
EGU 2008 Meeting Programme

Soil System Sciences

Monday

SSS5 Wildfire effects on carbon storage in soil and vegetation: long-term gain or loss? (co-listed in NH)

Convener: Doerr, S.
Co-Convener(s): Mataix-Solera, J., Raison, J.
Lecture Room 16
Chairperson: DOERR, S.H.

8:30–9:00; EGU2008-A-02946; SSS5-1MO1O-001

Raison, R J; Kirschbaum, M U F

Fire and the carbon balance of terrestrial ecosystems (solicited)

9:00–9:15; EGU2008-A-00400; SSS5-1MO1O-002

Scott, A.C.; Collinson, M.E.; Glasspool, I.J.

Pre-Quaternary fires, the carbon cycle and effects on the Earth system.

9:15–9:30; EGU2008-A-07960; SSS5-1MO1O-003

de Groot, W.J.; Flannigan, M.D.; Cantin, A.

Changing fire regimes and carbon storage in the Canadian boreal forest (solicited)

9:30–9:45; EGU2008-A-07216; SSS5-1MO1O-004

Balster, H.; Lehsten, V; Tansey, K; Arneth, A; Thonicke, K; Spessa, A

Estimating carbon emissions from fires in Africa using remote sensing and modelling (solicited)

9:45–10:00; EGU2008-A-00567; SSS5-1MO1O-005

Page, S.; Hoscilo, A; Tansey, K

Wildfire effects on tropical peatlands (solicited)

10:00 COFFEE BREAK

Chairperson: RAISON, J.

10:30–10:45; EGU2008-A-02797; SSS5-1MO2O-001

Rumpel, C.; Ba, A; Darboux, F; Chaplot, V; Planchon, O

Quantification of carbon export after fire by water erosion (solicited)

10:45–11:00; EGU2008-A-00750; SSS5-1MO2O-002

Lopez-Capel, E.; Manning, D.A.C

Influence of forest fires on labile, recalcitrant and refractory carbon soil pools: Evidence from Thermal analysis-Quadrupole mass spectrometry- Isotope Ratio mass spectrometry (solicited)

11:00–11:15; EGU2008-A-00705; SSS5-1MO2O-003

Ascough, P. L.; Bird, M. I; Scott, A. C; Collinson, M. E; Snape, C. E; Wormald, P

Pyrogenic carbon: influences upon structure and environmental degradation potential (solicited)

11:15–11:30; EGU2008-A-03738; SSS5-1MO2O-004

Knicker, H.; Dick, D. P.; Dalmolin, R.S.D

Survival of pyrogenic organic C in Brazilian grassland soils (solicited)

11:30–11:45; EGU2008-A-02291; SSS5-1MO2O-005

Rein, G

Severity, mass loss and emissions from wildland smouldering fires (solicited)

11:45 END OF SESSION

SSS5 Wildfire effects on carbon storage in soil and vegetation: long-term gain or loss? (co-listed in NH) – Posters

Convener: Doerr, S.

Co-Convener(s): Mataix-Solera, J., Raison, J.

Display Time: Monday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: MATAIX-SOLERA, J.

XY0649; EGU2008-A-02530; SSS5-1MO5P-0649

Spessa, A.; Thonicke, K; Wooster, M

The Importance of Fire in the Earth System: Simulation Models, EO Data and Future Prospects

XY0650; EGU2008-A-02594; SSS5-1MO5P-0650

Worrall, F.; Clay, G

Could managed burning lead to increased carbon storage?

XY0651; EGU2008-A-06650; SSS5-1MO5P-0651

Alexis, M.A.; Rasse, D.P.; Rumpel, C.; Bardoux, G.;

Péchet, N.; Mariotti, A.

Ecosystem C budget during a scrubland fire

XY0652; EGU2008-A-06555; SSS5-1MO5P-0652

Doerr, SH.; Cerda, A; Bryant, R

The role of ash in carbon fluxes in fire-affected environments

XY0653; EGU2008-A-01607; SSS5-1MO5P-0653

Cerdà, A.; Bodí, M.B.; Doerr, S.H.; Mataix-Solera, J.

The effects of ash on the soil system in fire-prone environments: an overview of the state-of-the-art and research gaps (solicited)

XY0654; EGU2008-A-01280; SSS5-1MO5P-0654

Mataix-Solera, J.; Navarro, M.A.; Zornoza, R.; Guer-

rero, C.; Gómez, I.; García-Orenes, F.; Bárcenas, G.M.

Fire effects on soil organic carbon in turn affecting physical, chemical and biochemical soil properties

XY0655; EGU2008-A-00753; SSS5-1MO5P-0655

Lopez-Capel, E.; De la Rosa, J.M.; Gonzalez-Pérez, J.A.;

Gonzalez-Vazquez, R; Gonzalez-Vila, J.F.; Manning, D.A.C

Monitoring of changes in C and N forms in soils affected by forest fires by thermal analysis and pyrolysis/GC-MS

XY0656; EGU2008-A-00269; SSS5-1MO5P-0656

Campo, J.; Andreu, V.; Gimeno-García, E.; González-Pelayo, O.; Rubio, J.L.

Medium term evolution of organic matter in under canopy and bare soils of a Mediterranean environment under different fire intensities (solicited)

XY0657; EGU2008-A-04202; SSS5-1MO5P-0657
Hilscher, A.; Siewert, C.; Knicker, H.
Black Carbon loss and structural modifications of different
pyrogenic materials by microbiology activities

XY0658; EGU2008-A-12299; SSS5-1MO5P-0658
Bryant, R; **Doerr, SH;** Frewer, M; Kong, CH
Vertical redistribution of organic matter causing water
repellency in soil following simulated wildfire

XY0659; EGU2008-A-08186; SSS5-1MO5P-0659
Atanassova, I.; Doerr, S.
Changes in organic compounds characteristics associated
with heat-induced increases and elimination of water repellency in soils

SSS9 Soils as a sink, regulator and source of diffuse pollutants

Convener: Burauel, P.
Co-Convener(s): Quinton, J.
Lecture Room 23
Chairperson: BURAUDEL, P.

8:30–8:45; EGU2008-A-02234; SSS9-1MO10-001
Allaire, S.E.; Dadfar, H.; De Jong, R.; van Bochove, E.;
Denault, J.-T.; Thériault, G.
Crack flow as a component of risk indicator of water
contamination

8:45–9:00; EGU2008-A-09911; SSS9-1MO10-002
Cavoski, I.; Caboni, P.; Sarais, G.; Miano, T.
Degradation of rotenone in soils and influence of temperature
fluctuation on its persistence

9:00–9:15; EGU2008-A-03029; SSS9-1MO10-003
Leita, L.; Genovesi, S.; Sequi, P.; Andrighetto, I.; Sor-
gato, M.C.; Bertoli, A.
Prion - soil Interaction and direct detection of soil-bound
prions

9:15–9:30; EGU2008-A-09578; SSS9-1MO10-004
Cheyns, K.; Mertens, J.; Smolders, E.; Springael, D.
Effect of Dissolved Organic Matter (DOM) on the degra-
dation of atrazine in soil: batch and column experimental
results and modeling.

9:30–9:45; EGU2008-A-06624; SSS9-1MO10-005
Jablonowski, N.D.; Modler, J.; Burauel, P.
Bioaccessibility of environmentally aged soil-bound 14C-
atrazine residues

9:45–10:00; EGU2008-A-08021; SSS9-1MO10-006
Nehls, T.; Wessolek, G.
Paved urban soils as sources and sinks for heavy metals

10:00 END OF SESSION

SSS9 Soils as a sink, regulator and source of diffuse pollutants – Posters

Convener: Burauel, P.
Co-Convener(s): Quinton, J.
Display Time: Monday, 08:00–19:30
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Poster Area Halls X/Y
Chairperson: QUINTON, J.

XY0660; EGU2008-A-00851; SSS9-1MO5P-0660
S. Djogo, S. Dj; D. Manojlovic, D. M.; S. Razic, S. R.
A Comparative Study of Copper Levels in the Soil from
Plantation of Medicinal Plants

XY0661; EGU2008-A-00906; SSS9-1MO5P-0661
Rennert, T.; Kaufhold, S.; Brodowski, S.; Mansfeldt, T.
Interactions of ferricyanide with humic soils and charred
straw

XY0662; EGU2008-A-02729; SSS9-1MO5P-0662
Margon, A.; Pastrello, A.; Arcon, I.; Contin, M.; Leita, L.
Humic acids may favour the persistence of hexavalent
chromium in soil

XY0663; EGU2008-A-03670; SSS9-1MO5P-0663
Deasy, C; Quinton, J.N.; Silgram, M.; Stevens, C.J.; Jack-
son, R.; Bailey, A.
Mitigation Options for Phosphorus and Sediment (MOPS):
exploring the potential of in-field treatments to reduce
surface runoff losses from arable soils to water

XY0664; EGU2008-A-04607; SSS9-1MO5P-0664
Kreschnak, C.; Ingwersen, J.; Streck, T.
Heavy metal accumulation in flood detention basins

XY0665; EGU2008-A-05714; SSS9-1MO5P-0665
Itoh, Y.; Imaya, A.; Ohnuki, Y.; Yoshinaga, S.
Influence of the physicochemical characteristics of Japanese
forest soils on their retention of heavy metals.

XY0666; EGU2008-A-06131; SSS9-1MO5P-0666
Kodes, V.; Kozak, J.
Pesticide information system and its relationship with the
Czech soil information system

XY0667; EGU2008-A-06503; SSS9-1MO5P-0667
Kodesova, R.; Rohoskova, M.; Kodes, V.; Penizek, V.;
Kocarek, M.; Drabek, O.; Kozak, J.
Application of the Czech soil information system PUGIS
and pedotransfer rules for the assessment of pesticide
mobility in soils of the Czech Republic

XY0668; EGU2008-A-07588; SSS9-1MO5P-0668
Meißner, S.; Rennert, T.; Rinklebe, J.; Totsche, K.U.
Dissolved metals in a floodplain soil: comparison of soil
solution, extract and soil column experiment data

XY0669; EGU2008-A-07675; SSS9-1MO5P-0669
Vatai, J.; Szentpétery, I.; Kuti, L.; **Kerék, B.**
Connection between the nitrate sensitivity and vulnerability
of water and between the geological environment

XY0670; EGU2008-A-08487; SSS9-1MO5P-0670
Pagels, B.; Totsche, K.U.; Kögel-Knabner, I.
Flood effects on contaminant release in alluvial top soils –
Field studies

XY0671; EGU2008-A-08679; SSS9-1MO5P-0671
Acosta, J.A.; **Faz, A.;** Arocena, J.M.; Martínez-Martínez, S.
Heavy metals partitioning as base for risk assessment in
urban environment

XY0672; EGU2008-A-08892; SSS9-1MO5P-0672
Fandeur, D.; Juillot, F.; Fritsch, E.; Olivi, L.; Webb, S.;
Cognigni, A.; Fialin, M.; Borensztajn, S.; Ambrosi, J.P.;
Morin, G.
Crystal chemistry of chromium in New Caledonian lateritic
soils

XY0673; EGU2008-A-10625; SSS9-1MO5P-0673
Winkelbauer, J.; Voelkel, J.; Leopold, M.; Huerkamp, K.;
Dehos, R.W.
The influence of soil properties and local characteristics on
the distribution, migration and potential bioavailability of
Radio-Cesium in Bavarian forest ecosystems more than 20
years after the Chernobyl accident

XY0674; EGU2008-A-10638; SSS9-1MO5P-0674
Sparica Miko, M.; Miko, S.; Mesiae, S.
Assessment of lead(II) fractionation in high altitude karst
soils in Croatia

XY0675; EGU2008-A-10655; SSS9-1MO5P-0675

Huerkamp, K.; Raab, T.A.; Voelkel, J.

Small-scaled spatial lead distribution in floodplain soils of the Vils River (Upper Palatinate, Germany) determined by field-portable X-ray fluorescence analysis (FPXRF)

XY0676; EGU2008-A-12479; SSS9-1MO5P-0676

Almendros, P.; Gonzalez, D.; Obrador, A.; **Alvarez, J.M.**

Residual zinc forms in weakly acidic and calcareous soils after an oilseed flax crop

XY0677; EGU2008-A-12480; SSS9-1MO5P-0677

Álvarez, J.M.; Rico, M.I.; González, D.; Almendros, P.

Fertilization effect of Cu-EDTA chelate on soil pH and redox conditions in a flooded neutral soil

SSS13 Soil structure forming processes and soil functions

Convener: Vogel, H.

Co-Convener(s): Jarvis, N., Bouma, J.

Lecture Room 23

Chairperson: N.N.

10:30–10:45; EGU2008-A-05363; SSS13-1MO2O-001

Pachepsky, Y. A.; Lilly, A.; Gish, T. J.

Structure and function in soil hydrology (solicited)

10:45–11:00; EGU2008-A-09235; SSS13-1MO2O-002

Bachmair, S.; Weiler, M.; Nützmänn, G.

Tracer experiments and simulations on the effect of land use on preferential flow

11:00–11:15; EGU2008-A-07150; SSS13-1MO2O-003

Martin, S.; West, H.; Mooney, S.; Dickinson, M.

Effects of microbial diversity on the development of soil structure

11:15–11:30; EGU2008-A-03683; SSS13-1MO2O-004

Otten, W.; Grinev, D.; Young, I.M.

Interconnectivity of pore volumes and fungal colonisation of soil: combining X-ray micro tomography and soil thin sections.

11:30–11:45; EGU2008-A-01580; SSS13-1MO2O-005

Papadopoulos, A.; Binley, A.; Macleod, C J A; Haygarth, PM; Humphreys, M W; Turner, L B; Whalley, W R
Quantifying temporal changes of soil structure affected by grass roots using X-ray computed tomography

11:45–12:00; EGU2008-A-05535; SSS13-1MO2O-006

Horn, R.; Smucker, A.; **Peth, S.**

Structure formation and its consequences for soil strength and mass (solicited)

12:00 END OF SESSION

SSS13 Soil structure forming processes and soil functions – Posters

Convener: Vogel, H.

Co-Convener(s): Jarvis, N., Bouma, J.

Display Time: Monday, 08:00–19:30

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Poster Area Halls X/Y

Chairperson: N.N.

XY0678; EGU2008-A-00882; SSS13-1MO5P-0678

Ghanbarian-Alavijeh, B.; Liaghat, A.M.; Parsinejad, M.; Azimi, R.

Evaluation of Particle-Size Distribution in Prediction of Soil Moisture Shape Index

XY0679; EGU2008-A-01292; SSS13-1MO5P-0679

Chertkov, V. Y.

Some observed and possible effects of an intra-aggregate soil structure

XY0680; EGU2008-A-03216; SSS13-1MO5P-0680

Li, J.; Bardossy, A.; van der Zee, S

Investigation and simulation of soil fields with copula based approach

XY0681; EGU2008-A-03636; SSS13-1MO5P-0681

Maurer, T.; Gerke, H.H.

Modelling of aeolian sediment translocation on the soil surface of a small catchment area using WEPS

XY0682; EGU2008-A-03656; SSS13-1MO5P-0682

Lange, B.; Lüscher, P.; **Germann, P.**

Tree roots improve infiltration into gley soils

XY0683; EGU2008-A-03792; SSS13-1MO5P-0683

Kuka, K.; Franko, U.; Vogel, H.-J.

Interactions between soil structure and Soil organic matter turnover

XY0684; EGU2008-A-04302; SSS13-1MO5P-0684

Berli, M.; Carminati, A.; Ghezzehei, T.A.; Or, D.

Evolution of unsaturated hydraulic conductivity of aggregated soils during compression

XY0685; EGU2008-A-07359; SSS13-1MO5P-0685

Jarvis, N.; Lindahl, A.; Moeys, J.; Hollis, J.; Messing, I.; Dubus, I

Can we predict the effects of soil structure on water flow and solute transport?

XY0686; EGU2008-A-07400; SSS13-1MO5P-0686

Destain, M.-F.; Sirjacobs, D.; Hanquet, B.; Leemans, V.; Verbrugge, J.-C.

On-the-go georeferenced measurements of soil mechanical strength and differentiation of soil structure

XY0687; EGU2008-A-07449; SSS13-1MO5P-0687

Markgraf, W.; Horn, R.

Rheological investigations in soil mechanics – a link to swelling and shrinkage processes

XY0688; EGU2008-A-07950; SSS13-1MO5P-0688

Alaoui, A.; Diserens, E.

Effects of soil compaction and shearing processes on soil structure following passage of a tracked heavy machine

XY0689; EGU2008-A-08911; SSS13-1MO5P-0689

Mohammed, E.; **Cornelis, W.M.**

Effect of land management on soil structure of vertisols in the Gezira irrigation scheme, Sudan

XY0690; EGU2008-A-10164; SSS13-1MO5P-0690

Carminati, A.; Weller, U.; Vetterlein, D.; Oswald, S.; Vogel, H.-J.

Soil-plant interactions: X-ray tomography of the soil-root interface

XY0691; EGU2008-A-10292; SSS13-1MO5P-0691

Zehe, E. ; Samaniego, L.; Schroeder, B.

Can we link spatial patterns of anecic earthworm populations, preferential flow pathways and agrochemical transport in rural catchments?

SSS16 Regolith and soil micromorphology, alteration process and clay minerals: mineralogy and geochemistry

Convener: Trombino, L.
Co-Convener(s): Gerard, M., Weber, J., Courty, M., Stoops, G., Carnicelli, S.
Lecture Room 23
Chairperson: TROMBINO, L.

13:30–13:45; EGU2008-A-00296; SSS16-1MO3O-001
Stoops, G.; Lambiv Dzemua, G.; Van Ranst, E.; Mees, F.
Micromorphology, mineralogy and chemistry of a laterite profile on serpentinite in South-East Cameroon (solicited)

13:45–14:00; EGU2008-A-06279; SSS16-1MO3O-002
Cremaschi, M.
Climate and humans in soil genesis since the late Pleistocene. Micromorphological aspects of the Haplic Luvisols, Sols Lessivées a Pseudogley, Aqualfs, in the Ghiardo area (Northern Italy). (solicited)

14:00–14:15; EGU2008-A-01876; SSS16-1MO3O-003
Tonneijck, F.H.; Jongmans, A.G.; Sevink, J.; Verstraten, J.M.
Chronostratigraphy of soil organic matter in volcanic ash soils in Northern Ecuador as influenced by tephra deposition and bioturbation

14:15–14:30; EGU2008-A-01181; SSS16-1MO3O-004
Nael, M.; Jalalian, A.; Khademi, H.; Kalbasi, M.; Sotoohian, F.; Schulin, R.
Effect of different geopedological conditions on behavior of selected heavy metals in forest soils of Western Alborz, Iran

14:30–14:45; EGU2008-A-08071; SSS16-1MO3O-005
Gerard, M.
Micromorphological habitus of iron oxides and oxyhydroxides related to different alteration process.

14:45–15:00; EGU2008-A-01223; SSS16-1MO3O-006
Lucke, B.; **Schmidt, M.;** Bäumler, R.
Paleosols and "debris" in Jordan - neglected archives of environmental change?

15:00 COFFEE BREAK

Chairperson: GERARD, M.

15:30–15:45; EGU2008-A-03695; SSS16-1MO4O-001
Mächtle, B.; Eitel, B.; Schukraft, G.
Cadmium dynamics as a new marker for palaeopedogenesis at desert margins?

15:45–16:00; EGU2008-A-00478; SSS16-1MO4O-002
Levard, C.; Rose, J.; Masion, A.; Doelsch, E.; Basile-Doelsch, I.; Borschneck, D.; Bottero, J.-Y.
New findings on natural aluminosilicate nanoparticles structure: a synthetic route approach and multi-scale characterization techniques

16:00–16:15; EGU2008-A-04122; SSS16-1MO4O-003
Hubert, F.; Caner, L.; Meunier, A.
Advance in soil clay minerals characterisation: direct x-ray diffraction profile fitting method

16:15–16:30; EGU2008-A-04992; SSS16-1MO4O-004
Hosseinfard, S.J.; Khademi, H.; Kalbasi, M.
Comparison of non-exchangeable K release from micaceous minerals using different extractants

16:30–16:45; EGU2008-A-00021; SSS16-1MO4O-005
Narra, S.; Raab, T.; Hüttel, R F
Structural amelioration of virgin clay soils in Lusatia with flue gas desulphurization (FGD) gypsum under Poplar growth and soil physical aspects

16:45–17:00; EGU2008-A-10645; SSS16-1MO4O-006
Courty, M.-A.; Brooker, A.; Fedoroff, M.; Ge, T.; Grice, K.; Greenwood, P.; Mermoux, M.; Poreda, R.; Smith, D.C.; Thiemens, M.H.
Multi-disciplinary study of the carbonaceous polymorphs associated to the 4 kyr BP burnt soil-strata tracing the 4-kyr BP impact-ejecta

17:00 END OF SESSION

SSS16 Regolith and soil micromorphology, alteration process and clay minerals: mineralogy and geochemistry – Posters

Convener: Trombino, L.
Co-Convener(s): Gerard, M., Weber, J., Courty, M., Stoops, G., Carnicelli, S.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: STOOPS, G.

XY0692; EGU2008-A-01100; SSS16-1MO5P-0692
Rellini, I.; **Trombino, L.;** Firpo, M.; Rossi, P.M.
Extending westward the loess basin between the Alps and the Mediterranean region: micromorphological evidences from the slope of the Ligurian Alps (Northern Italy).

XY0693; EGU2008-A-02351; SSS16-1MO5P-0693
Scharringhausen, M.; Richter, L.; Brucks, A.
Discrete element soil modelling for planetary soils

XY0694; EGU2008-A-03635; SSS16-1MO5P-0694
Zerboni, A.; Cremaschi, M.; Trombino, L.
Micropedological approach to polycyclic pedogenesis in arid lands: the case of the Messak plateau (Libyan Sahara)

XY0695; EGU2008-A-04160; SSS16-1MO5P-0695
Szadorski, J.; Weber, J.
Clay mineral composition of different horizons of soils derived from tonalites at Sudety Mts., Poland

XY0696; EGU2008-A-04224; SSS16-1MO5P-0696
Kierczak, J.; Néel, C.; Joussein, E.
The effect of secondary phyllosilicates on Ni and Cr trapping in serpentine soil developed under temperate climate of SW Poland

XY0697; EGU2008-A-04944; SSS16-1MO5P-0697
Dêbicka, M.
Transformations of mineralogical composition of soil colloidal fraction exposed to the phosphorus sorption

XY0698; EGU2008-A-09489; SSS16-1MO5P-0698
Yebra-Rodríguez, A.; Alvarez-Lloret, P.; Cardell, C.; Rodríguez-Navarro, A.B.
Crystalline properties of injection molded Polyamide-6 and Polyamide-6/montmorillonite nanocomposites

XY0699; EGU2008-A-09632; SSS16-1MO5P-0699
Kapferer, N.; Berger, A.; Mercolli, I.
An Oligocene regolith preserved on top of the Sesia Zone, Western Italian Alps

XY0700; EGU2008-A-09657; SSS16-1MO5P-0700
Silva, T.P.; Figueiredo, M.O.
Retention of metal nutrients and water by nanominerals in regoliths from Santiago Island, Cape Verde

XY0701; EGU2008-A-11458; SSS16-1MO5P-0701
Lobczowski, W.; **Weber, J.;** Szadorski, J.; Kocowicz, A.
Clay minerals from cambic soil derived from phonolite of Opolno-Zdroj area, Sudety Mts., SW Poland

SSS30 Advances in 3-D quantification of the soil porous architecture using X-ray Computed Tomography and image analysis techniques

Convener: Papadopoulos, A.
Co-Convener(s): Vogel, H., Peth, S.
Lecture Room 16
Chairperson: N.N.

13:30–13:45; EGU2008-A-00861; SSS30-1MO30-001

Heck, R.J.; Taina, I.A.; Elliot, T.R.

X-ray Computed Tomography of Soil - Do We Need Standardization? (solicited)

13:45–14:00; EGU2008-A-03134; SSS30-1MO30-002

ELYEZNASNI, N.E.; POT, V.P.; GARNIER, P.G.; YOUNG, L.Y.; SELLAMI, F.S.; GINZBURG, I.G.; BENOIT, P.B

Transport modeling of pesticides in soil porosity using 3D maps provided from X-ray computed tomography

14:00–14:15; EGU2008-A-05141; SSS30-1MO30-003

Vogel, H.-J.; Weller, U.

A general framework for n-dimensional quantification of soil structure - from pore scale to the continuum

14:15–14:30; EGU2008-A-06341; SSS30-1MO30-004

Mooney, S.; Grinev, D.; Young, I

Quantification of biophysical processes in soil-plant systems under natural environmental conditions using X-ray microtomography

14:30–14:45; EGU2008-A-00221; SSS30-1MO30-005

Otani, J.; Lenoir, N.; Takano, D.; Mukunoki, T.

Characterization of x-ray ct data for sands (solicited)

14:45–15:00; EGU2008-A-11507; SSS30-1MO30-006

Mele, G.; Matrecano, M.

Quantification of the soil pore network by 3D image analysis: three different approaches.

15:00 END OF SESSION

SSS30 Advances in 3-D quantification of the soil porous architecture using X-ray Computed Tomography and image analysis techniques – Posters

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Co-Convener(s): Vogel, H., Peth, S.
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Authors in Attendance: Monday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0702; EGU2008-A-09677; SSS30-1MO5P-0702

Udawatta, R.P. ; Gantzer, C.J.; Anderson, S.H.; As-souline, S.

Synchrotron X-ray Computed Microtomography of Soil Pore Characteristics Affected by Compaction

XY0703; EGU2008-A-02563; SSS30-1MO5P-0703

Weller, U.; Vogel, H.-J.; Trenkel, S.

Water detection in soil with X-ray technology

XY0704; EGU2008-A-05777; SSS30-1MO5P-0704

Wang, W.; Kravchenko, A.N.; Smucker, A.J.M.; Rivers, M. L.

Effect of wetting and drying cycles on the spatial variability characteristics of the internal structures of soil aggregates

XY0705; EGU2008-A-01489; SSS30-1MO5P-0705

Al-Raoush, R.; Papadopoulos, A

Representative Elementary Volume Analysis of Sand Using X-ray Computed Tomography (solicited)

XY0706; EGU2008-A-00534; SSS30-1MO5P-0706

Tarquis, A.M.; Grinev, D.; Otten, W.; Young, I.; Crawford, J.W.

Soil connectivity at different bulk densities

XY0707; EGU2008-A-02346; SSS30-1MO5P-0707

Kravchenko, A.; Smucker, A.; Rivers, M.

Determination of multifractal spectra in void/solid soil aggregate images

XY0708; EGU2008-A-06283; SSS30-1MO5P-0708

Sosio, R. ; Villa, A.; Crosta, G. B.

The application of the x-ray microtomography to describe granular mixtures

XY0709; EGU2008-A-01006; SSS30-1MO5P-0709

Anderson, S.; Udawatta, R.; Gantzer, C.

Pore characteristics measured by high resolution x-ray computed tomography for agroforestry and grass buffers

XY0710; EGU2008-A-05759; SSS30-1MO5P-0710

Jassogne, L.; Davidson, R.; McNeill, A.; Hettiarachchi, G.; Chittleborough, D.

Using computer tomography to visualise and quantify macropores in intact soils, the issue of thresholding (solicited) (cancelled)

XY0711; EGU2008-A-00751; SSS30-1MO5P-0711

Rezanezhad, F.; Quinton, B.; Elliot, T.; Price, J.; Elrick, D.; Heck, R.

Physical and Hydraulic Properties of Peat Soil Using X-ray Computed Tomography and Image Analysis

XY0712; EGU2008-A-09793; SSS30-1MO5P-0712

Lehmann, P.; Willson, C.; Shokri, N.; Stamparoni, M.; Or, D.

Synchrotron based X-ray imaging of thick liquid films controlling evaporation from porous media

XY0713; EGU2008-A-09751; SSS30-1MO5P-0713

Al-Raoush, R.; Papadopoulos, A

A methodology to reconstruct sand packs from high resolution 3D images

XY0714; EGU2008-A-00294; SSS30-1MO5P-0714

Papadopoulos, A.; Binley, A; Macleod, C J A; Haygarth, P M; Humphreys, M W; Turner, L B; Whalley, W R

Quantification of grass roots induced effects on soil structural development using X-ray Computed Tomography

Tuesday

SSS4 Fire effects on forest soils: from short- to long-term effects (co-listed in NH)

Convener: Mataix-Solera, J.
Co-Convener(s): Doerr, S., Raison, J.
Lecture Room 16
Chairperson: MATAIX-SOLERA, J.

13:30–13:45; EGU2008-A-06170; SSS4-1TU30-001

Doerr, SH; Woods, SW; Martin, DA

Fire-induced water repellency in conifer forest soils: a myth?

13:45–14:00; EGU2008-A-00675; SSS4-1TU30-002

Stoof, CR; Wesseling, JG; Ferreira, A; Ritsema, CJ

Fire Effects on Soil Water Retention Characteristics

14:00–14:15; EGU2008-A-03770; SSS4-1TU30-003

Blake, W.H.; Theocharopoulos, S.P.; Skoulikidis, N.; Clark, P.; Tountas, P.; Hartley, R.; Amaxidis, Y.

Wildfire, soil erosion and the risk to aquatic resources: evidence from the burnt Evrotas River basin, southern Peloponnese, Greece.

14:15–14:30; EGU2008-A-02621; SSS4-1TU3O-004
Malkinson, D.; Wittenberg, L.
Post fire induced soil water repellency – modeling short and long term processes

14:30–14:45; EGU2008-A-00556; SSS4-1TU3O-005
Woods, S.; Balfour, V.
Vegetative ash: an important factor in the short term response to rainfall in the post-fire environment

14:45–15:00; EGU2008-A-05771; SSS4-1TU3O-006
Dunkerley, D.L.
Catastrophic runoff and regolith erosion following the 2003 and 2007 wildfires in the eastern uplands, Victoria, Australia.

15:00 COFFEE BREAK

Chairperson: BLAKE, W.H.

15:30–15:45; EGU2008-A-00266; SSS4-1TU4O-001
Gonzalez-Pelayo, O.; Andreu, V.; Gimeno-Garcia, E.; Campo, J.; Rubio, J. L.
Ponding infiltration stages in a burned mediterranean soil

15:45–16:00; EGU2008-A-11506; SSS4-1TU4O-002
Bautista, S.; Giovanardi, F.S.; Vallejo, V.R.
Environmental factors controlling post-fire sediment yield at the catchment scale in a Mediterranean fire-prone area

16:00–16:15; EGU2008-A-02543; SSS4-1TU4O-003
Lugassi, R.; Ben-Dor, E; Eshel, G
Rapid method for reconstructing the maximum soil surface temperature and its spatial distribution using reflectance spectroscopy

16:15–16:30; EGU2008-A-02277; SSS4-1TU4O-004
Massman, W.; Frank, J
Long term impacts of prescribed burns on soil thermal conductivity and soil heating at a Colorado Rocky Mountain site

16:30–16:45; EGU2008-A-00824; SSS4-1TU4O-005
Danquah, S.; fire effect on forest soil in two forest reserve i fire effect on forest soil in two forest reserve in the transition zone of ghana

16:45–17:00; EGU2008-A-01590; SSS4-1TU4O-006
Page-Dumroese, D.; Jurgensen, M.
Impact of fire on wood decomposition in forest soils of western North America

17:00 END OF SESSION

SSS4 Fire effects on forest soils: from short- to long-term effects (co-listed in NH) – Posters

Convener: Mataix-Solera, J.
Co-Convener(s): Doerr, S., Raison, J.
Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: DOERR, S.H.

XY0574; EGU2008-A-00139; SSS4-1TU5P-0574
Cerdà, A.; Bodí, M.B.
Long-term effects of fire on soil infiltration in a Mediterranean shrub environment

XY0575; EGU2008-A-00242; SSS4-1TU5P-0575
Mataix-Solera, J.; Arcenegui, V.; Guerrero, C.; Jordán, M.; Dlapa, P.; Tessler, N.; Wittenberg, L.
Soil properties controlling the effects of fire on water repellency in Terra Rossa

XY0576; EGU2008-A-00460; SSS4-1TU5P-0576
Tessler, Naama
Fires influence on soil properties in Mt. Carmel, Israel - a long-term view

XY0577; EGU2008-A-01140; SSS4-1TU5P-0577
Pereira, P.; Úbeda, X.; Outeiro, L.; Martin, D.A.
Effects of fire intensity on carbon and nitrogen in leaf litter of three Mediterranean Species (*Quercus suber*, *Quercus robur*, *Pinus pinea*)

XY0578; EGU2008-A-01141; SSS4-1TU5P-0578
Pereira, P.; Úbeda, X.; Outeiro, L.; Martin, D.A.
Solutes released from leaf litter (*Quercus suber*, *Quercus robur*, *Pinus pinea*) exposed to different fire intensities in a laboratory experiment.

XY0579; EGU2008-A-01142; SSS4-1TU5P-0579
Pereira, P.; Úbeda, X.; Outeiro, L.; Martin, D.A.
Relation between fire temperatures and solute release in Mediterranean forests. A multivariate analysis approach

XY0580; EGU2008-A-01248; SSS4-1TU5P-0580
Zornoza, R.; **Pérez-Bejarano, A.;** Mataix-Solera, J.; Guerrero, C.; Arcenegui, V.; Mataix-Beneyto, J.
Monitoring a burned soil with the use of soil quality indices

XY0581; EGU2008-A-01741; SSS4-1TU5P-0581
Martinez-Hackert, B.; Bursik, M.
Wildland Fire Effect on Hillslope Erosion of Monogenetic Volcanoes in Semiarid Climate

XY0582; EGU2008-A-01903; SSS4-1TU5P-0582
Farres, M.; Outeiro, L.; Ubeda, X.
Short term effects on some soil variables after a prescribed fire. The Montgrí Massif case study.

XY0583; EGU2008-A-02283; SSS4-1TU5P-0583
Massman, W.; Frank, J; Stromberger, M
Long term consequences of a prescribed burn and slash mastication to soil moisture and CO₂

XY0584; EGU2008-A-04546; SSS4-1TU5P-0584
Czachor, H.; Doerr, S.
Impact of high temperature on water sorptivity of mineral soils

XY0586; EGU2008-A-06598; SSS4-1TU5P-0586
Alexis, M.A.; Rumpel, C.; Knicker, H.; Leifeld, J.; Rasse, D.P.; Mariotti, A.
Chemical properties and C storage potential of natural scrubland charcoal

XY0587; EGU2008-A-09650; SSS4-1TU5P-0587
Canu, A.; Arca, B.; Ghiglieri, G.; Pittalis, D.; Deroma, M.; Ventura, A.; Carboni, M.G.
Effects of fire intensity on soil properties in a Mediterranean area.

XY0588; EGU2008-A-10175; SSS4-1TU5P-0588
Bárcenas, G.M.; García-Orenes, F.; Mataix-Solera, J.; Mataix-Beneyto, J.
Wildfire effects on microbial abundance in different plant communities in Sierra Nevada (Granada, Spain)

XY0589; EGU2008-A-10492; SSS4-1TU5P-0589
Guerrero, C.; Arcenegui, V.; Mataix-Solera, J.; Pérez-Bejarano, A.; Zornoza, R.
Short-term evolution of the basal respiration of forest soils heated at different temperatures

XY0590; EGU2008-A-11910; SSS4-1TU5P-0590
Keizer, J.J.; Doerr, S.H.; Malvar, M.C.; Varela, M.R.
Soil water repellency in Portuguese eucalypt stands during the first two years following wildfire

XY0591; EGU2008-A-11968; SSS4-1TU5P-0591
Iglesias, T.; Almendros, G.; Aroca, M.J.; Fernández Bermejo, M.C.

The impact of recurrent wildfire on chemical properties of forest soils under pine from central Spain

XY0592; EGU2008-A-00485; SSS4-1TU5P-0592

Varela, M.E.; Rueda, E.; de Blas, E.; Keizer, J.

Direct and short-term effects of wildfire on organic matter content and microbial biomass in forest and shrubland soils of nw Spain

XY0593; EGU2008-A-10460; SSS4-1TU5P-0593

Dlapa, P.; Simkovic, I.; Doerr, S.H.; Mataix-Solera, J.

Intrinsic processes influencing organic matter and water repellency in heated soils as revealed by laboratory experiments

SSS14 New frontiers in soil chemical analysis

Convener: Terzano, R.

Co-Convener(s): Janssens, K., Medici, L.

Lecture Room 16

Chairperson: JANSSENS, K. - TERZANO, R.

8:30–9:00; EGU2008-A-01333; SSS14-1TU1O-001

Campbell, J. L.; Gellert, R.; Maxwell, J. A.; O'Meara, J. M.

The first “On-the-Spot” Determination of Water Content of Martian Soils (solicited)

9:00–9:15; EGU2008-A-11233; SSS14-1TU1O-002

Goettlicher, J.; Steininger, R.

Synchrotron Radiation Laboratory for Environmental Studies: A combinatory approach with X-ray methods

9:15–9:30; EGU2008-A-11901; SSS14-1TU1O-003

Lind, O.C.; Strømman, G.; Skipperud, L.; Rosseland, B.O.; Janssens, K.; De Nolf, W.; Jaroszewicz, J.; Burkitbayev, M.; Salbu, B.

Speciation and source identification of U from contaminated TENORM sites

9:30–9:45; EGU2008-A-04153; SSS14-1TU1O-004

Heltai, Gy; Flórián, K; Halász, G; Fekete, I; Rusnák, R; Remeteiová, D; Boková, V; Horváth, M

Comparative studies of different sequential extraction schemes for characterization of environmental mobility of heavy metals in soils, sediments and gravitation dusts

9:45–10:00; EGU2008-A-03980; SSS14-1TU1O-005

Gbefa, K; Dean, J; Entwistle, J; Ma, R

Bioavailability and bioaccessibility of Metals in the Environment using ICP-CCT-MS

10:00 COFFEE BREAK

Chairperson: JANSSENS, K. - TERZANO, R.

10:30–10:45; EGU2008-A-01359; SSS14-1TU2O-001

Conte, P.; Berns, A.E.

New understanding of cross-polarization dynamics in amorphous and heterogeneous natural organic substances

10:45–11:00; EGU2008-A-01200; SSS14-1TU2O-002

Shrestha, B. M.; Certini, G.; Forte, C.; Singh, B. R.

Soil organic matter quality under land use changes in a Nepalese watershed

11:00–11:15; EGU2008-A-02838; SSS14-1TU2O-003

D'Acqui, L.A.; Pucci, A.; Calamai, L.

In situ characterization of SOM as revealed by coupled LTA-PAS-FTIR approach

11:15–11:30; EGU2008-A-11907; SSS14-1TU2O-004

k.muraoka, k.m.; y.araki, y.a; n.kawada, n.k.; t.papp, t.p.; t.utaka, t.u.; k.taniguchi, k.t.

Analysis of Hazardous Elements in Soil

11:30–11:45; EGU2008-A-05715; SSS14-1TU2O-005

Meheust, Y.; Fossum, J.O.; Knudsen, K.D.; Maloy, K.J.; Helgesen, G.

Mesosopic changes of a model clay soil due to the microscopic swelling of its crystallites

11:45–12:00; EGU2008-A-03492; SSS14-1TU2O-006

Gomez-Tena, M.P.; Gazulla, M.F.; Zumaquero, E.; Machi, C.

The use of HT-XRD and TGA-EGA for complementary characterization on chromites

12:00 END OF SESSION

SSS14 New frontiers in soil chemical analysis – Posters

Convener: Terzano, R.

Co-Convener(s): Janssens, K., Medici, L.

Display Time: Tuesday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: JANSSENS, K. - MEDICI, L.

XY0594; EGU2008-A-00509; SSS14-1TU5P-0594

Mladkova, Z.; Docekalova, H; Docekal, B

Effect of soil moisture content on the metal concentration measured by diffusive gradients in thin films technique (DGT)

XY0595; EGU2008-A-01469; SSS14-1TU5P-0595

Zaichick, V.; Zaichick, D.

INAA and XRF Applications in the Assessment of Chemical Element Contents in the Topsoil of Moscow's Park

XY0596; EGU2008-A-01812; SSS14-1TU5P-0596

Harutyunyan, D.; Ohanyan, I

The analysis of Persistent Organic Pollutants in the ground sediments in Kura River Basin by extraction Spectral-photometry

XY0597; EGU2008-A-02134; SSS14-1TU5P-0597

Deraed, C.; Tessadri, R.; Nehm, R.; Cosnier, A.; Vélasquez, S.; Lebouil, S.

Geological samples by ACTIVA-M ICP-AES

XY0598; EGU2008-A-02580; SSS14-1TU5P-0598

Carlsson, T.; Muurinen, A.

Redox Measurements in Water-saturated Bentonite

XY0599; EGU2008-A-03054; SSS14-1TU5P-0599

Pinto, V.; Cremisini, C.

A rapid screening method for the evaluation of the mobility of “heavy metals” in contaminated soils

XY0600; EGU2008-A-03273; SSS14-1TU5P-0600

Santoro, A.; Terzano, R.; Spagnuolo, M.; Fiore, S.; Blo, G.; Medici, L.; Ruggiero, P.

Assessing mercury distribution and speciation in the colloidal fraction of contaminated soils

XY0601; EGU2008-A-03337; SSS14-1TU5P-0601

Terzano, R.; Santoro, A.; Spagnuolo, M.; Ruggiero, P.; Vekemans, B.; Vincze, L.; De Nolf, W.; Janssens, K.; Denecke, M.A.; Mangold, S.

Mercury speciation in polluted soils by combined spectroscopic and microspectroscopic techniques employing synchrotron generated X-rays

- XY0602**; EGU2008-A-03988; SSS14-1TU5P-0602
Fiore, S.; Lettino, A.; **Medici, L.**; Santoro, A.; Terzano, R.
Trace elements in contaminated soils and sediments: microscopic chemical and mineralogical characterization of particles containing trace metals
- XY0603**; EGU2008-A-04205; SSS14-1TU5P-0603
Kampf, Gy.; Kristof, K.; Balint, A.; Torkos, K.; Debreczeni, K.; Heltai, Gy.
Correction of water interference in gas chromatographic measurements of N₂O and CO₂ of soil origin
- XY0604**; EGU2008-A-04370; SSS14-1TU5P-0604
Klaue, B.; Houlahan, T
The rapid development of handheld x-ray fluorescence analyzers into a wide-spread essential field analysis tool for geological and environmental applications
- XY0605**; EGU2008-A-04920; SSS14-1TU5P-0605
Cristache, C; **Duliu, O.G.**; Margineanu, R.M.; Simion, C.A.; Matei, M.
Epithermal Neutron Activation Analysis and Radiometric Investigation of Slanic Prahova (Romania) salt mine evaporites
- XY0606**; EGU2008-A-05161; SSS14-1TU5P-0606
Papp, T.; Papp, A.T.; Maxwell, J.A.; Kawata, N.; Utaka, T.; Taniguchi, K.
Toward a maximum information utilization approach in EDXRF analysis of soil samples
- XY0607**; EGU2008-A-05296; SSS14-1TU5P-0607
Bayer, J.V.; Bryant, R.; Cheng, S.; **Doerr, S.H.**
Laser scanning confocal microscopy of soil particle fluorescence
- XY0608**; EGU2008-A-06368; SSS14-1TU5P-0608
Jakubowska, M.; Pasieczna, A.; Zembrzusi, W.; Lukaszewski, Z.
Thallium in fractions of soil formed on glaciofluvial sands and gravel of a Zn-Pb mining and smelting area
- XY0609**; EGU2008-A-06713; SSS14-1TU5P-0609
Andreu, V.; Rubio, J.L.; Pascual, J.A.; Picó, Y.
Application of liquid chromatography/tandem mass spectrometry to pesticide residue determination in the Albufera lake (Valencia, Spain)
- XY0610**; EGU2008-A-07047; SSS14-1TU5P-0610
Kizek, R.; Trnkova, L.; Sileny, J.; Adam, V.; Hubalek, J.
Flow microsenors in analysis of heavy metal ions
- XY0611**; EGU2008-A-07066; SSS14-1TU5P-0611
Adam, V.; Kizek, R.; Trnkova, L.; Huska, D.; Hubalek, J.
Protein based biosensors in analysis of heavy metal ions
- XY0612**; EGU2008-A-07090; SSS14-1TU5P-0612
Trnkova, L.; Krizkova, S.; Sileny, J.; Hubalek, J.; Adam, V.; Beklova, M.; Kizek, R.
Detection of silver ions by means of electrochemical sensors
- XY0613**; EGU2008-A-07512; SSS14-1TU5P-0613
Lepane, V.; Hinnov, M.; Tönno, I.; Alliksaar, T.
Spectroscopic analysis of chromatographically separated molecular fractions of sedimentary dissolved organic matter
- XY0614**; EGU2008-A-07923; SSS14-1TU5P-0614
Tamburini, F.; Bernasconi, S.M.; Frossard, E.
From marine to terrestrial ecosystems: Oxygen isotope geochemistry of phosphate as a tool to study P dynamics
- XY0615**; EGU2008-A-08851; SSS14-1TU5P-0615
Yamamoto, T.; Kudo, T.; Yamamoto, T.; Kawai, J.
Analysis of coordination environment of aluminum species in zeolites by X-ray fluorescence, XAFS and EXEFS
- XY0616**; EGU2008-A-09747; SSS14-1TU5P-0616
Figueiredo, M.O.; Silva, T.P.; Veiga, J.P.
Oxidation state and coordination of iron in red pre-soils: first results from a
- XY0617**; EGU2008-A-10087; SSS14-1TU5P-0617
De Giacomo, A.; Dell'Aglio, M.; De Pascale, O.; Senesi, G.S.; **Zaccone, C.**; Miano, T.M.
Laser Induced Breakdown Spectroscopy (LIBS) application in monitoring of heavy metals polluted soils
- XY0618**; EGU2008-A-10518; SSS14-1TU5P-0618
El-Shishtawy, A.; Al-Dousky, B.; Salem, I.; El-Assy, I.; Aly, G.
Mineralogical and Geochemical Characteristics of Cretaceous Kaolin Deposits from West Central Sinai, Egypt
- XY0619**; EGU2008-A-10915; SSS14-1TU5P-0619
Bulgariu, D.; Bulgariu, L.; Rusu, C
separation and determination of Si, Al and Fe speciation forms from soils by solid-liquid extraction and extraction in aqueous PEG-based two-phase systems
- XY0620**; EGU2008-A-10934; SSS14-1TU5P-0620
Bulgariu, D.; Bulgariu, L.; Rusu, C
The study by Raman and FTIR spectrometry of structure and stability of organic-minerals combinations from soils
- XY0621**; EGU2008-A-11715; SSS14-1TU5P-0621
Fiala, K.; **Krhovjakova, J.**
Application of loss-of-ignition method to the soil organic carbon determination
- XY0622**; EGU2008-A-11849; SSS14-1TU5P-0622
Ghirlanda, S.; Henderson, S.E.; Carlson, R.E.; Richter, B.E.; Cavalli, S.
Advances in Automated Sample Preparation
- XY0623**; EGU2008-A-11850; SSS14-1TU5P-0623
Ghirlanda, S.; Henderson, S.E.; Carlson, R.E.; Richter, B.E.; Cavalli, S.
Innovations in Solvent Extraction: Evolution you can see
- XY0624**; EGU2008-A-12071; SSS14-1TU5P-0624
Kukushkin, S.A.; Moos, E.N.; Seltser, I.A.
Electron Emission under X-rays
-
- SSS18 Organic wastes composting and application to soil - analytical, agricultural and environmental issues**
- Convener: Ciavatta, C.
Co-Convener(s): Weber, J.
Lecture Room 23
Chairperson: N.N.
- 10:30–10:45**; EGU2008-A-09340; SSS18-1TU2O-001
Centemero, M.; Favoino, E.
Trends for compost production and application in the EU and the potential contribution of compost to tackle Climate Change
- 10:45–11:00**; EGU2008-A-01948; SSS18-1TU2O-002
Zmora-Nahum, S.; Danon, M.; Hadar, Y.; **Chen, Y.**
Chemical and biological changes occurring during prolonged curing of compost and their effect on suppressiveness against plant diseases
- 11:00–11:15**; EGU2008-A-01723; SSS18-1TU2O-003
Richard, C.
Photoinductive properties of compost
- 11:15–11:30**; EGU2008-A-08512; SSS18-1TU2O-004
Cocozza, C.; Parente, A.; Zaccone, C.; Miano, T.; Santamaria, P.
Composting of beached residues of *Posidonia oceanica* (L.) Del.

11:30–11:45; EGU2008-A-03154; SSS18-1TU2O-005
Lemée, L.; Som, M.P.; Amblès, A.
Stability and maturity of a green waste and biowaste com-
posts

11:45–12:00; EGU2008-A-09036; SSS18-1TU2O-006
Mirás Avalos, J. M.; Roca Fernández, A. I.; Sande Fouz, P.;
Vidal Vázquez, E.
Changes in soil properties after solid urban residue compost
addition

12:00 END OF SESSION

**SSS18 Organic wastes composting and application to
soil - analytical, agricultural and environmental issues –
Posters**

Convener: Ciavatta, C.
Co-Convener(s): Weber, J.
Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0625; EGU2008-A-00537; SSS18-1TU5P-0625
Weber, J.; Jerzykiewicz, M.; Drozd, J.; Jamroz, E.; Kocow-
icz, A.
Effect of different composts produced from municipal solid
wastes on properties of soil humic substances

XY0626; EGU2008-A-02406; SSS18-1TU5P-0626
Demirkiran, A.; Ucan, K.; Meral, R.; Merdun, H.
Limiting effects of lignosulphonate on leaching of fertilizers
in soil conditions

XY0627; EGU2008-A-03174; SSS18-1TU5P-0627
Rogeeon, H.; Som, M.P.; Célerier, J.; Lemée, L.; Amblès, A.
Effect of a green waste/biowaste compost on the properties
of a silty soil

XY0628; EGU2008-A-03531; SSS18-1TU5P-0628
Grigatti, M.; Ciavatta, C.
Simultaneous determination of organic carbon and nitro-
gen mineralization capacity of sewage sludge-based compost

XY0629; EGU2008-A-05328; SSS18-1TU5P-0629
Pachepsky, Y. A.; Guber, A. K.; Shelton, D. R.; Sadeghi, A.
M.
Overland transport of manure-borne pathogen indicator
organisms: observations and modeling

XY0630; EGU2008-A-05431; SSS18-1TU5P-0630
Le Gouée, P.; **Delahaye, D.;** Marie, M.; Douvinet, J.;
Bermond, M.
Environmental, agricultural and ecological impacts of
municipal plant wastes incorporated into a silty soil (Haute-
Normandie, Northern-Western France).

XY0631; EGU2008-A-07849; SSS18-1TU5P-0631
Sparvoli, E.; Pini, R.; D'Acqui, L.; Scatena, M.
Quality compost and soil quality

XY0632; EGU2008-A-08093; SSS18-1TU5P-0632
Bastock, J.; Romero-Gonzalez, M.; Wilson, R.
Contaminant transport and fate in engineered charcoal
remediation systems

XY0633; EGU2008-A-02369; SSS18-1TU5P-0633
Meral, R.; Merdun, H.; Demirkiran, A.
Effects of different soil conditioners on infiltration and
aggregate stability

XY0634; EGU2008-A-12045; SSS18-1TU5P-0634
Cruz, J.; Poch, R.M.; Porta, J.
Environmental effects of rehabilitated coalmine soils using
organic wastes

XY0635; EGU2008-A-04295; SSS18-1TU5P-0635
Giovannini, C.; Montecchio, D.; Francioso, O.; Gior-
gioni, M.E.; **Ciavatta, C.**
Characterization of different growing media-compost based
for ornamental plants by TG-DTA and FT-IR

XY0636; EGU2008-A-07151; SSS18-1TU5P-0636
Sinicco, T.; Cayuela, M.L.; Leita, L.; Mondini, C.
A simple respirometric method to evaluate the degree of
stability of compost

XY0637; EGU2008-A-07267; SSS18-1TU5P-0637
Giorgioni, M. E.; Ciavatta, C.
Use of green and mixed composts as peat alternative for
philodendron pot growing: morphologic and phenological
effects.

XY0638; EGU2008-A-09103; SSS18-1TU5P-0638
Jamroz, E.; Drozd, J.; Licznar, M.; Licznar, S.; Weber, J.
Influence of municipal solid wastes compost maturity
on the content of total and water soluble forms of some
microelements and their uptaking by lettuce

XY0639; EGU2008-A-09197; SSS18-1TU5P-0639
Licznar, M.; Drozd, J.; Szajdak, L.; Walenczak, K.; **Jam-
roz, E.**
Impact of the moisture of municipal solid wastes on the
nitrogen transformation during composting

XY0640; EGU2008-A-09739; SSS18-1TU5P-0640
Ojeda, G.; Alcañiz, J.M.; Bonmatí, M.; Woche, S.; Bach-
mann, J.
Soil quality factors in minesoils reclamation by sewage
sludge amendments related to soil wettability

XY0641; EGU2008-A-10623; SSS18-1TU5P-0641
Roca-Pérez, L.; Mormeneo, S; Boluda, R.
Study of gas emission during composting of sewage sludge
and rice straw

XY0642; EGU2008-A-11219; SSS18-1TU5P-0642
Costa, C.A.; Duarte, A.C.; Esteves, V.I.; Santos, E.B.H.
Long-term effects of organic amendments on the total
contents and fractionation of potentially toxic metals in soils

XY0643; EGU2008-A-00760; SSS18-1TU5P-0643
Soriano-Disla, J.M.; Gómez, I.; Guerrero, C.; Navarro-
Pedreño, J.; Pérez-Tomás, C.; Mataix-Solera, J.
Evolution of some maturity parameters during a sewage
sludge composting process

XY0644; EGU2008-A-12447; SSS18-1TU5P-0644
Dumitru, M.; Vrinceanu, N.; Motelica, M.; Tanase, V.;
Carabulea, V.
Production and Efficient Use of Composts from Animal
Husbandry Wastes and Urban Sludge

**SSS20 Soil organic matter decomposition. The impact of
land management practices**

Convener: Page-Dumroese, D.
Co-Convener(s): Jurgensen, M., Cerda, A.
Lecture Room 23
Chairperson: N.N.

8:30–8:45; EGU2008-A-02806; SSS20-1TU1O-001
Mueller, C.W.; Koegel-Knabner, I.
Historic land use affects composition of soil organic matter
in adjacent forests and grassland soils

8:45–9:00; EGU2008-A-12339; SSS20-1TU1O-002

Jurgensen, M.F.; Page-Dumroese, D.; Cerdà, A.; Úbeda, X.; M-Mena, M.; Rey, A.; Pegoraro, E.; Outeiro, Ll.; Almagro, M.; Bodí, M.B.

Wood stakes as an index of soil organic matter decomposition in a climatic gradient along the Spanish Mediterranean Coast

9:00–9:15; EGU2008-A-10603; SSS20-1TU1O-003

Bogomolova, I.; Lyubimova, I.

Change in the humus content of solonetz soils affected by human activities

9:15–9:30; EGU2008-A-10794; SSS20-1TU1O-004

Belyaeva, N.; Kansivaa, S.; Kuzyakov, Y.; Romanenkov, V.; Shevtsova, L.

Effects of long-term fertilizer applications on decomposition of ¹⁴C labelled Lolium shoots (Lolium perenne L.) and ¹⁴C labelled glucose

9:30–9:45; EGU2008-A-03697; SSS20-1TU1O-005

Franko, U.; Ließ, E.; Thiel, E.; Kuka, K.; Kolbe, H.
Impact of climate change and land management of soil organic matter storage in Saxony

9:45–10:00; EGU2008-A-08983; SSS20-1TU1O-006

Viaud, V.; Walter, C.

Coupling agricultural landscape modelling with dynamic modelling of soil organic stock change

10:00 END OF SESSION

SSS20 Soil organic matter decomposition. The impact of land management practices – Posters

Convener: Page-Dumroese, D.

Co-Convener(s): Jurgensen, M., Cerda, A.

Display Time: Tuesday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: N.N.

XY0645; EGU2008-A-00135; SSS20-1TU5P-0645

Cerdà, A.; Page-Dumroese, D.; Jurgensen, M.F.; Bodí, M.B.
Water, manure and agriculture management as key factors for organic matter decomposition in citrus orchards in Eastern Spain.

XY0646; EGU2008-A-00804; SSS20-1TU5P-0646

Cerdà, A.; Page-Dumroese, D.; Jurgensen, M.F.; Bodí, M.B.
The El Teularet – Sierra de Enguera experimental site. Land management effects on organic matter decomposition in Spanish rainfed orchards.

XY0647; EGU2008-A-00635; SSS20-1TU5P-0647

Krivobokov, L.; Mukhortova, L.; Boloneva, M.
Post-clearcutting changes in herbaceous understory and forest litter quality

XY0648; EGU2008-A-02008; SSS20-1TU5P-0648

Smolander, A.; Kitunen, V.

N and C transformations in the organic layer under two tree species, silver birch and Norway spruce

XY0649; EGU2008-A-04278; SSS20-1TU5P-0649

Verheijen, FGA; Kibblewhite, M

Does soil organic matter deliver benefits to arable farmers in England and Wales?

XY0650; EGU2008-A-02059; SSS20-1TU5P-0650

Styla, K; **Szajdak, L**

The content of indole-3-acetic acid in the apple-trees orchard soil after replantation

XY0651; EGU2008-A-02763; SSS20-1TU5P-0651

Stromberger, M.; Massman, W

Response of soil microbial community structure and C cycling functions to forest fuel mastication treatments

XY0652; EGU2008-A-12003; SSS20-1TU5P-0652

Sanchez, F.G.; Maier, C.A.; Johnsen, K.

Stabilization/destabilization of soil carbon and nitrogen in intensively managed loblolly pine stands

SSS29 Molecular biogeochemistry: the fate of organic carbon in soils

Convener: Nierop, K.

Co-Convener(s): Jansen, B., Bull, I.

Lecture Room 23

Chairperson: N.N.

13:30–14:00; EGU2008-A-10562; SSS29-1TU3O-001

Evershed, R.P.; Maxfield, P.J.; Brennand, E.L.; Dildar, N.; Hornibrook, E.

The Fate of Methanotrophically Fixed Carbon in Soils (solicited)

14:00–14:15; EGU2008-A-08206; SSS29-1TU3O-002

Wiesenberg, G.L.B

Turnover time determination on a molecular level: traditional C3-/C4-crop change experiments as the ultimate choice?

14:15–14:30; EGU2008-A-09114; SSS29-1TU3O-003

Smittenberg, R.; Hajdas, I; Bernasconi, S

Early evolution of the soil organic matter pool as measured on a high alpine chronosequence using organic geochemical and (radio)isotopic techniques

14:30–14:45; EGU2008-A-03848; SSS29-1TU3O-004

Rasse, D.P.; Girardin, C.; Dignac, M.-F.; Chenu, C.

Modelling the fate of molecular structures in soils: from short-term decomposition to long-term C storage.

14:45–15:00; EGU2008-A-10681; SSS29-1TU3O-005

James, M.A.; Evershed, R.P.; Mukherjee, A.J.; Pfälzner, P.
Soil Biomarker Reconstructions of Ritual Activities in a Near Eastern Bronze Age Royal Tomb

15:00 COFFEE BREAK

Chairperson: N.N.

15:30–15:45; EGU2008-A-07786; SSS29-1TU4O-001

Gleixner, G.

Turnover of soil organic matter estimated from molecular isotope ratios of biomarkers

15:45–16:00; EGU2008-A-03541; SSS29-1TU4O-002

Dümig, A.; Schad, P.; Rumpel, C.; Dignac, M.-F.; Knicker, H.; Kögel-Knabner, I.

Carbon isotope studies and lignin analysis of plants and soil organic matter detect vegetation changes in the southern Brazilian highlands

16:00–16:15; EGU2008-A-02196; SSS29-1TU4O-003

Dignac, M.F.; Rumpel, C.; Rasse, D.P.; Mendez-Millan, M.; Bahri, H.; Derenne, S.; Bardoux, G.; Mariotti, A.

Molecular dynamics of lignin and cutin/suberin in soils: implications for root/shoot contribution to soil organic matter

16:15–16:30; EGU2008-A-01863; SSS29-1TU4O-004

NGUYEN TU, T.T.; Egasse, C.; Zeller, B.; Bardoux, G.; Biron, P.; Richard, P.; Lemettré, S.; Bariac, T.; **Derenne, S.**

Early degradation of plant lipids in soils : A field experiment using ¹³C-labelled leaves

16:30–16:45; EGU2008-A-03812; SSS29-1TU40-005
Bol, R; **Dungait, JAJ;** Evershed, RP; Lopez-Capel, E;
Chadwick, D; Amelung, W
The impacts and fate of livestock derived organic matter in
grassland soils

16:45–17:00; EGU2008-A-10820; SSS29-1TU40-006
Dungait, JAJ; Kemmitt, SJ; Michallon, L; Evershed, RP;
Brookes, PC
Investigating the response of the soil microbial biomass to
trace amounts of low molecular-weight compounds using
13C-PLFA-SIP

17:00 END OF SESSION

SSS29 Molecular biogeochemistry: the fate of organic carbon in soils – Posters

Convener: Nierop, K.
Co-Convener(s): Jansen, B., Bull, I.
Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0653; EGU2008-A-02129; SSS29-1TU5P-0653
Tonneijck, FH; Nierop, KGJ; Verstraten, JM
Organic matter in volcanic ash soils under forest and páramo
along an Ecuadorian altitudinal transect

XY0654; EGU2008-A-02139; SSS29-1TU5P-0654
Van Loon, E.E.; **Jansen, B.**
An inverse modelling framework to reconstruct the Andean
vegetation

XY0655; EGU2008-A-02289; SSS29-1TU5P-0655
Polubesova, T; Chefetz, B.; Chen, Y.; Navon, R.
Interactions of hydrophobic fractions of dissolved organic
matter with Fe 3+- and Cu2+-montmorillonite

XY0656; EGU2008-A-03404; SSS29-1TU5P-0656
Bardy, M.; Derenne, S.; Fritsch, E.
Evolution of lipid abundance and molecular composition
during the podzolisation of laterites in the upper Amazon
basin

XY0657; EGU2008-A-04230; SSS29-1TU5P-0657
Fischer, H.; **Kuzyakov, Y.**
Sorption, microbial incorporation, and decomposition

XY0658; EGU2008-A-08722; SSS29-1TU5P-0658
Quénéa, K.; Derenne, S.
accelerated solvent extraction: influence of solvents and ex-
traction condition on lipids extracted from three different soil

XY0659; EGU2008-A-09444; SSS29-1TU5P-0659
Ellerbrock, R.H.; Gerke, H.H.
Relating composition of a pyrophosphate soluble soil
organic matter fraction to polyvalent cations according to
coordination chemistry

XY0660; EGU2008-A-09764; SSS29-1TU5P-0660
Reemtsma, T; These, A; Linscheid, M
Polycarboxylates as transition state of organic matter in
soil, aquatic and atmospheric environment – Evidence from
ultrahigh resolution mass spectrometry

XY0661; EGU2008-A-10976; SSS29-1TU5P-0661
De Troyer, I.; Mertens, J.; Smolders, E.; Merckx, R.
Transport of 13C labeled Dissolved Organic Carbon in
undisturbed Soil Columns at various unsaturated Flow
reveals Fate and Mobility of DOC in Soil

XY0662; EGU2008-A-11024; SSS29-1TU5P-0662
Cerli, C.; Celi, L; Guggenberger, G; Kaiser, K
Effect of density cut-offs and sonication energy on organic
matter density fractionation

XY0663; EGU2008-A-12002; SSS29-1TU5P-0663
Van Mourik, J.M.
The added value of soil organic matter pyrolysates to the
interpretation of radiocarbon dating of humic soil horizons

Wednesday

SSS1 Soil erosion and degradation on Mediterranean type ecosystems

Convener: Cerda, A.
Co-Convener(s): Hooke, J., Lavee, H., Montanarella, L.,
Romero Diaz, A.
Lecture Room 16
Chairperson: CERDA, A.

8:30–8:45; EGU2008-A-07345; SSS1-1WE1O-001
Imeson, A C
Soil erosion and land degradation in the Mediterranean: the
current state-of-affairs (solicited)

8:45–9:00; EGU2008-A-00636; SSS1-1WE1O-002
Lesschen, J.P.; Cammeraat, L.H.
Land degradation due to agricultural land abandonment in
Southeast Spain

9:00–9:15; EGU2008-A-04582; SSS1-1WE1O-003
Ries, J. B.
Soil erosion and on abandoned land in Spain – Method-
ological aspects on monitoring of degradation processes
(solicited)

9:15–9:30; EGU2008-A-12338; SSS1-1WE1O-004
Puigdefabregas, J.; del Barrio, G.; Sanjuan, M.; Garcia, M.
Land degradation patterns and desertification monitoring
in the Iberian Peninsula. A remotely-sensed approach
(solicited)

9:30–9:45; EGU2008-A-01219; SSS1-1WE1O-005
Lucke, B.; **Schmidt, M.;** Bäumlér, R.
Does land use or climate dominate desertification in the
Levant? A critical re-examination from Northern Jordan.

9:45–10:00; EGU2008-A-11957; SSS1-1WE1O-006
Marques, M.J.; Ackhtar-Schuster, M.
European Desert-Net, the scientific knowledge for stake-
holders and policy-makers. Some facts.

10:00 COFFEE BREAK

Chairperson: HOOKE, J.

10:30–10:45; EGU2008-A-05446; SSS1-1WE2O-001
Vanwallegghem, T.V. ; Giráldez, J.V.; Laguna, A.; Jiménez-
Hornero, F.
Soil erosion in olive orchards: from historical averages to
extreme events

10:45–11:00; EGU2008-A-11752; SSS1-1WE2O-002
Bruggeman, A.; Tubeileh, A.; Turkelboom, F.; Masri, Z.
Water harvesting in olive orchards on degraded hill slopes in
an arid area of northern Syria

11:00–11:15; EGU2008-A-09954; SSS1-1WE2O-003
Lado, M.; Ben-Hur, M
Effect of changing wetting conditions on seal formation,
runoff, and soil loss in Mediterranean soils

11:15–11:30; EGU2008-A-08990; SSS1-1WE2O-004
Bochet, E.; García-Fayos, P.
How can we control erosion in roadslopes of semiarid Mediterranean areas?

11:30–11:45; EGU2008-A-11248; SSS1-1WE2O-005
Rey, F.
A strategy for fine sediment retention with bioengineering works in eroded catchments in mountainous and Mediterranean type ecosystems (solicited)

11:45–12:00; EGU2008-A-01550; SSS1-1WE2O-006
Federico, F.
Management of stream channel erosion due to urbanization in Southern California (USA): Science, policy and research challenges

12:00 LUNCH BREAK

Chairperson: LAVEE, H.

13:30–13:45; EGU2008-A-00713; SSS1-1WE3O-001
Shakesby, R.
Soil erosion in Mediterranean forests after wildfire: a global regional variant? (solicited)

13:45–14:00; EGU2008-A-04662; SSS1-1WE3O-002
Wittenberg, L.
Fire disturbance regimes: spatio-temporal effects on soil-vegetation interactions, soil properties and erosion processes (solicited)

14:00–14:15; EGU2008-A-10256; SSS1-1WE3O-003
Schnabel, S.; Lavado, F.; Gómez Gutiérrez, A.
Spatial and temporal variability of soil erosion in rangelands of southwest Spain (solicited)

14:15–14:30; EGU2008-A-01179; SSS1-1WE3O-004
Hooke, J.; Sandercock, P.; Marchamalo, M
Connectivity analysis and its application to land management and erosion-reduction strategies in Mediterranean lands

14:30–14:45; EGU2008-A-05392; SSS1-1WE3O-005
Cammeraat, E.; Lesschen, J.P.; van Wesemael, B.; Gonzalez-Barbera, G.
The impact of vegetation succession on soil parameters and its consequences for desertification remediation (solicited)

14:45–15:00; EGU2008-A-03416; SSS1-1WE3O-006
Boix-Fayos, C.; Martínez-Mena, M; de Vente, J; Albaladejo, J
Influence of land use changes on soil carbon stock and soil carbon erosion in a Mediterranean catchment (solicited)

15:00 COFFEE BREAK

Chairperson: DE LUIS, M.

15:30–15:45; EGU2008-A-10887; SSS1-1WE4O-001
Nunes, J.P.; Seixas, J.; Keizer, J.J.
Response of runoff and soil erosion patterns to changes in storm characteristics, soil moisture patterns and vegetation cover for Mediterranean watersheds

15:45–16:00; EGU2008-A-02446; SSS1-1WE4O-002
González-Hidalgo, J.C.; Batalla, R.; Cerdà, A.; de Luis, M.
Contribution of largest events to sediment transport across USA

16:00–16:15; EGU2008-A-00051; SSS1-1WE4O-003
Efe, R.
Land use changes, land degradation and soil erosion on the Taurus Mountains

16:15–16:30; EGU2008-A-10090; SSS1-1WE4O-004
Vlastara, M.; Zarris, D.; Panagoulia, D.
Sediment delivery assessment for a trans-boundary Mediterranean catchment: The example of Nestos River basin

16:30–16:45; EGU2008-A-08303; SSS1-1WE4O-005
McDonald, E.; Bullard, T.
Geomorphic response to extreme change in a Mediterranean ecosystem: Holocene alluvial history of Santa Catalina Island, California, U.S.A.

16:45–17:00; EGU2008-A-01676; SSS1-1WE4O-006
Thornes, J.B.
Mediterranean Erosion: From Archaeology to Panarchy (solicited)

17:00 END OF SESSION

SSS1 Soil erosion and degradation on Mediterranean type ecosystems – Posters

Convener: Cerda, A.
Co-Convener(s): Hooke, J., Lavee, H., Montanarella, L., Romero Diaz, A.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: ROMERO DÍAZ, A.

XY0677; EGU2008-A-00067; SSS1-1WE5P-0677
Thornes, J.B.; Fonseca, I.; Younas, A.; Evangelou, Ch; Papanastasis, V.P.
A model for testing the impact of grazing on soil erosion and its calibration

XY0678; EGU2008-A-00128; SSS1-1WE5P-0678
Cerdà, A.; Bodí, M.B.
Low frequency – high magnitude simulated rainfall events to determine soil losses under scrubland cover in eastern Spain.
1. Summer dry conditions.

XY0679; EGU2008-A-00129; SSS1-1WE5P-0679
Cerdà, A.; Bodí, M.B.
Low frequency – high magnitude simulated rainfall events to determine soil losses under scrubland cover in eastern Spain.
2. Winter wet conditions.

XY0680; EGU2008-A-00130; SSS1-1WE5P-0680
Cerdà, A.; Bodí, M.B.
Citrus plantation and soil erosion by surface and subsurface flow.

XY0681; EGU2008-A-00217; SSS1-1WE5P-0681
Cerdà, A.; Bodí, M.B.
Soil erosion on Mediterranean scrubland in Eastern Spain

XY0682; EGU2008-A-00933; SSS1-1WE5P-0682
Douaiba, B.; Kallos, G; Abbess, A; Aidaoui, L; Louka, P; Khorsi, A
Sources sink from north African dust cycle in the Mediterranean region

XY0683; EGU2008-A-01043; SSS1-1WE5P-0683
Montanaro, G.; Celano, G.; Dichio, B.; Sofo, A.; Xiloyannis, C.
Soil fertility remediation in fruit tree orchards in Mediterranean areas

XY0684; EGU2008-A-01112; SSS1-1WE5P-0684
Almagro, M.; López, J; Boix-Fayos, C; Albaladejo, J; Martínez-Mena, M
What role does soil water erosion play in the organic carbon balance under three different land uses in a semiarid area of S.E. Spain?

- XY0685**; EGU2008-A-01143; SSS1-1WE5P-0685
 Úbeda, X.; **Pereira, P.**; Outeiro, L.; Martin, D.A.
 Effects of fire temperature on leaf litter physical parameters and release of base cations of two *Quercus suber* plots, located in different forests of the Iberian Peninsula
- XY0686**; EGU2008-A-01180; SSS1-1WE5P-0686
 Hooke, J.; Sandercock, P.
 The impacts of vegetation on degradation and soil removal in ephemeral channels of Mediterranean-type areas
- XY0687**; EGU2008-A-01448; SSS1-1WE5P-0687
 Urbanek, E.; **Shakesby, R A**
 The influence of stone content on water movement in water-repellent soil
- XY0688**; EGU2008-A-01476; SSS1-1WE5P-0688
Romero Díaz, A.; Belmonte Serrato, F.
 Forestations and erosion in semiarid environments (south-east of Spain)
- XY0689**; EGU2008-A-01480; SSS1-1WE5P-0689
 Díaz Hernández, J.L.; **Romero Díaz, A.**; Marín Sanleandro, P.; Sánchez Soriano, A.
 Piping and soil – subsoil water dynamics
- XY0690**; EGU2008-A-01478; SSS1-1WE5P-0690
 Moreno Brotons, J.; **Romero Díaz, A.**; Alonso Sarriá, F.; Belmonte Serrato, F.; García Fernandez, G.
 Wind erosion in sterile of mining industry in the Cartagena – La Unión area (South-east of Spain)
- XY0691**; EGU2008-A-12381; SSS1-1WE5P-0691
 Orza, J.A.G.; Cabello, M.
 The resuspension contribution to airborne particulate matter levels in SE Spain: An overview of the RESUSPENSE project
- XY0692**; EGU2008-A-12162; SSS1-1WE5P-0692
Ferre-Bueno, E.; Ruiz-Sinoga, J.D.; Martínez-Murillo, J.F.
 Mediterranean eco-geomorphological system response variability to the 2004-06 drought along a climatic gradient.
- XY0693**; EGU2008-A-11712; SSS1-1WE5P-0693
Berliner, P.R.; Merzer, T.; Khassawneh, O.
 Water balances and perennial-annual interactions of small plots in a dryland planted forest
- XY0694**; EGU2008-A-11955; SSS1-1WE5P-0694
 Pérez Cabello, F.; Lasanta Martín, T.; Montorio Llovería, R.; García Martín, A.; Echeverría Arnedo, M. T.; Ibarra Benlloch, P.; de la Riva Fernández, J.; **Cerdà, A.**
 High spatial resolution photography and erosion plots for studying hydro-geomorphological response after an experimental fire
- XY0695**; EGU2008-A-11721; SSS1-1WE5P-0695
 Taboada-Castro, M.M.; Taboada-Castro, M.T.; **Rodríguez-Blanco, M.L.**
 Runoff and water erosion during a heavy rainy seasons on agricultural lands from northwestern Spain
- XY0696**; EGU2008-A-09409; SSS1-1WE5P-0696
Canu, A.; Zucca, C.; Previtali, F.; Enne, G.
 Interdisciplinary assessment of soil degradation due to agropastoral activities in Sardinia, Italy
- XY0697**; EGU2008-A-01640; SSS1-1WE5P-0697
Varghese, F.; Kumara Raja, M.
 Coir Geo-Textiles: A Natural Solution for Soil Erosion and Slope Stabilisation
- XY0698**; EGU2008-A-09995; SSS1-1WE5P-0698
Fister, W.; Ries, J.B.; Schmidt, R.-G.
 Laboratory results of a portable wind and rainfall simulator
- XY0699**; EGU2008-A-11527; SSS1-1WE5P-0699
 Sosak-Świdarska, B.
 Soil microfungi as bioindicators of the contamination by heavy metals
- XY0700**; EGU2008-A-11705; SSS1-1WE5P-0700
López-Vicente, M.; Navas, A.
 Routing soil particles in a distributed model with GIS in Mediterranean agricultural landscapes and implications for wetland conservation
- XY0701**; EGU2008-A-06774; SSS1-1WE5P-0701
 Caracciolo, C.; Porcù, F.; Prodi, F.; Napoli, M.; Orlan-dini, S.; Zanchi, C.; Dietrich, S.
 Precipitation analysis using disdrometric data to evaluate runoff and erosive processes
- XY0702**; EGU2008-A-06828; SSS1-1WE5P-0702
Pascual-Aguilar, J.A.; Andreu, V.; Rubio, J.L.
 Soil sealing and desertification: GIS assessment of existing land cover digital cartography for the spatial quantification of the process
- XY0703**; EGU2008-A-06962; SSS1-1WE5P-0703
Gómez Gutiérrez, Á.; Schnabel, S.
 Gully erosion and land use during the last 60 years in a small rangeland catchment in southwest Spain
- XY0704**; EGU2008-A-07248; SSS1-1WE5P-0704
 Petan, S.; Zorn, M.; Miko¹, M.
 Measurements of interrill soil erosion under different land use in Slovene Istria
- XY0705**; EGU2008-A-04575; SSS1-1WE5P-0705
Dewitte, O.; Daoudi, M.; Ozer, A.
 Mapping gully erosion susceptibility at the regional scale using a likelihood-ratio-based approach: the Isser River area (N Algeria)
- XY0706**; EGU2008-A-11958; SSS1-1WE5P-0706
Prats, S.A.; Malvar, M.C.; Nunes, J.P.; Ferreira, R.S.; Keizer, J.J.
 Repeat rainfall simulation experiments for post-fire erosion risk assessment and modeling in two eucalypt stands in Portugal
- XY0707**; EGU2008-A-04706; SSS1-1WE5P-0707
 Seeger, M.; Henning, B.; Ries, J. B.
 The role of plant architecture on runoff and erosion processes – field observations and an experimental approach
- XY0708**; EGU2008-A-04938; SSS1-1WE5P-0708
Sakamoto, K.; Kaneko, T.; Horita, Y.; Tonegawa, Y.; Takada, H.; Sorimachi, A.; Sekiguchi, K.; Wang, Q.; Ishihara, H.
 Influence of nitric acid and ammonia on heterogeneous uptake and oxidation of sulfur dioxide on yellow sand particles
- XY0709**; EGU2008-A-02496; SSS1-1WE5P-0709
Varela, M.E.; Benito, E.; Keizer, J.
 Wildfire effects on soil erodibility of woodlands in nw Spain
- XY0710**; EGU2008-A-05348; SSS1-1WE5P-0710
De Alba, S.; Barbero, F.; Cortines, F.; Hontoria, C.
 Effects of furrow orientation on water erosion in extreme rainfall events
- XY0711**; EGU2008-A-01651; SSS1-1WE5P-0711
Mabit, L.; Klik, A
 Erosion and sedimentation evaluation in a small agricultural Austrian watershed using Caesium-137, Lead-210 and traditional approaches

XY0712; EGU2008-A-02007; SSS1-1WE5P-0712
Carrasco, L.; **García-Orenes, F.**; caravaca, F.; Azcón, R.; Kohler, J.; Roldán, A.
Stabilisation of mine tailings by addition of microbially treated sugar beet and native bacterium inoculation in semiarid conditions

XY0713; EGU2008-A-02010; SSS1-1WE5P-0713
Morugan, A.; **García-Orenes, F.**; Mataix-Solera, J.; Gómez, I.; Guerrero, C.; Arcenegui, V.; Zornoza, R.; Ballester, P.
Does irrigation with treated waste water degrade the soil? A one year study monitoring a Mediterranean calcareous soil

XY0714; EGU2008-A-02473; SSS1-1WE5P-0714
de Luis, M.; González-Hidalgo, J.C.; Longares, L.A.
Is rainfall erosivity increasing in Mediterranean Iberian Peninsula?

XY0715; EGU2008-A-02210; SSS1-1WE5P-0715
Giannossi, M.L.; **Medici, L.**; Summa, V.; Tateo, F.
Correlations between land degradation processes and compositional characters of sediments in two studied area (Basilicata, Southern Italy).

XY0716; EGU2008-A-07841; SSS1-1WE5P-0716
Rodríguez-Blanco, M.L.; Taboada-Castro, M.M.; Taboada-Castro, M.T.
Impact of rainfall events on sediments and phosphorus losses from a rural catchment

XY0717; EGU2008-A-04270; SSS1-1WE5P-0717
Martínez-Sánchez, M.J.; Martínez-Pujante, M.J.; Mantilla, W.; Molina, J.; Tudela, M.L.; **Pérez-Sirvent, C.**
Use of new chemical and physico-chemical indicators to identify sensitive environmental areas

XY0718; EGU2008-A-08543; SSS1-1WE5P-0718
Bellin, N.; **van Wesemael, B.**; Meerkerk, A.; Vanacker, V.; Barbera, G.G.
The Decay of Soil and Water Conservation Structures in South east Spain increases Connectivity between the Cropland and the Fluvial System.

XY0719; EGU2008-A-05354; SSS1-1WE5P-0719
De Alba, S.; Alcazar, M.; Barbero, F.; Benito, G.; Lacasta, C.
Water erosion in a semiarid agricultural landscape in Central SpainS. de Alba (1), M. Alcazar (1), F. Barbero (1), G. Benito (2), C. Lacasta (2)

XY0720; EGU2008-A-04192; SSS1-1WE5P-0720
Marques, M.J.; Bienes, R.; Garcia-Muñoz, S.; Muñoz-Organero, G.
Cover crops for the soil protection in hillside vineyards under Mediterranean climate

XY0721; EGU2008-A-08904; SSS1-1WE5P-0721
Sougnez, N.; **Vanacker, V.**; van Wesemael, B.
Low modern erosion rates observed in steep, sparsely vegetated mountain ranges in southeast Spain

XY0722; EGU2008-A-03387; SSS1-1WE5P-0722
Pieri, L.; Bittelli, M.; **Ventura, F.**; Rossi Pisa, P.
Characteristic of eroded sediment and textural changes from an agricultural soil

SSS2 Fauna effect on soil properties

Convener: Cammeraat, E.
Co-Convener(s): Frouz, J.
Lecture Room 23
Chairperson: FROUZ, J.

15:30–15:45; EGU2008-A-03440; SSS2-1WE4O-001
Sustr, V.; Frouz, J.
How can insect larvae influence the soil properties?

15:45–16:00; EGU2008-A-08213; SSS2-1WE4O-002
Tajovsky, K.; Kristufek, V.; Pizl, V.
Organo-mineral microaggregates – specific units of interaction between mineral soil, microorganisms and soil invertebrate animals

16:00–16:15; EGU2008-A-08804; SSS2-1WE4O-003
Willott, J.; Cammeraat, E.; Vacca, A.
The Effects of soil-dwelling Ants on the Structure of Mediterranean Soils

16:15–16:30; EGU2008-A-08756; SSS2-1WE4O-004
Pieper, S.; Weigmann, G.; Mohnke, O.; Wessolek, G.
The functional influence of soil fauna on chemistry and physics of urban soils

16:30–16:45; EGU2008-A-05735; SSS2-1WE4O-005
Wilkinson, M.; Humphreys, G.; Smith, B.; Pietsch, T.
Quantifying soil displacement by biota over “short” and “long” timescales

16:45–17:00; EGU2008-A-05491; SSS2-1WE4O-006
van Loon, E.E.; **Tonneijck, F.H.**
Describing observed age-depth and C%-depth relationships in volcanic ash soils with a dynamic model of the carbon balance and bioturbation.

17:00 END OF SESSION

SSS2 Fauna effect on soil properties – Posters

Convener: Cammeraat, E.
Co-Convener(s): Frouz, J.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: CAMMERAAT, E.

XY0723; EGU2008-A-00801; SSS2-1WE5P-0723
Cerdà, A.; Bodí, M.B.; Jurgensen, M.F.
The effects of ants on soil properties in chemically- and organically-managed orchards.

XY0724; EGU2008-A-03987; SSS2-1WE5P-0724
Mettrop, I.; Verbeeten, E.; Cammeraat, E.
The contribution of termites on water repellence affected infiltration of a crusted soil in Sanmatenga, Burkina Faso

XY0725; EGU2008-A-05069; SSS2-1WE5P-0725
Kaneda, S.; Nakajima, M.; Murakami, T.; Urashima, Y.
Impacts of earthworm, Pheretima (Amyntas) cornosa on nutrient loss from soil in microcosm experiment

XY0726; EGU2008-A-07707; SSS2-1WE5P-0726
Lindahl, A.; **Jarvis, N**
Analysis of the site and soil factors affecting the abundance of Lumbricus terrestris L.

XY0727; EGU2008-A-06056; SSS2-1WE5P-0727
van Mourik, J.; Schilder, M.
Soil ecological Response of various Substrates on Fagus Reforestations

XY0728; EGU2008-A-06139; SSS2-1WE5P-0728
Roubířková, A.; Prach, K.; Kaneda, S.; Mudrák, O.;
Frouz, J.

Do the earthworm caused soil modifications alter course of
vegetation succession in post mining sites?

XY0729; EGU2008-A-06168; SSS2-1WE5P-0729

Kristufek, V.; Frouz, J.; Elhottova, D.

Soil invertebrate microbial interaction and its implication for
soil ecosystem

XY0730; EGU2008-A-06112; SSS2-1WE5P-0730

Frouz, J.; Pizl, V.; Kaneda, S.; Simek, M.

The effect of soil fauna on carbon sequestration in soils.

XY0731; EGU2008-A-06124; SSS2-1WE5P-0731

Kuráž, V.; **Frouz, J.**

The effect of soil macrofauna on water regime of post
mining soils

XY0732; EGU2008-A-07591; SSS2-1WE5P-0732

Mohnke, O.; Prokoph, K.; Pieper, S.; Günther, T.; Yara-
manci, U.

3D Electrical Resistivity Tomography (ERT) as a tool for
monitoring small scale soil moisture dynamics to assess the
impact of earthworm activity on water repellency.

SSS24 Soil microbial activity. Assessment, monitoring and modelling

Convener: Nannipieri, P.

Co-Convener(s): Guerrero, C., Trasar-Cepeda, C.

Lecture Room 23

Chairperson: N.N.

13:30–13:45; EGU2008-A-00068; SSS24-1WE3O-001

Renella, G.; Landi, L.; Nannipieri, P.

Enzyme assays and measures of soil microbial activity in
relation to trace element and nutrient availability (solicited)

13:45–14:00; EGU2008-A-00234; SSS24-1WE3O-002

Lagomarsino, A.; Grego, S.; Marhan, S.; Moscatelli, M.C.;
Kandeler, E.

Impact of tillage and fertilization practices on enzymatic
activities in soil particle-size fractions

14:00–14:15; EGU2008-A-04981; SSS24-1WE3O-003

Blagodatsky, S.; Kuzyakov, Y.

Modeling of priming effects in soil: a necessary minimum

14:15–14:30; EGU2008-A-05000; SSS24-1WE3O-004

Blagodatskaya, E.V.; Blagodatsky, S.; Anderson, T.-H.;
Kuzyakov, Y.

Substrate availability and microbial growth in soil amended
with glucose, root exudates and maize straw

14:30–14:45; EGU2008-A-11297; SSS24-1WE3O-005

Kaiser, C.; Koranda, M.; Rasche, F.; Fuchslueger, L.;
Kitzler, B.; Zechmeister, S.; Sessitsch, A.; Richter, A.

Resource limitation of microbial decomposition of soil
organic matter

14:45–15:00; EGU2008-A-11866; SSS24-1WE3O-006

Ritz, K.; The SQID Team

Multi-variate approaches to measuring soil microbial activ-
ity: concepts and applications in national-scale monitoring
schemes

15:00 END OF SESSION

SSS24 Soil microbial activity. Assessment, monitoring and modelling – Posters

Convener: Nannipieri, P.

Co-Convener(s): Guerrero, C., Trasar-Cepeda, C.

Display Time: Wednesday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: N.N.

XY0733; EGU2008-A-02042; SSS24-1WE5P-0733

Caravaca, F.; **Guerrero, C.;** García-Orenes, F.; Roldán, A. ;
Mataix-Solera, J.; Cerdà, A.; Zornoza, R.; Bárcenas, G.
Effects of different agricultural management practices in
soil microbiological properties in a semiarid Mediterranean
agroecosystem

XY0734; EGU2008-A-04130; SSS24-1WE5P-0734

Moscatelli, M.C.; Lagomarsino, A.; Garzillo, A.M.V.;
Pignataro, A.; Grego, S.

Comparison of b-glucosidase kinetics using colorimetric
and fluorimetric assays under organic and conventional soil
managements

XY0735; EGU2008-A-04629; SSS24-1WE5P-0735

Jezińska-Tys, J.T.; **Fr¹c, F.**

Biochemical and microbiological characterization of soil
microbial community under fertilization with dairy sewage
sludge and farmyard manure

XY0736; EGU2008-A-05477; SSS24-1WE5P-0736

Baldrian, P.; Šnajdr, J.; Valášková, V.; Cajthaml, T.; Mer-
hautová, V.

Quantification of Spatial Variability and Seasonality of
Microbial Processes in the Upper Layers of Hardwood
Forest Soil

XY0737; EGU2008-A-07857; SSS24-1WE5P-0737

Pleshakova, E.; Dubrovskaya, E.; Turkovskaya, O.

Dynamics of dehydrogenase and catalase activities in oil-
polluted soil, as studied with two bioremediation techniques

XY0738; EGU2008-A-08362; SSS24-1WE5P-0738

Zornoza, R.; Guerrero, C.; Mataix-Solera, J.; Arcenegui, V.;
García-Orenes, F.; Mataix-Beneyto, J.

Microbial biomass and activity after the abandonment of
agriculture in some semiarid Mediterranean areas of Spain

XY0739; EGU2008-A-11212; SSS24-1WE5P-0739

Bahrim, G.; **Negoita, T. Gh.;** Cotarlet, M.

Antarctic soils, resources of microorganisms with biotech-
nological properties

XY0740; EGU2008-A-11642; SSS24-1WE5P-0740

Miguéns, T.; Gil-Sotres, F.; Leirós, M.C.; **Trasar-
Cepeda, C.**

Biochemical activity in forest soils repopulated with differ-
ent species of Pinus.

XY0741; EGU2008-A-11644; SSS24-1WE5P-0741

Miguéns, T.; Gil-Sotres, F.; Leirós, M.C.; **Trasar-
Cepeda, C.**

Annual variation in the activity of hydrolytic enzymes of
the P and S cycles in soils under different types of forest
vegetation

XY0742; EGU2008-A-11646; SSS24-1WE5P-0742

Bello, D.; **Trasar-Cepeda, C.;** Leirós, M.C.; Gil-Sotres, F.
Influence of pH on the toxic effects of 2,4-dichlorophenol and
2,4,5-trichlorophenol in an agricultural soil.

XY0743; EGU2008-A-03594; SSS24-1WE5P-0743

Kleszczewska, A.; Manecki, M.; Kisielowska, E.; Bajda, T.
Pyromorphite formation from lead adsorbed on bacteria
cells of *Bacillus subtilis*

ISS60 - SSS3/HS5.2 Linking the land to the water: understanding the impacts of soil erosion and nutrient loss on soil and water quality from hillslope to large catchment scales (co-organised by SSS & HS)

Convener: Brazier, R.
Co-Convener(s): CERDAN, O., Heathwaite, L., Quinton, J., Batalla, R.
Lecture Room 23
Chairperson: N.N.

8:30–8:45; EGU2008-A-03916; IS60 - SSS3/HS5.2-1WE10-001
van Leeuwen, S.M.

North Sea riverine nutrient loads: a 1980-2002 trend analysis

8:45–9:00; EGU2008-A-11120; IS60 - SSS3/HS5.2-1WE10-002
Irvine, B.J; Kirkby, M.J.; Dalen, E.N.

Catchment connectivity and the potential of downscaled ERA-40 climate data in coarse scale modelling

9:00–9:15; EGU2008-A-06723; IS60 - SSS3/HS5.2-1WE10-003

Francke, T; Mamede, G; López-Tarazón, J A; Batalla, R J
Assessment of sediment yield and reservoir siltation using non-parametric regression and numerical modelling

9:15–9:30; EGU2008-A-08942; IS60 - SSS3/HS5.2-1WE10-004

Scholefield, P; Brazier, R; Heathwaite, A; Arnscheidt, R; Jordan, P; Haygarth, P; Walling, D; Hodgkinson, R; Withers, P; Beven, K

Uncertainty of stream nutrient transport estimates using random sampling of storm events from high and low resolution water quality and discharge data.

9:30–9:45; EGU2008-A-05345; IS60 - SSS3/HS5.2-1WE10-005

Huang, C.; Smith, D.R.; Pappas, E.A.; Heathman, G.C.; Flanagan, D.C.

Building a comprehensive watershed-scale project for assessing conservation effects at the St Joseph River Watershed

9:45–10:00; EGU2008-A-07733; IS60 - SSS3/HS5.2-1WE10-006

Bronstert, A.; **Mueller, E.N.;** Francke, T.; Mamede, G.; Batalla, R. J.; de Araujo, J. C.; Güntner, A.

WASA-SED: The application of a new modelling tool to simulate the generation, transport and retention processes of sediments in dryland regions of Spain and Brazil

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-11113; IS60 - SSS3/HS5.2-1WE20-001

Scherer, U.; Zehe, E.; Träbing, K.

Modelling sediment transport in agriculturally used loess catchments

10:45–11:00; EGU2008-A-02207; IS60 - SSS3/HS5.2-1WE20-002

Evrard, O.; Vandaele, K.; van Wesemael, B.; Biëdiers, C.
A grassed waterway and earthen dams mitigate muddy floods and limit sediment transfer to the alluvial plain

11:00–11:15; EGU2008-A-07310; IS60 - SSS3/HS5.2-1WE20-003

Bilotta, G; Brazier, R; Butler, P; Scott, C; Haygarth, P
An investigation into the influence of stocking density on the properties of soil and vegetation and the water quality of surface runoff in intensively managed grasslands

11:15–11:30; EGU2008-A-05961; IS60 - SSS3/HS5.2-1WE20-004

Lane, P; Sheridan, G; Noske, P; Sherwin, C
Nutrient loads and hillslope generation processes from burnt mountain catchments in SE Australia

11:30–11:45; EGU2008-A-09223; IS60 - SSS3/HS5.2-1WE20-005

Hatfield, R.G.; Maher, B.A.
Sediment dynamics in an upland temperate catchment: changing sediment sources, rates and deposition

11:45–12:00; EGU2008-A-08022; IS60 - SSS3/HS5.2-1WE20-006

Tamburini, F.; Bernasconi, S.M.; Frossard, E.; Oberson, A.; Stamm, C.; Prasuhn, V.; Dubois, D.; Mäder, P.

Tracking sources and fate of phosphate in agroecosystems using O-isotopes of phosphate

12:00 END OF SESSION

ISS60 - SSS3/HS5.2 Linking the land to the water: understanding the impacts of soil erosion and nutrient loss on soil and water quality from hillslope to large catchment scales (co-organised by SSS & HS) – Posters

Convener: Brazier, R.
Co-Convener(s): CERDAN, O., Heathwaite, L., Quinton, J., Batalla, R.

Display Time: Wednesday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: N.N.

XY0744; EGU2008-A-00314; IS60 - SSS3/HS5.2-1WE5P-0744

López Tarazón, J.A.; Batalla, R.J.; Vericat, D.
Temporal variability of sediment load in a highly erodible Mediterranean mountainous catchment (The River Isabena, Southern Pyrenees)

XY0745; EGU2008-A-01620; IS60 - SSS3/HS5.2-1WE5P-0745

Sande-Fouz, P.; Mirás-Avalos, J.M.; Vidal-Vázquez, E.
Erosion and sediment yield from an agroforestry catchment in Galicia, NW Spain

XY0746; EGU2008-A-01774; IS60 - SSS3/HS5.2-1WE5P-0746

Sande Fouz, P.; Mirás Avalos, J.M.; Paz González, A.
Phosphate oscillation in an agroforestry catchment under atlantic climate

XY0747; EGU2008-A-01864; IS60 - SSS3/HS5.2-1WE5P-0747

Gumiere, SJG; Le Bissonnais, YLB; Raclot, DR
Mhydas-Erosion : A physically based erosion model for watershed application.

XY0748; EGU2008-A-02584; IS60 - SSS3/HS5.2-1WE5P-0748

Ramos, M.C.; Martínez-Casasnovas, J.A.
Precipitation Extremes and their Influence on Soil and Nutrient mobilization by Runoff in Vineyards of NE Spain

XY0749; EGU2008-A-02619; IS60 - SSS3/HS5.2-1WE5P-0749

Mills, C; Bathurst, J; Quinn, P
A study of spatial scaling in sediment yield and dynamics along a rural river system - the River Eden, Cumbria, UK

XY0750; EGU2008-A-03417; IS60 - SSS3/HS5.2-1WE5P-0750

Ventura, F.; Pieri, L.; Vignudelli, M.; Ventura, M.; Rossi Pisa, P.; Tagliavini, M.

Nitrogen balance and land use in three different agricultural watersheds of the Po Valley (Italy)

XY0751; EGU2008-A-03651; IS60 - SSS3/HS5.2-1WE5P-0751

Deasy, C.; Quinton, J.N.

Monitoring techniques to assess soil erosion and nutrient loss from arable land to water within the Mitigation of Phosphorus and Sediment (MOPS) project

XY0752; EGU2008-A-03677; IS60 - SSS3/HS5.2-1WE5P-0752

Cerdan, O.; **Delmas, M.;** Mouchel, J.M.

Preliminary study on the origin of river sediment export in Europe : taking into account hillslopes characteristics and spatial variability

XY0753; EGU2008-A-04972; IS60 - SSS3/HS5.2-1WE5P-0753

lihua, Tang; dawen, Yang; huimin, Lei; hongyang, Zhao study of agricultural effect on water quality in weishan irrigated area in China

XY0754; EGU2008-A-07106; IS60 - SSS3/HS5.2-1WE5P-0754

van der Velde, M. ; Bouraoui, F.

Impact of climate change on water needs and nitrogen cycling in European agricultural areas

XY0755; EGU2008-A-08519; IS60 - SSS3/HS5.2-1WE5P-0755

Quine, T.A. ; Van Oost, K.; Govers, G.

Dynamic geomorphically-driven soil property evolution in the agricultural landscape

XY0756; EGU2008-A-08693; IS60 - SSS3/HS5.2-1WE5P-0756

Lexartza-Artza, I; Wainwright, J

Flow and sediment dynamics under changing land use, Ingbirchworth, River Don Catchment

XY0757; EGU2008-A-09116; IS60 - SSS3/HS5.2-1WE5P-0757

Galßmann, M.; Lange, J.; Schütz, T.

High resolution assessment and modelling of suspended sediment in an agricultural catchment

XY0758; EGU2008-A-09130; IS60 - SSS3/HS5.2-1WE5P-0758

Dussaillant, A

Hillslope erosion model for rain splash, sheet flow, and concentrated flow erosion

XY0759; EGU2008-A-09242; IS60 - SSS3/HS5.2-1WE5P-0759

Pásztor, L.; Kuti, L.; Szabó, J.; Németh, T.; Bakacsi, Zs.

Mapping nitrate vulnerable zones in Hungary

XY0760; EGU2008-A-09316; IS60 - SSS3/HS5.2-1WE5P-0760

Lloyd, C.E.M; **Michaelides, K.;** Evershed, R.P.; Chadwick, D.

Experimental investigations of the effects of soil erosion and deposition on soil organic matter dynamics

XY0761; EGU2008-A-09530; IS60 - SSS3/HS5.2-1WE5P-0761

Scholefield, P; Neal, C; Kelly, J; Nutter, S; Takeuchi, Y; Maberly, S; Zhang, H; Hamilton-Taylor, J; Folkard, A

An instrumented river buoy for measuring temporospatial water quality data on whole river reaches.

XY0762; EGU2008-A-09630; IS60 - SSS3/HS5.2-1WE5P-0762

Scholefield, P; Neal, C; Rowland, P; Vincent, C; Maberly, S; Pickup, R

Whole catchment hydrochemical analysis of the River Ribble and River Wyre , UK.

XY0763; EGU2008-A-10265; IS60 - SSS3/HS5.2-1WE5P-0763

Armstrong, A.; Quinton, J.; Chandler, J.; Heng, P.; Sander, G.; Scott, C; Wheatley, A.

Multi-dimensional Soil Erosion and Associated Chemical Transport: Experiments, Mathematical Modelling and Field Evaluation (MultiSEM)

Thursday

SSS8 Organic soils and Carbon Sink: characterization, relevance, analysis

Convener: Szajdak, L.

Co-Convener(s): Poch, R., Miano, T.

Lecture Room 16

Chairperson: N.N.

8:30–8:45; EGU2008-A-02529; SSS8-1TH1O-001

Bleuten, W.; Naumov, A; Huttunen, J; Repo, M; Kosykh, N;

Mironicheva-Tokareva, N; Borren, W; Lapshina, E

Carbon sequestration by subarctic peatlands of West Siberian peatland ecosystems and responses to climate warming

8:45–9:00; EGU2008-A-03932; SSS8-1TH1O-002

Minke, M.; Halle, E.; Brozyna, M.; Augustin, J.;

Schalitz, G.; Behrendt, A.; Juszczak, R.

Influence of land use and weather on the greenhouse gas exchange of drained fens in NE-Germany

9:00–9:15; EGU2008-A-01165; SSS8-1TH1O-003

Márton, L.

Interrelations Between Precipitation and Fertilization on Soil Organic Carbon Changes

9:15–9:30; EGU2008-A-09154; SSS8-1TH1O-004

Drösler, M.; Augustin, J.; Förster, Ch.; Freibauer, A.;

Höper, H.; Kantelhardt, J.; Minke, M.; Petschow, M.;

Schaller, L.; Sommer, M.

GHG-exchange and economic effects of climate friendly peatland management in Germany

9:30–9:45; EGU2008-A-04070; SSS8-1TH1O-005

Bellarby, J.; Gottschalk, P.; Chapman, S.J.; Lilly, A.;

Bell, J.S.; Towers, W.; Miller, D.; Hudson, G.; Smith, P.;

Smith, J.U.

Soil carbon stocks in Scotland: past changes and future conservation needs.

9:45–10:00; EGU2008-A-11991; SSS8-1TH1O-006

Turunen, J.

Development of Finnish peatland area and carbon storage 1950–2000

10:00 END OF SESSION

SSS8 Organic soils and Carbon Sink: characterization, relevance, analysis – Posters

Convener: Szajdak, L.

Co-Convener(s): Poch, R., Miano, T.

Display Time: Thursday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: N.N.

XY0618; EGU2008-A-00390; SSS8-1TH5P-0618

Golovatskaya, E.A.; Dyukarev, E.A.

Assessment of carbon sinks in eutrophic and oligotrophic peatlands at south of Western Siberia

XY0619; EGU2008-A-01486; SSS8-1TH5P-0619

Poch, R.M.; Antúñez, M.

Structure-dependent organic matter storage in mediterranean mountain soils

XY0620; EGU2008-A-01836; SSS8-1TH5P-0620

Szajdak, L.; Szczepański, M

Impact of peatland as biogeochemical barrier on the decrease of carbon and nitrogen forms in ground water

XY0621; EGU2008-A-01840; SSS8-1TH5P-0621

Meysner, T.; Szajdak, L

Effect of shelterbelt on two kinds of soils on redox processes

XY0622; EGU2008-A-01846; SSS8-1TH5P-0622

Maryganova, V; **Szajdak, L.;** Tychinskaya, L

Structural characteristics and amphiphilic properties of humic acids extracted from peat soil with different reagents

XY0623; EGU2008-A-01850; SSS8-1TH5P-0623

Maryganova, V; **Szajdak, L.;** Tychinskaya, L

Fractionation of alkali-soluble peat organic matter with the application of XAD-8 and XAD-4 resins used in tandem

XY0624; EGU2008-A-01854; SSS8-1TH5P-0624

Sokolov, G; **Szajdak, L.;** Simakina, I

Transformations of the structure of inorganic and organic nitrogen-containing compounds of peat, sapropel, brown coal and organic fertilizers on their basis

XY0625; EGU2008-A-01858; SSS8-1TH5P-0625

Orru, H.; Orru, M; Szajdak, L; Übner, M; Korhonen, R

Chemical properties of peat in 7 mires with balneological potential in Estonia

XY0626; EGU2008-A-02099; SSS8-1TH5P-0626

Szajdak, L.; Styła, K

The xanthine oxidase activity on two kinds of soils: organic soil and mineral-organic soil on the area of an Landscape Park in Turew

XY0627; EGU2008-A-02331; SSS8-1TH5P-0627

Ahmed, O.H.; Susilawati, K.; Nik Muhamad, A.B.; Khanif, M.Y.

Towards developing sustainable method of isolating humic acids from humified materials

XY0628; EGU2008-A-03336; SSS8-1TH5P-0628

Rowson, J.G.; Worrall, F.; Evans, M.G.

Restoring peatlands to carbon sinks

XY0629; EGU2008-A-06265; SSS8-1TH5P-0629

Bambalov, N; Smirnova, V; Samokar, O

Long-term experiment of peat soil conservation by technology of German sand-mix culture in Belarus

XY0630; EGU2008-A-06286; SSS8-1TH5P-0630

Szajdak, L; Brandyk, T; **Szatyłowicz, J**

Impact of secondary transformation of peat moorsh soils on their physic-chemical properties

XY0631; EGU2008-A-06326; SSS8-1TH5P-0631

Szajdak, L; Inisheva, L. I.

Biochemical activity and the content of chemical compounds in peats of the Great Vasyugan Mire

XY0632; EGU2008-A-06376; SSS8-1TH5P-0632

Chrzanowski, S

Impact of land use on soil water conditions in transformed hydrogenic sites used as grasslands

XY0633; EGU2008-A-06909; SSS8-1TH5P-0633

Sapek, A; Sapek, B

High concentrations of phosphate and ammonium in groundwater samples from low peat after decreasing the groundwater table

XY0634; EGU2008-A-07652; SSS8-1TH5P-0634

Gierlach-Hladon, T.; Szajdak, L

Studies of the influence of humic acids on sorption and ion-exchange properties of high moor peat

XY0635; EGU2008-A-07879; SSS8-1TH5P-0635

Arczynska-Chudy, E; **Jeziarska-Madziar, M.;** Goldyn, H; Pinskwar, P

Nutrient content in the bottom sediments of small midfield ponds

XY0636; EGU2008-A-10260; SSS8-1TH5P-0636

Llorente, M.; Turrión, B

Organic matter stability in calcareous soils under different land uses: a density fractionation approach

XY0637; EGU2008-A-10352; SSS8-1TH5P-0637

Zaccone, C.; Said-Pullicino, D.; Coccozza, C.; Gigliotti, G.; Miano, T.M.

Total phenolic constituents (TPC) in Sphagnum-dominated peat and corresponding humic acids along a bog profile

XY0638; EGU2008-A-10359; SSS8-1TH5P-0638

Llorente, M.; Lafuente, F; Turrión, B

Estimation of microbial biomass by ultra-violet absorbance in calcareous soils under different land uses

XY0639; EGU2008-A-11623; SSS8-1TH5P-0639

Rakovich, V

Belarusian mire and peat soils contribution to formation of sources and fluxes of CO₂ and CH₄

XY0640; EGU2008-A-11640; SSS8-1TH5P-0640

Koster, T; **Kolli, R.;** Noormets, M; Kauer, K; Rannik, K; Lillak, R; Szajdak, L

Properties, composition and mutual relationship of soil and plant covers concerning land use change

XY0641; EGU2008-A-07584; SSS8-1TH5P-0641

Sokolowska, Z; Szajdak, L; Warchulska, P

Influence of phosphate ions and competitiveness sodium and calcium cations on the humic acids peptization and coagulation processes

XY0642; EGU2008-A-12266; SSS8-1TH5P-0642

Inisheva, L.I.; Dementyeva, T.V.; Inishev, N.G.

Studies on bog ecosystems in stationary post "Vasyuganye"

SSS10 Transport in preferential flow domains of the soil porous system

Convener: Coppola, A.
Co-Convener(s): Kutilek, M., Gerke, H., Pagliai, M.
Lecture Room 16
Chairperson: COPPOLA, A.

13:30–14:00; EGU2008-A-01730; SSS10-1TH3O-001
Simunek, J.; van Genuchten, M.Th.; Sejna, M.
Modeling nonequilibrium and preferential flow and transport with HYDRUS. (solicited)

14:00–14:15; EGU2008-A-12041; SSS10-1TH3O-002
Iversen, B. V.; Børgesen, C. D.; Lægdsmand, M.; Greve, M. H.; Heckrath, G.; Kjærgaard, C.
Model tool for identifying potential risk areas of in situ colloidal-P transport through soil macropores

14:15–14:30; EGU2008-A-08503; SSS10-1TH3O-003
Hincapié, I.; Germann, P.; Vontobel, P.
Spatially averaged approach to heterogeneous flow in sand boxes assessed with neutron radiography

14:30–14:45; EGU2008-A-08039; SSS10-1TH3O-004
Rossi, M.; **Ippisch, O.**; Flühler, H.
Is solute transport in heterogeneous soils predictable?

14:45–15:00; EGU2008-A-10472; SSS10-1TH3O-005
Sanchez, I.; Capilla, J. E.; Llopis-Albert, C.
Modeling effective flow and mass transport in a porous media with preferential flow paths: a lab tank experiment

15:00 COFFEE BREAK

Chairperson: GERKE, H.

15:30–16:00; EGU2008-A-09516; SSS10-1TH4O-001
Durner, W.; Peters, A.; Iden, S.C.
Estimation of soil hydraulic properties of soils with heterogeneous pore-size distribution - on appropriate methods and models (solicited)

16:00–16:15; EGU2008-A-04635; SSS10-1TH4O-002
Czachor, H.
Physical factors of sub-critical soil water repellency

16:15–16:30; EGU2008-A-04572; SSS10-1TH4O-003
Or, D.; Lehmann, P.; Shokri, N
Preferential evaporation from heterogeneous porous media

16:30–16:45; EGU2008-A-04208; SSS10-1TH4O-004
Dyck, M. F.; Kachanoski, R. G.
Effects of soil horizons on vertical continuity of preferred flow domains

16:45–17:00; EGU2008-A-05799; SSS10-1TH4O-005
Carrick, S.; Almond, P.; Buchan, G.
The reality versus conventional wisdom of measuring infiltration in structured and layered field soils

17:00 END OF SESSION

SSS10 Transport in preferential flow domains of the soil porous system – Posters

Convener: Coppola, A.
Co-Convener(s): Kutilek, M., Gerke, H., Pagliai, M.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0643; EGU2008-A-01967; SSS10-1TH5P-0643
Allaire, S.E.; Lafond, J.
Measuring preferential flow of gas in soil

XY0644; EGU2008-A-03615; SSS10-1TH5P-0644
Germann, P.
Physics of non-equilibrium flow

XY0645; EGU2008-A-10299; SSS10-1TH5P-0645
Kutilek, M.; Germann, P.F.
Converging hydrostatic and hydromechanic concepts of preferential flow definitions

XY0646; EGU2008-A-04379; SSS10-1TH5P-0646
Karpyn, Z.; Piri, M.
Characterization of fluid micro-structures in porous media of mixed wettability (cancelled)

XY0647; EGU2008-A-09941; SSS10-1TH5P-0647
Gerke, H.H.; Ellerbrock, R.H.
Organic matter composition of soil aggregate coatings related to wettability

XY0648; EGU2008-A-10512; SSS10-1TH5P-0648
Ramstad Alme, L.; **Fossum, J. O.**; Meheust, Y.
Transport of water in a weakly-hydrated model clay soil

XY0649; EGU2008-A-05746; SSS10-1TH5P-0649
Meheust, Y.; Le Gal, N.; Caudal, J.-P.; de Bremond d'Ars, J.
Visualization of solute transport and particle tracking in a three-dimensional porous medium, using optical index matching

XY0650; EGU2008-A-11679; SSS10-1TH5P-0650
Basile, A.; Coppola, A.; Mele, G.; Terribile, F.
2D and 3D micromorphological analyses for improving soil hydrological characterization

XY0651; EGU2008-A-08876; SSS10-1TH5P-0651
Binner, R.; Kalbe, U.; Berger, W.
Parametrisation and visualisation of the pore structure of graded soils via 3D image processing.

XY0652; EGU2008-A-10678; SSS10-1TH5P-0652
Jelínková, V.; Pohlmeier, A.; Císlarová, M.; van Dusschoten, D.; Vereecken, H.
Tracer experiments to study preferential flow in a soil column by means of MRI.

XY0653; EGU2008-A-09003; SSS10-1TH5P-0653
Leue, M.; Ellerbrock, R.H.; Gerke, H.H.; Böhm, C.
In-situ characterization of organic matter composition at aggregate surfaces using DRIFT spectroscopy

XY0654; EGU2008-A-03181; SSS10-1TH5P-0654
Jarvis, N
A model of near-saturated hydraulic properties

XY0655; EGU2008-A-05601; SSS10-1TH5P-0655
Germer, K.; Stadler, L.; Hinkelmann, R.; Färber, A.; Braun, J.
Studies on infiltration processes in a soil column with a single macropore

XY0656; EGU2008-A-07508; SSS10-1TH5P-0656
Bell, K. J.; McGrath, G. S.; **Hinz, C.**
Effects of surface heterogeneity on preferential flow in water repellent sandy soils

XY0657; EGU2008-A-07692; SSS10-1TH5P-0657
Nosalewicz, A.; Lipiec, J.; Wojciga, A.
Pore size distribution and water infiltration under different tillage systems

XY0658; EGU2008-A-02399; SSS10-1TH5P-0658
Merdun, H.; Meral, R.; Demirkiran, A.
Stability of time domain reflectometer measurements of water flow and solute transport in different field soils

XY0659; EGU2008-A-02382; SSS10-1TH5P-0659
Kodesova, R.; Vignozzi, N.; Rohoskova, M.; Hajkova, T.; Kocarek, M.; Pagliai, M.; Kozak, J.
Water flow and chlorotoluron transport affected by varying soil structure of different diagnostic horizons of three soil types

XY0660; EGU2008-A-06601; SSS10-1TH5P-0660
Comegna, A.; Lamaddalena, N.; Basile, A.; Coppola, A.
Chloride transport in a tile-drained "Terra Rossa" soil : Relationship between local-scale and field-scale transport parameters

XY0661; EGU2008-A-06730; SSS10-1TH5P-0661
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.

SSS11 Soils and pedosediments as environmental archives of the last 130 000 years (including Philippe Duchaufour Medal Lecture)

Convener: Kühn, P.
Co-Convener(s): Terhorst, B., Sedov, S., Lorz, C., Pietsch, D.
Lecture Room 16
Chairperson: N.N.

10:30–11:15; EGU2008-A-12057; SSS11-1TH2O-001
Ruellan, A.
Soil morphology: a key for discover and understand the structured and dynamic pedological covers (Philippe Duchaufour Medal Lecture) (solicited)

11:15–11:30; EGU2008-A-02757; SSS11-1TH2O-002
Grygar, T.; Kadlec, J.; Zigova, A.
Cations in expandable clay minerals: a snapshot of past soil solution chemistry

11:30–11:45; EGU2008-A-00121; SSS11-1TH2O-003
Saey, T.; Simpson, D.; Vitharana, U.; Vermeersch, H.; Vermang, J.; Van Meirvenne, M.
Reconstructing the paleotopography at the beginning of the Weichselian glacial stage using electromagnetic induction

11:45–12:00; EGU2008-A-01217; SSS11-1TH2O-004
Lucke, B.; **Schmidt, M.;** Bäumler, R.
Paleosols in Jordan as indicators for the timing and character of environmental change

12:00 END OF SESSION

SSS11 Soils and pedosediments as environmental archives of the last 130 000 years (including Philippe Duchaufour Medal Lecture) – Posters

Convener: Kühn, P.
Co-Convener(s): Terhorst, B., Sedov, S., Lorz, C., Pietsch, D.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0662; EGU2008-A-02637; SSS11-1TH5P-0662
Strnad, L.; Mihaljević, M.; Ettler, V.; Barsova, L.; Zuna, M.; Šebek, O.
Concentration profile of the platinum group elements in peat deposit near a historic Pb-Ag mining district

XY0663; EGU2008-A-06005; SSS11-1TH5P-0663
Gocke, M.; Pustovoytov, K.; **Kuzyakov, Y.**
CO₂ concentration in soil air affects recrystallisation rate of primary CaCO₃

XY0664; EGU2008-A-06089; SSS11-1TH5P-0664
Zerboni, A.; Trombino, L.; Berlusconi, A.; Livio, F.; Sileo, G.; Michetti, A.M.; Cremaschi, M.
Multidisciplinary approach to the Monte Netto loess-paleosols sequence: implications for the evolution of the central sector of the northern Po Plain

XY0665; EGU2008-A-09776; SSS11-1TH5P-0665
Bullmann, H.
Lessivés and clayic brown soils consisting of loess over brown loam at Triassic Shell Limestone. Pedogenic ferric oxides and total ferrous content describing pedogenic and lithogenic features

XY0666; EGU2008-A-10617; SSS11-1TH5P-0666
Mesia, S.; Miko, S.; Hasan, O.; Koch, G.; Sparica Miko, M.; Bakrae, K.
Sediments and catchment soils of a closed Mediterranean karstic lake as archives of land use change and atmospheric Pb deposition (Vransko jezero, Cres Island, Northern Adriatic)

XY0667; EGU2008-A-10775; SSS11-1TH5P-0667
Riegler, D.; Peticzka, R.; Terhorst, B.
In-situ soil colour measurements for palaeosol detection

XY0668; EGU2008-A-10988; SSS11-1TH5P-0668
Sumfleth, K.; Duttman, R.
The spatial variability of scale-dependent correlations between soil properties and relief information in a typical paddy soil landscape of south-east China

XY0669; EGU2008-A-02235; SSS11-1TH5P-0669
Mihaljevic, M.; Zuna, M.; Ettler, V.; Chrastny, V.; Sebek, O.; Strnad, L.; Kyncl, T.
A comparison of lead behaviour in two geochemical archives in the vicinity of a lead smelter

SSS21 Soil conservation strategies in orchards

Convener: Gomez, J.
Co-Convener(s): Basso, B., Singer, M., Erpul, G.
Lecture Room 23
Chairperson: N.N.

8:30–8:45; EGU2008-A-01031; SSS21-1TH1O-001
Casalí, J.; **Giménez, R.;** De Santisteban, L.; Álvarez-Mozos, J.; Mena, J.; Del Valle de Lersundi, J.
Determination of long-term erosion rates in vineyards of Navarre (Spain) using botanical benchmarks: an empirical approach

8:45–9:00; EGU2008-A-09942; SSS21-1TH1O-002
Ben-Hur, M; **Lado, M**
Plant canopy and soil cover effects on surface runoff and soil loss in orchards from Mediterranean soils

9:00–9:15; EGU2008-A-09792; SSS21-1TH1O-003
Meerkerk, A.L.; van Wesemael, B.
The water balance of semi-arid orchards: implications for the application of cover crops

9:15–9:30; EGU2008-A-00980; SSS21-1TH1O-004
Basso, B; Ritchie, J.T; Grace, P.R.; Sartori, L.
A field study to estimate time-to-ponding in different tillage and residues management: implication for soil and water conservation in orchards

9:30–9:45; EGU2008-A-01019; SSS21-1TH1O-005
O’Geen, A.; Pettygrove, G.; Southard, R.
Development of geographic nutrient management zones for winegrapes based on soil-landscape characteristics

9:45–10:00; EGU2008-A-03977; SSS21-1TH1O-006
Gómez, J.A.; **Vanwalleghe, T.;** Giráldez, J.V.
Preliminary results of soil erosion at different scales in an olive orchard in Southern Spain

10:00 END OF SESSION

SSS21 Soil conservation strategies in orchards – Posters

Convener: Gomez, J.
Co-Convener(s): Basso, B., Singer, M., Erpul, G.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0670; EGU2008-A-00136; SSS21-1TH5P-0670
Cerdà, A.; Bodí, M.B.
Conservation strategies on olive orchards in eastern Spain. (solicited)

XY0671; EGU2008-A-00646; SSS21-1TH5P-0671
Deviren, S.; Ozkaya, M.; Erpul, G.
Soil and water conservation techniques generally used in olive orchards in Mediterranean Turkey

XY0672; EGU2008-A-00977; SSS21-1TH5P-0672
Alvarez, S.; Soriano, M.A.; Gomez, J.A.
Development of a Soil Degradation Index for Monitoring of Organic Olive Orchards in Southern Spain

XY0673; EGU2008-A-00978; SSS21-1TH5P-0673
Licciardello, F.; Gómez, J.A.; Zimbone, S.M.
Evaluation of the WEPP model to analyze the erosion risk on hillslope olive orchards under different soil managements

XY0674; EGU2008-A-00986; SSS21-1TH5P-0674
Sofo, A.; Celano, G; Dichio, B; Montanaro, G; Xiloyannis, C
Functional and genetic fingerprinting of microbial soil community in a kiwifruit orchard under different management practices

XY0675; EGU2008-A-01010; SSS21-1TH5P-0675
Taguas, EV; Bingner, R; Yuan, Y; Peña, A; Ayuso, JL; Perez, R
Quantifying the importance of ephemeral gully erosion with the AnnAGNPS model in an olive orchard microcatchment in Spain.

XY0676; EGU2008-A-01030; SSS21-1TH5P-0676
Boussadia, O.; Ben Mariem, F.; **Braham, M.;** Ben El Hadj, S.
Degradation of olive production system in Tunisian semi arid (solicited)

XY0677; EGU2008-A-01696; SSS21-1TH5P-0677
Zdruli, P
Anthropic interventions for increasing orchard cultivation areas in rocky calcareous shallow soils of Apulia Region in South-eastern Italy

XY0678; EGU2008-A-07006; SSS21-1TH5P-0678
Galindo, P.; de Luna, E; Polo, MJ
Herbicide runoff loss from no-tillage olive systems with ground cover strips

XY0679; EGU2008-A-11911; SSS21-1TH5P-0679
Braham, M.; Mechri, B.; Cheheb, H.; Ben Elhadj, S.
Soil management and Agronomic application of olive mill wastewaters to limit erosion in olive culture in Tunisia (solicited)

SSS22 Diffuse reflectance spectroscopy in soil science and land resource assessment

Convener: Guerrero, C.
Co-Convener(s): Mouazen, A., Viscarra Rossel, R.
Lecture Room 23
Chairperson: VISCARRA ROSSEL, R.

13:30–14:00; EGU2008-A-00097; SSS22-1TH3O-001
Reeves, J.
Near- and mid-infrared spectroscopy for the analysis of soils: Where are we and what needs to be done? (solicited)

14:00–14:15; EGU2008-A-00305; SSS22-1TH3O-002
Genot, V.; Colinet, G.; Dardenne, P.; Bock, L.
Study of the near infrared spectroscopy performances for the determination of soil parameters useful for the fertility diagnosis

14:15–14:30; EGU2008-A-11135; SSS22-1TH3O-003
Stenberg, B
Pretreatment of Soil Samples for Reduced Vis-NIR Prediction Error of Soil Organic Matter and Clay Content

14:30–14:45; EGU2008-A-00945; SSS22-1TH3O-004
Mouazen, A. M.; Maleki, M. R.; De Baerdemaeker, J.; Ramon, H.
Practical hints on using the visible and near infrared diffusive reflectance spectroscopy in soil sciences and land resources assessment (solicited)

14:45–15:00; EGU2008-A-01801; SSS22-1TH3O-005
Deb, M.K.
Non-destructive and quantitative analysis of inorganic ions in soil and sediments employing Diffuse reflectance Fourier transform infrared spectroscopy (DRS-FTIR)

15:00 COFFEE BREAK

Chairperson: MOUAZEN, A.M.

15:30–15:45; EGU2008-A-00317; SSS22-1TH4O-001
Gomez, C.; Viscarra Rossel, R.A.; McBratney, A.B.
Comparing predictions of soil organic carbon by field vis-NIR spectroscopy and hyperspectral remote sensing

15:45–16:00; EGU2008-A-06620; SSS22-1TH4O-002
Stevens, A; **van Wesemael, B.;** Bartholomeus, H; Tychon, B; Ben-Dor, E
Performance of different VNIR spectroscopic techniques for determining soil organic carbon contents

16:00–16:15; EGU2008-A-04316; SSS22-1TH4O-003
Dematte, J.A.M.; Fiorio, P.R.
Orbital and laboratory spectral data to optimize soil analysis

16:15–16:30; EGU2008-A-03213; SSS22-1TH4O-004
Melendez-Pastor, I; Navarro-Pedreño, J; Koch, M; Gómez, I
Imaging spectroscopy and GIS analysis to detect salinity problems in soils

16:30–16:45; EGU2008-A-06476; SSS22-1TH4O-005
De Jong, S.M.; Addink, E.A.; Duijsings, D.
Physical Characterization and Spectral Response of Mediterranean Soil Surface Crusts

16:45–17:00; EGU2008-A-00533; SSS22-1TH4O-006
Viscarra Rossel, R.A.; Stenberg, B.; Janik, L.
Diffuse reflectance spectroscopy in soil science: current and future possibilities (solicited)

17:00 END OF SESSION

SSS22 Diffuse reflectance spectroscopy in soil science and land resource assessment – Posters

Convener: Guerrero, C.
Co-Convener(s): Mouazen, A., Viscarra Rossel, R.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: GUERRERO, C.

XY0680; EGU2008-A-00765; SSS22-1TH5P-0680
Soriano, JM; Gomez, I; Guerrero, C; Navarro-Pedreño, J; Hierro-García, P; García-Orenes, F; Martínez-Muro, JL
Estimation of some maturity parameters on composts and sewage sludges using NIR spectroscopy

XY0681; EGU2008-A-03095; SSS22-1TH5P-0681
Cañasveras, J.C.; **Barrón, V.;** Gómez, J.A.; Torrent, J.
Estimation of aggregate stability in Mediterranean soils by diffuse reflectance spectroscopy

XY0682; EGU2008-A-03756; SSS22-1TH5P-0682
Rosenauer, E.; Piecha, S.
The influence of sunlight variations on field spectrometry and compensation strategies

XY0683; EGU2008-A-08261; SSS22-1TH5P-0683
Zornoza, R.; Guerrero, C.; Mataix-Solera, J.; Scow, K.M.; Arcenegui, V.; Mataix-Beneyto, J.
Prediction of variables related to microbial community composition of soils using near-infrared spectroscopy

XY0684; EGU2008-A-10398; SSS22-1TH5P-0684
Arcenegui, V.; Guerrero, C.; Mataix-Solera, J.; Zornoza, R.; Mataix-Beneyto, J.; García-Orenes, F.; Gómez, I.
Effects of sample moisture in the estimation of the maximum temperature reached on burned soils using near-infrared spectroscopy

XY0685; EGU2008-A-10420; SSS22-1TH5P-0685
Guerrero, C.; Arcenegui, V.; Mataix-Solera, J.; Pérez-Bejarano, A.; Zornoza, R.; Gómez, I.; Mayoral, A.M.; Morales, J.
Near-infrared (NIR) spectroscopy for the estimation of properties of burned soils and the assessment of fire severity

XY0686; EGU2008-A-11144; SSS22-1TH5P-0686
Guerrero, C.; Zornoza, R.; Gómez, I.; Mataix-Solera, J.; Pérez-Bejarano, A.; Navarro-Pedreño, J.; Martínez-Martínez, M.; Fernández-Boyano, M.; Mataix-Solera, J.; Soriano-Disla, J.M.
The use of NIR spectroscopy for the estimation of properties in agricultural and forest soils from SE Spain

XY0687; EGU2008-A-00431; SSS22-1TH5P-0687
Maleki, M.; De Baerdemaeker, D; Ramon, R; Mouazen, M
Efficiency of a VISNIR real-time phosphorus fertiliser applicator

SSS27 Soil quality indicators to assess genesis, degradation and rehabilitation processes

Convener: Dilly, O.
Co-Convener(s): Benedetti, A., Grandjean, G.
Lecture Room 23
Chairperson: DILLY, O.

10:30–10:45; EGU2008-A-00626; SSS27-1TH2O-001
Pompili, L.; Lagomarsino, A.; Moscatelli, M.C.; Grego, S.; Benedetti, A.
Soil organic matter, microbial carbon pool and enzymatic activity in differently managed agricultural systems

10:45–11:00; EGU2008-A-09712; SSS27-1TH2O-002
Michot, D.; **Follain, S.;** Walter, C.
Soil electrical resistivity to characterize 3D soil organisation within a complex agricultural landscape

11:00–11:15; EGU2008-A-02715; SSS27-1TH2O-003
Muhr, J.; Borken, W; Matzner, E
Effects of Soil Frost on Fluxes and Radiocarbon Signature of Soil Respiration in a Norway Spruce Forest Soil

11:15–11:30; EGU2008-A-06629; SSS27-1TH2O-004
Stevens, A.; van Wesemael, B.
Monitoring and mapping soil organic carbon with airborne VNIR spectroscopy

11:30–11:45; EGU2008-A-09106; SSS27-1TH2O-005
Valet, S.; **Motelica-Heino, M.;** Le Coustumer, P.
Soil surface crusts as a major indicator of their hydro-physical potentiality

11:45–12:00; EGU2008-A-11343; SSS27-1TH2O-006
Negoita, T. Gh.; Stefanic, Gh.; Gheorghita, N.; Dumitrescu, N.; Cotta, M.
Pedobiological processes in the Antarctic coast regions

12:00 END OF SESSION

SSS27 Soil quality indicators to assess genesis, degradation and rehabilitation processes – Posters

Convener: Dilly, O.
Co-Convener(s): Benedetti, A., Grandjean, G.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0688; EGU2008-A-00452; SSS27-1TH5P-0688
Lagomarsino, A.; Marinari, S.; Moscatelli, M.C.; Pompili, L.; Benedetti, A.; Grego, S.
The influence of different land uses in Mediterranean environment on soil biochemical indicators and functional diversity

XY0689; EGU2008-A-02786; SSS27-1TH5P-0689
Fernández, O.; Bescansa, P.; Virto, I.; Imaz, M.J.; Enrique, A.
Impact of afforestation on soil quality and organic matter dynamics in an eroded calcic soil in arid land, NE Spain

XY0690; EGU2008-A-10267; SSS27-1TH5P-0690
Nii-Annang, S.A.; Grünwald, H.; Freeze, D.; Hüttel, R.F.; **Dilly, O.**
Soil organic carbon, microbial respiration and their carbon isotope characteristics in alley cropping systems after 9 years of recultivation of quaternary deposits in eastern Germany

XY0691; EGU2008-A-09051; SSS27-1TH5P-0691
Valet, S.; **Motelica-Heino, M.;** Le Coustumer, P.
The compactness of soils: a major physical indicator of their potentiality

XY0692; EGU2008-A-03939; SSS27-1TH5P-0692
Seladji, S.; Cosenza, Ph.; Richard, G.; Boizard, H.; Souf-faché, B.; Flageul, S.; Pencolé, J.-P.; Tabbagh, A.
High-resolution electrostatic measurements for detecting compacted zones in a loamy cultivated soil

XY0693; EGU2008-A-08486; SSS27-1TH5P-0693
Pásztor, L.; Szabó, J.; Bakacsi, Zs.
Regionalization of soil degradation processes in Hungary

XY0694; EGU2008-A-08572; SSS27-1TH5P-0694
Pásztor, L.; Szabó, J.; Bakacsi, Zs.; Dombos, M.; László, P.
Identification of regional scale soil degradation processes by exploiting spatio-temporal features of Kreybig Digital Soil Information System

XY0695; EGU2008-A-04260; SSS27-1TH5P-0695
Anton, J.; Tarkis, A.; Grau, J.; Saa, A.; Sanchez, E.
Use of decision theory tools for qualification of the lands of the Community of Madrid

XY0696; EGU2008-A-03820; SSS27-1TH5P-0696
Faz-Cano, A.; Martínez-Pagán, P.; Aracil, E.
2D electrical tomography to assess pollution in slurry ponds of the Murcia Region, SE Spain

XY0697; EGU2008-A-06683; SSS27-1TH5P-0697
Wongfun, N.; Del Sontro, T.; Sobek, S.; Wehrli, B.
Carbon burial and its influences on methane ebullition in a Swiss hydro-electric reservoir.

Friday

SSS7 Iodine and Selenium anomalies in soils and Health

Convener: Bech, J.
Co-Convener(s): Fuge, R., Banuelos, G.
Lecture Room 23
Chairperson: BECH.J, FUGE.R, BANUELOS.G.

13:30–14:00; EGU2008-A-03242; SSS7-1FR3O-001
Fuge, R.
Iodine in soil, relationship with human and animal health (solicited)

14:00–14:15; EGU2008-A-04448; SSS7-1FR3O-002
Korobova, E.
Soil and landscape geochemical factor of iodine distribution in the main environmental components and agricultural food chain within the central Russian plain

14:15–14:30; EGU2008-A-02190; SSS7-1FR3O-003
Johnson, C.C.; Fordyce, F.M.
Iodine and Selenium in soils: British Geological Survey case studies into trace element deficiencies and human health from around the world

14:30–14:45; EGU2008-A-08622; SSS7-1FR3O-004
Steinnes, E.
Significance of the oceans as a source of I and Se in soils

14:45–15:00; EGU2008-A-09267; SSS7-1FR3O-005
Ander, E.L.; Johnson, C.C.; Fordyce, F.M.; Breward, N.; Scheib, A.J.
Iodine and selenium in soils from East Anglia, UK

15:00 COFFEE BREAK

Chairperson: BECH.J, FUGE.R, BANUELOS.G.

15:30–15:45; EGU2008-A-04350; SSS7-1FR4O-001
Banuelos, G.

Biofortified and phyto-products may be essential for sustainability and implementation of phytoremediation strategies

15:45–16:00; EGU2008-A-05001; SSS7-1FR4O-002
Martínez-Sánchez, M.J.; **Pérez-Sirvent, C.**; **García-Lorenzo, M.L.**; Mantilla, W.; Solano, A.; Agudo, I.; Bech, J.
Background and baseline values for selenium in soils from Murcia Region (SE, Spain) and their relationship with mineralogical composition

16:00–16:15; EGU2008-A-00440; SSS7-1FR4O-003
Prabha, D.; Subbhuraam, CVS
Selenium accumulation by *Portulaca oleracea* L. - an edible medicinal plant

16:15–16:30; EGU2008-A-06090; SSS7-1FR4O-004
Keskinen, R.; Ekholm, P.; Yli-Halla, M.; Hartikainen, H.
Comparison of Different Methods for Extracting Soil Selenium

16:30–16:45; EGU2008-A-06066; SSS7-1FR4O-005
Sager, M.
Selenium levels in Austrian agriculture and nutrition

16:45–17:00; EGU2008-A-05965; SSS7-1FR4O-006
Park, M.; **Chon, H.T.**
Enrichment of selenium and its relationship with other heavy metals in rocks, soils, and crops in the area covered with black shale in Korea

17:00 END OF SESSION

SSS7 Iodine and Selenium anomalies in soils and Health – Posters

Convener: Bech, J.
Co-Convener(s): Fuge, R., Banuelos, G.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: BECH.J, FUGE.R, BANUELOS.G.

XY0647; EGU2008-A-04292; SSS7-1FR5P-0647
Pérez-Sirvent, C.; **Martínez-Sánchez, M.J.**; **García-Lorenzo, M.L.**; Campillo, N.; López-García, I.; Hernández-Córdoba, M.
Selenium and selenium species in environmental samples obtained in the neighbourhood of an old mining area. Methodological aspects and comparison of analytical procedures

XY0648; EGU2008-A-04630; SSS7-1FR5P-0648
Korobova, E.; Kouvyline, A.
Evaluation of a potential iodine supply due to the soil cover for the inhabited rural areas subjected to iodine radioisotope contamination (the Bryansk region case study)

XY0649; EGU2008-A-04996; SSS7-1FR5P-0649
Pérez-Sirvent, C.; **Martínez-Sánchez, M.J.**; **García-Lorenzo, M.L.**; Mantilla, W.; Martínez-Pujante, M.J.; Agudo, I.; Banegas, A.; Bech, J.
Geochemical background of selenium and its possible relation to soil properties

XY0650; EGU2008-A-06148; SSS7-1FR5P-0650
Fernández-López, C.; **Faz, A.**; **Arocena, J.**; **Bech Borrás, J.**
Selenium Contents in Salts from Natural Pan and Mining Areas in the Salar de Uyuni, Central Altiplano, Bolivia.

XY0651; EGU2008-A-06450; SSS7-1FR5P-0651
Longchamp, M.; **Angeli, N.**; Bariac, T.; Biron, P.;
Richard, P.; Castrec-Rouelle, M.
Study of selenate uptake by the higher plant *Zea mays* subsp.
mays (L.): methodology and first results.

XY0652; EGU2008-A-06989; SSS7-1FR5P-0652
Shimamoto, Y.; Takahashi, Y.
Iodine speciation in the soil-water systems using XANES
and HPLC-ICP-MS

XY0653; EGU2008-A-08806; SSS7-1FR5P-0653
Pezzarossa, B.; Petruzzelli, G.; Malorgio, F.
Addition of selenium to the growing substrate for Se enrichment of edible plant parts

XY0654; EGU2008-A-09700; SSS7-1FR5P-0654
Bech, J.; Suarez, M.; Reverté, F.; Tume, P.; Lansac, A.
Selenium and other trace elements in phosphate rock of Sechura (North Perú)

XY0655; EGU2008-A-10400; SSS7-1FR5P-0655
Boluda, R.; Gil, C.; Roca-Pérez, L.; Becerra, L.; Ramos-Miras, J.; Mota, J.; **Bech, J.**
The level of selenium and some other trace elements in Mediterranean Spanish soils

SSS25 Digital soil mapping: novel approaches (including geophysical measurements) to the prediction of key soil properties for modelling physical processes

Convener: Carré, F.
Co-Convener(s): Lark, M., Minasny, B., Romano, N.
Lecture Room 16
Chairperson: N.N.

8:30–9:00; EGU2008-A-09425; SSS25-1FR1O-001
Mayr, T.; Palmer, R.; Bellamy, P.; Rivas-Casado, M.
Digital Soil Assessment - a UK example (solicited)

9:00–9:15; EGU2008-A-03329; SSS25-1FR1O-002
Reuter, H.I.; Carre, F.; Hengl, T.; Montanarella, L.
Using DSM data for modeling wind erosion events – bridging the gap between DSM and DSRA (solicited)

9:15–9:30; EGU2008-A-02960; SSS25-1FR1O-003
Minasny, B.; McBratney, A.B.
Methodology for global digital soil mapping (solicited)

9:30–9:45; EGU2008-A-03392; SSS25-1FR1O-004
Lark, R.M.; Corstanje, R.; Pringle, M.J.
Digital soil mapping, or digital soil information? (solicited)

9:45–10:00; EGU2008-A-05773; SSS25-1FR1O-005
Hong, S. Y.; Minasny, B.; Kim, Y. H.; Song, K. C.
Digital Mapping of Soil Carbon Storage and Available Water Capacity in Korea (solicited)

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-01690; SSS25-1FR2O-001
Rawlins, B. G.; Marchant, B. P.; Smyth, D.; Van Dam, C.; Scheib, C.; Lark, R. M.; Jordan, C.
Airborne radiometric survey data and a DTM as covariates for regional scale mapping of soil organic carbon across Northern Ireland (solicited)

10:45–11:00; EGU2008-A-08087; SSS25-1FR2O-002
Behrens, T.; Schmidt, K.; Gerber, R.; Albrecht, C.; Felix-Henningsen, P.; Scholten, T.
Transect sampling for digital soil sensing and mapping (solicited)

11:00–11:15; EGU2008-A-01780; SSS25-1FR2O-003
Devkota, S.; **Lukose Kuriakose, S.**; Jetten, V.G.
Prediction of soil depth using topographical variables for debris flow initiation modeling in the upper Tikovil River basin, Kerala, India (solicited)

11:15–11:30; EGU2008-A-09214; SSS25-1FR2O-004
Vitharana, U.W.A.; Van Meirvenne, M.; Amakor, X.N.C.; Saey, T.; Vermeersch, H.
Use of proximal soil sensing to improve the thematic accuracy of a soil-polygon map (solicited)

11:30–11:45; EGU2008-A-05303; SSS25-1FR2O-005
SCHAUPPENLEHNER, T.; **Dragut, L.**; Blaschke, T.; Muhar, A.
Using landform classification to improve the interpolation of soil taxation point data (solicited)

11:45–12:00; EGU2008-A-06108; SSS25-1FR2O-006
Sauer, U.; Werban, U.; Dietrich, P.
Interactions between Soil related Sciences – Linking Geophysics, Soil Science and Digital Soil Mapping (solicited)

12:00 LUNCH BREAK

Chairperson: N.N.

13:30–13:45; EGU2008-A-02109; SSS25-1FR3O-001
Gomez, c.; Lagacherie, p.; Coulouma, g.
Continuum removal versus PLSR method for digital mapping of Clay and Calcium carbonate contents, using laboratory and airborne hyperspectral measurements (solicited)

13:45–14:00; EGU2008-A-01054; SSS25-1FR3O-002
Kooistra, L.; Witte, F.; van Dobben, H.; Wamelink, W.
Mapping of soil characteristics in (semi)-natural ecosystems using imaging spectroscopy derived plant indicator values (solicited)

14:00–14:15; EGU2008-A-06998; SSS25-1FR3O-003
Meersmans, J.; van Wesemael, B.; Goidts, E.; De Ridder, F.; Van Molle, M.
Soil organic carbon mapping at the regional scale for different dates (solicited)

14:15–14:30; EGU2008-A-04320; SSS25-1FR3O-004
Dematte, J.A.M.; Fiorio, P.R.; Ramirez, L.
Different Strategies On Soil Mapping By Using Laboratory And Orbital Spectral Information (solicited)

14:30–14:45; EGU2008-A-10892; SSS25-1FR3O-005
Lambot, S.; Slob, E.; Vanclooster, M.; Vereecken, H.
Mapping the soil hydrogeophysical properties using full-waveform inversion of proximal, zero-offset ground-penetrating radar based on vector network analyzer technology (solicited)

14:45–15:00; EGU2008-A-01369; SSS25-1FR3O-006
Grandjean, G.; Richard, G.; Van Wesemael, B.; Lambot, S.; Carré, F.; Maftei, R.; Hermann, T.; Thornelof, T.; Chiarantini, L.; Moretti, S.
DIGISOIL: an integrated system of data collection technologies for mapping soil properties (solicited)

15:00 END OF SESSION

SSS25 Digital soil mapping: novel approaches (including geophysical measurements) to the prediction of key soil properties for modelling physical processes – Posters

Convener: Carré, F.

Co-Convener(s): Lark, M., Minasny, B., Romano, N.

Display Time: Friday, 08:00–19:30

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

Poster Area Halls X/Y

Chairperson: N.N.

XY0656; EGU2008-A-09916; SSS25-1FR5P-0656

Korolyuk, T. V.; Khitrov, N. B.; Sorokina, N. P.

Test sites as the source of data on soil–factor relationships for the soil information system of the former Soviet Union on a scale of 1 : 1 M (solicited)

XY0657; EGU2008-A-07765; SSS25-1FR5P-0657

Hirschi, M.; **Boettinger, J.L.**; Ramsey, R.D.

Remote spectral sensing of biological soil crust occurrence, Canyonlands National Park, USA

XY0658; EGU2008-A-05870; SSS25-1FR5P-0658

Pain, C F

A revised map of Australia's physiographic regions: a hierarchical background for digital soil mapping

XY0659; EGU2008-A-10784; SSS25-1FR5P-0659

Barontini, S.; Ranzi, R.; Clerici, A.; Bacchi, B.

A methodology to derive quantitative, experimentally based, maps of the upper soil layers conductivity in mesoscale alpine catchments

XY0660; EGU2008-A-01231; SSS25-1FR5P-0660

Besson, A.; Cousin, I.; Bourennane, H.; Pasquier, C.; Nicoulaud, B.; Richard, G.; King, D.

Using the electrical resistivity for describing the temporal variability of the soil water content at the field scale

XY0661; EGU2008-A-01810; SSS25-1FR5P-0661

Maftai, R.; Cristea, C; Rusu, R; Manj, M

Geophysical tests on shallow landslides- case study Telega, Romania

XY0662; EGU2008-A-03240; SSS25-1FR5P-0662

Carizzoni, M.

The investigation of arable soils with cross hole seismic.

XY0663; EGU2008-A-06782; SSS25-1FR5P-0663

Thiesson, J.; Tabbagh, A.

Are magnetic properties a possible proxy of the carbon content in soil?

XY0664; EGU2008-A-04163; SSS25-1FR5P-0664

Doussan, C.; Ruy, S.

Can we use electrical conductivity for predicting unsaturated soil hydraulic conductivity ? (solicited)

XY0665; EGU2008-A-08387; SSS25-1FR5P-0665

Cepuder, P.; Nolz, R.

Use of digital soil maps and pedotransferfunctions with respect to spatial soil water movement

XY0666; EGU2008-A-08706; SSS25-1FR5P-0666

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

Nitrogen soil mapping through crop growth. (solicited)

XY0667; EGU2008-A-09975; SSS25-1FR5P-0667

Penizek, V.; boruvka, L.; Vrabcova, T.

Prediction of hydromorphic soils using compound topographic index

XY0668; EGU2008-A-09985; SSS25-1FR5P-0668

Pásztor, L.; Szabó, J.; Bakacsi, Zs.

Compiling as reliable as possible functional soil maps by exploiting spatio-temporal features of Kreybig Digital Soil Information System

XY0669; EGU2008-A-10709; SSS25-1FR5P-0669

Bacon, S.N.; McDonald, E.V.; Dalldorf, G.K.; Baker, S.E.; Sabol Jr., D.E.; Minor, T.B.; Bassett, S.D.; MacCabe, S.R.; Bullard, T.F.

An expert based system to predict soil attributes using geomorphic mapping, remote sensing, and soil databases in the desert southwest USA

XY0670; EGU2008-A-01471; SSS25-1FR5P-0670

Stulina, G; **Solodky, G**

Digital land (soil) mapping for modeling of water requirement

XY0671; EGU2008-A-03321; SSS25-1FR5P-0671

Klose, A.; Diekkrüger, B.

Regionalisation of soil properties in the semi-arid Drâa catchment (South Morocco) (solicited)

XY0672; EGU2008-A-02899; SSS25-1FR5P-0672

Kozlov, D.N.; Sorokina, N.P.

Soil cover structures represented on large-scale maps by DSM techniques (solicited)

XY0673; EGU2008-A-00260; SSS25-1FR5P-0673

Ageeb, G.W.; Ali, R.R.

Use of multithematic layers for assessing the agricultural soil capability in some areas in Egypt (solicited)

XY0674; EGU2008-A-00974; SSS25-1FR5P-0674

Gad, A.; Hammad, M.; Ali, R.

Remote sensing and GIS for land resources digital mapping, northwestern coast of Egypt (solicited)

SSS26 Tillage erosion or how farmers built new land-forms

Convener: De alba, S.

Co-Convener(s): Lobb, D., Heckrath, G., Quine, T., Van Oost, K., Govers, G.

Lecture Room 23

Chairperson: N.N.

10:30–10:45; EGU2008-A-08136; SSS26-1FR2O-001

Quine, T.A.; Van Oost, K; Nicholas, A.P.; Govers, G.

Tillage erosion modelling at the regional/global scale: how simple can we make it?

10:45–11:00; EGU2008-A-05959; SSS26-1FR2O-002

Li, S.; Lobb, D.A.; Tiessen, K.H.D

Tillage Translocation and Erosion – What is Really Driving the Creation and Destruction of Morphological Features within Intensive Cultivated Landscapes?

11:00–11:15; EGU2008-A-11353; SSS26-1FR2O-003

Van Oost, K.; Govers, G; Quine, T.A.

The importance of tillage erosion at the regional scale.

11:15–11:30; EGU2008-A-05331; SSS26-1FR2O-004

De Alba, S.; Barbero, F.

Soil redistribution by tillage: Remodelling agricultural landscapes

11:30–11:45; EGU2008-A-11560; SSS26-1FR2O-005

Lobb, D.; Li, S; Tiessen, K

The use of tillage to modify land surfaces to manage soil moisture and surface water

11:45–12:00; EGU2008-A-11453; SSS26-1FR2O-006
Schumacher, T. E.; Schumacher, J. A.; Mollinedo, J. Q.; Lobb, D. A.; Li, S.; Lindstrom, M. J.
Mouldboard plough soil translocation variation and repeatability

12:00 END OF SESSION

SSS26 Tillage erosion or how farmers built new land-forms – Posters

Convener: De alba, S.
Co-Convener(s): Lobb, D., Heckrath, G., Quine, T., Van Oost, K., Govers, G.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0675; EGU2008-A-05324; SSS26-1FR5P-0675
de Alba, S.; Borselli, L.; Torri, D.; Lindstrom, M.; Schumacher, T.E.
Field evidence of soil redistribution and soil erosion by tillage

XY0676; EGU2008-A-10671; SSS26-1FR5P-0676
Tiessen, K.; **Lobb, D.;** Mehuys, G.; Li, S.; Rees, H.; Chow, L.
Using ¹³⁷Cs and modelling (WATEM, TilleM, DirTilleM) to estimate tillage and water erosion within a hummocky podzolic landscape in Atlantic Canada

XY0677; EGU2008-A-05341; SSS26-1FR5P-0677
De Alba, S.; Guerro, G.
Landscape benching and formation of soil banks along field borders due to soil redistribution by tillage within agricultural fields

XY0678; EGU2008-A-05337; SSS26-1FR5P-0678
Martin, C.; Lucia, A.; **De Alba, S.;** Martin-Duque, J.F.; Perez-Gonzalez, A.; Barbero, F.; Malvar, M.; Coelho, C.; Keizer, J.
Mechanical erosion in forest management following wild-fires,

XY0679; EGU2008-A-03494; SSS26-1FR5P-0679
Trümper, G.; Klik, A.
Effects of soil tillage on carbon dioxide emissions from agricultural soils

XY0680; EGU2008-A-00807; SSS26-1FR5P-0680
Cerdà, A.; Bodí, M.B.
Contribution of tillage erosion to the total soil loss. The effect of plot scale and mean annual rainfall.

XY0681; EGU2008-A-11892; SSS26-1FR5P-0681
Farres, P.; Baker, R.
Mathematical model of soil crust tillage interactions.P. Farres, R. Baker (cancelled)

XY0682; EGU2008-A-06857; SSS26-1FR5P-0682
Mitusov, A.V.; Mitusova, O.E.; Bork, H.-R.
A question about land form geometry

SSS28 Fractal Structures and Processes in Environmental Systems

Convener: Senesi, N.
Co-Convener(s): Wilkinson, K., Baveye, P.
Lecture Room 23
Chairperson: N.N.

8:30–9:00; EGU2008-A-10714; SSS28-1FR1O-001
Baveye, P.C.

Fractal geometry and soil systems: Overview and operational challenges (solicited)

9:00–9:15; EGU2008-A-03817; SSS28-1FR1O-002
Stoll, S.; Diez, S.

Fractal Structures and Mechanisms in Coagulation/Flocculation Processes in Environmental Systems. Theoretical Aspects. (solicited)

9:15–9:30; EGU2008-A-01533; SSS28-1FR1O-003
Sokolowski, S.; Sokolowska, Z.

Fractal approach to adsorption processes on environmental surfaces (solicited)

9:30–9:45; EGU2008-A-05754; SSS28-1FR1O-004
Rice, J. A.

Applications of Fractals in the Study of Humic Materials (solicited)

9:45–10:00; EGU2008-A-02681; SSS28-1FR1O-005
Boddy, L.; Donnelly, D.P.

Fractal analysis of fungal mycelium in soil (solicited)

10:00 END OF SESSION

SSS28 Fractal Structures and Processes in Environmental Systems – Posters

Convener: Senesi, N.
Co-Convener(s): Wilkinson, K., Baveye, P.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 17:30–19:00
Poster Area Halls X/Y
Chairperson: N.N.

XY0683; EGU2008-A-00084; SSS28-1FR5P-0683
Ghanbarian-Alavijeh, B.; Liaghat, A.M.; Huang, G.
Prediction of Soil Water Retention Curve: Sensitivity Analysis and Calibration of SWRC Fractal Model

XY0684; EGU2008-A-00085; SSS28-1FR5P-0684
Ghanbarian-Alavijeh, B.; Liaghat, A.M.; Huang, G.
Prediction of van Genuchten Model Parameters using Fractal Dimension of Soil Water Retention Curve

XY0685; EGU2008-A-00883; SSS28-1FR5P-0685
Ghanbarian-Alavijeh, B.; Liaghat, A.M.
Comparison of Two Fractal and Empirical Models in Prediction of Unsaturated Hydraulic Conductivity

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