stingaciu, L.; Pohlmeier, A.; van Dusschoten, D.; Blümner, P.; Vereecken, H.; Stapf, S.; Ardelean, I
High- and Low-Field NMR Relaxometry in Homogenized Model Soils

A0392; EGU2008-A-04904; HS10.12-1FR3P-0392
Trubilowicz, J.; Weiler, M
Motes for forest hydrology – is the time right?

A0393; EGU2008-A-06700; HS10.12-1FR3P-0393
van der Ploeg, M.J.; Gooren, HPA; Hoogendam, CW; Bakker, G; Huiskes, C; Koopal, LK; Kruidhof, H; de Rooij, GH
Polymer tensiometers: Comparing direct measurement of soil water potential in dry soils with TDR soil moisture readings converted with water retention curves

A0394; EGU2008-A-06743; HS10.12-1FR3P-0394
Angeli, N.; Dambrine, E.; Boudot, J.P.; Viville, D.; Nys, C.; Richter, C.; Party, J.P.; Pollier, B.; Guérol, F.; Probst, A.
Stream water composition changes in the Vosges Mountains (NE France): long-term study and liming experiment.

A0395; EGU2008-A-06919; HS10.12-1FR3P-0395
Schuetz, T.; Lange, J.; Mose, R.; Ghostine, R.
Land-based infrared thermography in combination with water temperature as a validation-tool for hydrodynamic modelling of small constructed wetlands

A0396; EGU2008-A-08708; HS10.12-1FR3P-0396
Thamm, H.-P.; Whitton, M.; Hendrikse, J.H.M
Derivation of digital terrain models in a very high spatial resolution with a remote controlled ultra light air vehicle

A0397; EGU2008-A-09194; HS10.12-1FR3P-0397
Strause, J.; Brown, D.; Campbell, C.; **Cobos, D.;** Campbell, G.
Field-Scale Distributed Wireless Network for Monitoring Dynamic Hydrologic Processes

A0398; EGU2008-A-09861; HS10.12-1FR3P-0398
Ottoufelling, S.; Weilhartner, A.; v.d. Kammer, F.; Battin, T. J.; Hofmann, T.
The behaviour, fate and effects of TiO₂ nanoparticles in river streams - a microcosm experiment

A0399; EGU2008-A-11013; HS10.12-1FR3P-0399
Buytaert, W
Integrated environmental modelling - an R approach

HS10.14 Catchment modelling and process understanding

Convener: Moussa, R.
Co-Convener(s): Gallart, F., Lawler, D., Andrieu, H.
Lecture Room 31
Chairperson: N.N.

13:30–13:45; EGU2008-A-08465; HS10.14-1FR3O-001
McGrath, G.S.; Hinz, C.; Sivapalan, M.
Threshold flow events: Interrelationships between the variability of their triggering, their magnitude and soil moisture (solicited)

13:45–14:00; EGU2008-A-08070; HS10.14-1FR3O-002
Broda, S.; Larocque, M.; Paniconi, C.
Coupling of hillslope-storage Boussinesq and analytic element groundwater models for layered aquifer systems

14:00–14:15; EGU2008-A-09415; HS10.14-1FR3O-003
Šanda, M.; Nemcová, R.; Císlarová, M
Combined Approach in the Watershed Response Examination Employing Stable Isotopes

14:15–14:30; EGU2008-A-09854; HS10.14-1FR3O-004
Blume, T.; Bronstert, A.; Zehe, E.
Improving process understanding in a data-scarce catchment by modelling at different spatial scales and different levels of complexity

14:30–14:45; EGU2008-A-05890; HS10.14-1FR3O-005
Hancock, G. R.; Martinez, C.; Wells, P.; Kalma, J.; Boland, L.
An assessment of digital elevation models (DEMs) and their ability to capture geomorphic and hydrologic properties at the catchment scale

14:45–15:00; EGU2008-A-03642; HS10.14-1FR3O-006
Merz, R.; Blöschl, G
Process controls on the statistical flood moments

15:00 COFFEE BREAK

Chairperson: N.N.

15:30–15:45; EGU2008-A-04695; HS10.14-1FR4O-001
Seeger, M.; Butzen, V.; Wirtz, S.; Casper, M.
Spatial distribution and temporal variability of runoff processes in Mediterranean Mountain environments– coupling experimental and modeling approaches

15:45–16:00; EGU2008-A-02469; HS10.14-1FR4O-002
Dalen, E.N.; Kirkby, M.J.; Bracken, L.; Chapman, P.J.; Irvine, B.
Factors influencing runoff generation, and estimates of runoff in a semi-arid area, SE Spain.

16:00–16:15; EGU2008-A-11274; HS10.14-1FR4O-003
Séguis, L.; Kamagaté, B.; Favreau, G.; Galle, S.; Le Barbé, L.; Peugeot, C.; Gosset, M.; Descloitres, M.; Wubda, M.
Streamflow origins in a Soudanian crystalline bedrock catchment. Quantification of the different terms and variability. Implications for future modelling and new field investigations.

16:15–16:30; EGU2008-A-08452; HS10.14-1FR4O-004
Fenicia, F.; Avdeeva, Y.; Savenije, H.H.G; de Wit, M.J.M
Modelling the long-term change in the hydrological regime of the Meuse and Mosel catchments. Effect of active forestry?

16:30–16:45; EGU2008-A-04003; HS10.14-1FR4O-005
Gascoin, S.; Ducharme, A.; Ribstein, P.; Carli, M.; Habets, F.
Adaptation of a catchment-based land surface model to the hydrogeological setting of the Somme River basin (France)

16:45–17:00; EGU2008-A-09228; HS10.14-1FR4O-006
Odoni, N. A.; Lane, S. N.
Data-theoretic approaches to modelling catchment management impacts on flood magnitude

17:00 END OF SESSION

HS10.14 Catchment modelling and process understanding – Posters

Convener: Moussa, R.

Co-Convener(s): Gallart, F., Lawler, D., Andrieu, H.

Display Time: Friday, 08:00–19:30

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

Poster Area Hall A

Chairperson: N.N.

A0400; EGU2008-A-07260; HS10.14-1FR2P-0400

Muzylo, A.; Llorens, P.; Domingo, F

Variability of interception canopy parameters with the event weather conditions and its effect on rainfall interception modelling.

A0401; EGU2008-A-11440; HS10.14-1FR2P-0401

Bogaart, P.; Hurkmans, R.; Teuling, A.; Troch, P.; Uijlenhoet, R.

Low-dimensional modelling of large-scale hillslope hydrology

A0402; EGU2008-A-02730; HS10.14-1FR2P-0402

Chiffard, P.; Didszun, J.; Zepp, H.

Analysis of subsurface runoff processes and their role for the catchment response in low mountain ranges (Sauerland, Germany)

A0403; EGU2008-A-09510; HS10.14-1FR2P-0403

Pavelková, H.; **Šanda, M.**; Vogel, T

Hillslope soil profile water regime by dual domain modeling with the use of stable oxygen isotope

A0404; EGU2008-A-10196; HS10.14-1FR2P-0404

Garel, E.; Cognard-Plancq, A-L.; Ruy, S.; Marc, V.; Emblanch, C.; Malet, J-P.; Debieche, T-H.; Klotz, S.; Pradzynska, D.M.; Travelletti, J.

Investigating the areal variability of infiltration in heterogeneous material : the case of the black marl of south Alps

A0405; EGU2008-A-09750; HS10.14-1FR2P-0405

Blume, T.; Zehe, E.; Bronstert, A.

Field observations of persistent preferential flow paths in volcanic ash soils as a result of hydrophobicity

A0406; EGU2008-A-05387; HS10.14-1FR2P-0406

Hanel, M.; **Maca, P**

Runoff prediction with partial mutual information as tool for identification and construction of input variables for artificial neural networks

A0407; EGU2008-A-09834; HS10.14-1FR2P-0407

Meißl, G.; Geitner, C.; Stötter, J.; Schöberl, F.

Comparison of rule-based approaches to identify dominant runoff processes in alpine catchments

A0408; EGU2008-A-03179; HS10.14-1FR2P-0408

Hrachowitz, M.; Soulsby, C.; Tetzlaff, D.; Dawson, J.; Dunn, S.

Identifying runoff processes from long term tracer data: do multiple tracers help?

A0409; EGU2008-A-02241; HS10.14-1FR2P-0409

Goñi, M.; Gimena, F.N.; **López, J.J.**

An analysis of three instantaneous unit hydrographs based on the Beta density function

A0410; EGU2008-A-04532; HS10.14-1FR2P-0410

Bulygina, N.; Rode, M.

Top-Down Watershed Behavior Description

A0411; EGU2008-A-09556; HS10.14-1FR2P-0411

Branger, F.; Braud, I.; Viallet, P.; Debionne, S.

An “object-based” modelling approach to assess the influence of landscape management practices on a small agricultural catchment

A0412; EGU2008-A-08228; HS10.14-1FR2P-0412

Reusser, D. E.; Zehe, E.

Increased process understanding from modelling through a combination of error and sensitivity analysis.

A0413; EGU2008-A-01513; HS10.14-1FR2P-0413

Keshta, N.; Elshorbagy, A.; **El-Baroudy, I.**

Developing a generic system dynamics watershed (GSDW) model to assess the hydrologic performance of reconstructed and natural watersheds

A0414; EGU2008-A-12218; HS10.14-1FR2P-0414

Ouessar, M.; Bruggeman, A.; Abdelli, F.; Mohtar, R.; Gabriels, D.

Use of SWAT for assessing the effect of Land Use Changes in southern Tunisia

A0415; EGU2008-A-11851; HS10.14-1FR2P-0415

Pancescu, M.; **Birsan, M.-V.**; Matreata, M.

Flash-flood modelling of small Romanian catchments with the Vflo distributed model

A0416; EGU2008-A-09087; HS10.14-1FR2P-0416

Balin, D.; Goetzing, J.; Lee, H.; Sbaitha, H.; Rode, M.; Bardossy, A.

Impact of rainfall spatial uncertainty on distributed runoff modeling: the Weisse Elster case study, Germany

A0417; EGU2008-A-07010; HS10.14-1FR2P-0417

Natkhin, M.; Steidl, J.; Dietrich, O.

Quantifying the influence of climate and forest management on the lake water balance in a lowland catchment in Germany

A0418; EGU2008-A-07803; HS10.14-1FR2P-0418

Kumar, R.; Samaniego, L.; Attinger, S.

Implementation of a process-based distributed mesoscale hydrologic model

A0419; EGU2008-A-06359; HS10.14-1FR2P-0419

Samaniego, L.; Kumar, R.; Attinger, S.

Soil moisture parameter regionalization for a mesoscale hydrologic model

A0420; EGU2008-A-05481; HS10.14-1FR2P-0420

Johst, M.; Casper, M.; Grigoryan, G.; Herbst, M.

Suitability of rainfall runoff models for the assessment of extreme floods in meso-scale basins

A0421; EGU2008-A-11621; HS10.14-1FR2P-0421

Kulhavý, Z.; Tlapáková, L.; Doležal, F.

Integrated monitoring, real-time modelling and forecasting of hydrological processes in small agricultural and forest catchments

A0422; EGU2008-A-11361; HS10.14-1FR2P-0422

Ghesquiere, J.; Hallema, D.; Moussa, R.

Spatially distributed modelling of extreme flood events with overbank flow on farmed catchments

A0423; EGU2008-A-08369; HS10.14-1FR2P-0423

MOUSSA, R

Significance of the Nash-Sutcliffe efficiency measure for linear rise and exponential recession in event based flood modelling

A0424; EGU2008-A-11048; HS10.14-1FR2P-0424

Szabó, J.A.; Gierk, M.; Wachter, K.

An approach for distributed parameter optimization of LISFLOOD hydrological model using efficient hybrid optimization procedure

A0425; EGU2008-A-08848; HS10.14-1FR2P-0425

Lautenbach, S.L.; Seppelt, R.S.

Comparing semi-distributed and distributed conceptual rainfall-run-off models – trade-off between uncertainty and model efficiency?

A0426; EGU2008-A-05227; HS10.14-1FR2P-0426

Casper, M.; Sauer, T.; Schobel, S.

How to reach behavioural physically based models by reducing parameter uncertainty

A0427; EGU2008-A-02600; HS10.14-1FR2P-0427

Singh, S. K.; Bardossy, A.

Influence of time-varying parameterization on hydrological models

A0428; EGU2008-A-04105; HS10.14-1FR2P-0428

Shbaita, H.; Balin, D; Rode, M

Uncertainty analysis as a comparison tool between different scales of aggregation

A0429; EGU2008-A-05750; HS10.14-1FR2P-0429

Kavetski, D.; Schaeffli, B; Renard, B; Thyer, M; Fenicia, F

Improving conceptual rainfall-runoff models using Bayesian total error analysis

A0430; EGU2008-A-02311; HS10.14-1FR2P-0430

Renard, B.; Thyer, M.; Kuczera, G.; Kavetski, D.; Franks, S.

Bayesian total error analysis for hydrologic models: perspectives for regionalisation