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

Convener: Doerr, S.
Co-Conveners: 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

Balzter, 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, calcilabritory and refractory 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; Dalimoln, 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
SSS9 Soils as a sink, regulator and source of diffuse pollutants

**Convener:** Burauei, P.
Co-Conveners(s): Quinton, J.

**Display Time:** Monday, 08:00–19:30
**Poster Area:** Halls X/Y

**Authors in Attendance:** Monday, 17:30–19:00
**Chairperson:** QUINTON, J.

**XY0657:** EGU2008-A-04202; SSS9-1MO5P-0657
Hilscher, A.; Siewert, C.; Knicker, H.
Black Carbon loss and structural modifications of different pyrogenic materials by microbiology activities

**XY0658:** EGU2008-A-12299; SSS9-1MO5P-0658
Bryant, R.; Doerr, S.; Frewer, M.; Kong, CH
Vertical redistribution of organic matter causing water repellency in soil following simulated wildfire

**XY0659:** EGU2008-A-08186; SSS9-1MO5P-0659
Atanassova, I.; Doerr, S.
Changes in organic compounds characteristics associated with heat-induced increases and elimination of water repellency in soils

**XY0660:** EGU2008-A-00851; SSS9-1MO5P-0660
S. Djogo, S. Dj
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.; Jackson, 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
Vatal, J.; Szentpétery, I.; Kuti, L.; Kérek, 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.; Arocena, J.M.; Martínez-Martínez, S.
Heavy metals partitioning as base for risk assessment in urban environment

**XY0672:** EGU2008-A-08892; SSS9-1MO5P-0672
Crystal chemistry of chromium in New Caledonian lateritic soils

**XY0673:** EGU2008-A-10625; SSS9-1MO5P-0673
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.; Mesic, S.
Assessment of lead(II) fractionation in high altitude karst soils in Croatia
Small-scaled spatial lead distribution in floodplain soils of the Vils River (Upper Palatinate, Germany) determined by field-portable X-ray fluorescence analysis (FPXRF)

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

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

Structure and function in soil hydrology (solicited)

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

Effects of microbial diversity on the development of soil structure

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

Quantifying temporal changes of soil structure affected by grass roots using X-ray computed tomography

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

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

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

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

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

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

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

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

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

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 Lessiées a Pseudogley, Aqualfs, in the Ghiardo area (Northern Italy). (solicited)

14:00–14:15; EGU2008-A-01876; SSS16-1MO3O-003 Tonnejäck, 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

Effect of different pedogeological conditions on behavior of selected heavy metals in forest soils of Western Albórz, Iran

14:30–14:45; EGU2008-A-08071; SSS16-1MO3O-005 Gerhard, 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.; Etel, 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.; Mason, A.; Doelsch, E.; Basile-Doelsch, I.; Borschneck, D.; Bottoro, 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 Hosseinifard, S.J.; Khademi, H.; Kalbasi, M.
Comparison of non-exchangeable K release from micaceous minerals using different extractants

Structural amelioration of virgin clay soils in Lusatia with flue gas desulphirization (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; SSS16-1MO3P-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; SSS16-1MO3P-0693 Scharringhausen, M.; Richter, L.; Brucks, A.
Discrete element soil modelling for planetary soils

XY0694; EGU2008-A-03635; SSS16-1MO3P-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; SSS16-1MO3P-0695 Szadorski, J.; Weber, J.
Clay mineral composition of different horizons of soils derived from talusites at Sudety Mts., Poland

XY0696; EGU2008-A-04224; SSS16-1MO3P-0696 Kierczak, J.; Néel, C.; Joussein, E.
The effect of secondary phylllosilicates on Ni and Cr trapping in serpentine soil developed under temperate climate of SW Poland

XY0697; EGU2008-A-04944; SSS16-1MO3P-0697 Dębicka, M.
Transformations of mineralogical composition of soil colloidal fraction exposed to the phosphorus sorption

XY0698; EGU2008-A-09489; SSS16-1MO3P-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; SSS16-1MO3P-0699 Kapferer, N.; Berger, A.; Mercalli, I.
An Oligocene regolith preserved on top of the Sesia Zone, Western Italian Alps

XY0700; EGU2008-A-09657; SSS16-1MO3P-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; SSS16-1MO3P-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; SSS30-1MO3O-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; SSS30-1MO3O-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; SSS30-1MO3O-003
Vogel, H.J.-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; SSS30-1MO3O-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; SSS30-1MO3O-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; SSS30-1MO3O-006
Mele, G.; Matresano, 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

Convener: Papadopoulos, A.
Co-Convener(s): Vogel, H., Peth, S.
Display Time: Monday, 08:00–19:30

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.; Assouline, 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
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.; Stampanoni, M.; Or, D.
Synchrontron 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; SSS4-1TU3O-001
Doerr, SH; Woods, SW; Martin, DA
Fire-induced water repellency in conifer forest soils: a myth?
13:45–14:00; EGU2008-A-00675; SSS4-1TU3O-002
Stoof, CR; Wesseling, IG; Ferreira, A.; Ritsema, CJ
Fire Effects on Soil Water Retention Characteristics
14:00–14:15; EGU2008-A-03770; SSS4-1TU3O-003
Blake, WH.; Theocharpoulos, S.P.; Skoulilidis, N.; Clark, P.; Toumas, P.; Hartley, R.; Amazixidis, Y.
Wildfire, soil erosion and the risk to aquatic resources: evidence from the burnt Evrotas River basin, southern Peloponness, 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 re-
sponse 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.;
Camp, J.; Rubio, J. L.
Ponding infiltration stages in a burned mediterranean soil

15:45–16:00; EGU2008-A-11506; SSS4-1TU4O-002
Bautista, S.; Giovannardi, F.S.; Vallojo, 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
capacity 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 ghan

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-Conveners: 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 Mediter-
ranean shrub environment

XY0575; EGU2008-A-00242; SSS4-1TU5P-0575
Mataix-Solera, J.; Arcenegui, V.; Guerrero, C.; Jordán, M.;
Díapa, 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.; Ubeda, 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.; Ubeda, 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.; Ubeda, 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.; Guer-
lero, 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 Montrigri 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-11741; 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-Conveners: 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
Goetlicher, J.; Steininger, R.
Synchrotron Radiation Laboratory for Environmental Studies: A combinatorial 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.; Burkillbayev, M.; Salbi, B.
Speciation and source identification of U from contaminated TENORM sites

9:30–9:45; EGU2008-A-04153; SSS14-1TU1O-004
Heltau, 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.tutka, 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.
Mesoscopic 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.; Gazum, 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-Conveners: Janssens, K., Medici, L.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 17:30–19:00
Poster Area Halls XY
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 Spectrophotometry

XY0597; EGU2008-A-02134; SSS14-1TU5P-0597
Deraed, C.; Tessadi, R.; Nehm, R.; Cosnier, A.; Vélasquez, S.; Leboul, 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
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
Correction of water interference in gas chromatographic measurements of N2O and CO2 of soil origin

Xy0604; Egu2008-A-04370; Sss14-1TU5P-0604
Klaue, B.; Houlaian, 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
Laser Induced Breakdown Spectroscopy (LIBS) application in monitoring of heavy metals polluted soils

Xy0616; Egu2008-A-09747; Sss14-1TU5P-0616
Figueirido, 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.; Sensi, G.S.; Zaccone, C.; Miano, T.M.

Xy0618; Egu2008-A-10518; Sss14-1TU5P-0618
El-Shishatwy, 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
Bulgari, D.; Bulgari, 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
Bulgari, D.; Bulgari, 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.; Selseter, I.A.
Electron emission under x-rays

Ss18 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; Ss18-1TU2O-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; Ss18-1TU2O-002
Figueiredo, M.O.; Silva, T.P.; Veiga, J.P.
Oxidation state and coordination of iron in red pre-soils: first results from a

11:00–11:15; Egu2008-A-02073; Ss18-1TU2O-003
Richard, C.
Photoinductive properties of compost

11:15–11:30; Egu2008-A-08512; Ss18-1TU2O-004
Cocozza, C.; Parente, A.; Zaccone, C.; Miano, T.; Santamaria, P.
Composting of beached residues of Posidonia oceanica (L.) Del.
8:45–9:00; EGU2008-A-12339; SSS20-ITU1O-002
Jurgensen, M.F.; Page-Dumroese, D.; Cerda, A.; Ubeda, X.; M-Mena, M.; Rey, A.; Pegoraro, E.; Outeiro, L.L.; 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-ITU10-003
Bogomolova, I.; Lyubimova, I.
Change in the humus content of solonetz soils affected by human activities
Belyaeva, N.; Kansivaa, S.; Kuzyakov, Y.; Romanenko, V.; Shevtsivsa, 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-ITU10-005
Impact of climate change and land management of soil organic matter storage in Saxony
9:45–10:00; EGU2008-A-08983; SSS20-ITU10-006
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-ITU5P-0645
Cerda, 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-ITU5P-0646
Cerda, A.; Page-Dumroese, D.; Jurgensen, M.F.; Bodí, M.B.
The El Teulare – Sierra de Enguera experimental site, Land management effects on organic matter decomposition in Spanish rainfed orchards.
XY0647; EGU2008-A-00635; SSS20-ITU5P-0647
Krivobokov, L.; Mukhortova, L.; Bolovena, M.
Post-clearcutting changes in herbaceous understory and forest litter quality
XY0648; EGU2008-A-02008; SSS20-ITU5P-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-ITU5P-0649
Verheijen, FGA; Kibblewhite, M.
Does soil organic matter deliver benefits to arable farmers in England and Wales?
XY0650; EGU2008-A-02059; SSS20-ITU5P-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-ITU5P-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-ITU5P-0652
Sanchez, F.G.; Maier, C.A.; Johnsen, K.
Stabilization/desstabilization 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
Wiesen, 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.; Dignac, M.-F.; 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
Early degradation of plant lipids in soils: A field experiment using 13C-labelled leaves
16:30–16:45; EGU2008-A-03812; SSS29-1TU4O-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; SSS29-1TU4O-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-Conveners: 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
Tonnejick, 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 Cu 2+-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 latersites 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 extraction 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, L.; Mertens, J.; Smolders, E.; Mercx, 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.
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 – Methodological 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.; Bäumler, 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 stakeholders and policy-makers. Some facts.

10:00 COFFEE BREAK

Chairperson: HOOKE, J.

10:30–10:45; EGU2008-A-05446; SSS1-1WE2O-001
VanWalleghem, 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 semi-arid 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

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
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-01179; SSS1-1WE3O-004
Hooke, J.; Sandercock, P.; Marchamalo, M.
Influence of land use changes on soil carbon stock and soil carbon erosion in a Mediterranean catchment (solicited)

15:00 COFFEE BREAK

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

Chairperson: LAVEE, H.

12:00 END OF SESSION
XY0685; EGU2008-A-01143; SSS1-1WE5P-0685
Ubeda, 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 subplots, located in different forests of the Iberian Peninsula.

XY0686; EGU2008-A-01180; SSS1-1WE5P-0686
Hooke, J.; Sandercoc, 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.; Martín 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 Sarría, F.; Belmonte Serrato, F.; García Fernández, 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
Berlin, 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 Llovera, R.; García Martín, A.; Echeverría Arnedo, M. T.; Ibarra Benlloch, P.; de la Riva Fernández, J.; Cerdá, 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-Sviderska, 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.; Orlandini, 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, A.; 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
Peten, S.; Zorn, M.; Miko, M.
Measurements of interrill soil erosion under different land use in Slovenia Istra.

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.
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
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.C.; 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
Mabui, I.; Klik, A.
Erosion and sedimentation evaluation in a small agricultural Austrian watershed using Caesium-137, Lead-210 and traditional approaches.
Y0712; 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 semi-arid conditions

Y0713; EGU2008-A-02010; SSS1-1WE5P-0713
Morgan, 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

Y0714; EGU2008-A-02473; SSS1-1WE5P-0714
de Luis, M.; González-Hidalgo, J.C.; Longares, L.A.
Is rainfall erosivity increasing in Mediterranean Iberian Peninsula?

Y0715; EGU2008-A-02210; SSS1-1WE5P-0715
Giannoni, 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).

Y0716; EGU2008-A-07841; SSS1-1WE5P-0716
Rodriguez-Blanco, M.L.; Taboada-Castro, M.M.; Taboada-Castro, M.T.
Impact of rainfall events on sediments and phosphorus losses from a rural catchment

Y0717; EGU2008-A-04270; SSS1-1WE5P-0717
Martínez-Sánchez, M.J.; Martínez-Pajante, 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

Y0718; 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.

Y0719; EGU2008-A-05354; SSS1-1WE5P-0719
De Alba, S.; Alcazar, M.; Barbero, F.; Benito, G.; Lacasta, C.
Water erosion in a semi-arid agricultural landscape in Central Spain. S. de Alba (1), M. Alcazar (1), F. Barbero (1), G. Benito (2), C. Lacasta (2)

Y0720; EGU2008-A-04192; SSS1-1WE5P-0720
Marques, M.J.; Bienes, R.; García-Muñoz, S.; Muñoz-Organo, G.
Cover crops for the soil protection in hillside vineyards under Mediterranean climate

Y0721; EGU2008-A-08904; SSS1-1WE5P-0721
Sognez, N.; Vanacker, V.; van Wesemael, B.
Low modern erosion rates observed in steep, sparsely vegetated mountain ranges in southeast Spain

Y0722; EGU2008-A-03387; SSS1-1WE5P-0722
Peri, L.; Bittelli, M.; Ventura, F.; Rossi Pisa, P.
Characteristic of eroded sediment and textural changes from an agricultural soil

Y0723; EGU2008-A-00801; SSS2-1WE5P-0723
Cerdà, A.; Bodí, M.B.; Jurgensen, M.F.
The Effects of soil-dwelling Ants on the Structure of Mediterranean Soils

Y0724; EGU2008-A-03987; SSS2-1WE5P-0724
invertebrate animals

Y0725; EGU2008-A-05069; SSS2-1WE5P-0725
Kaneda, S.; Nakajima, M.; Murakami, T.; Urashima, Y.
Impacts of earthworm, Pheretima (Amynthas) cornosa on nutrient loss from soil in microcosm experiment

Y0726; EGU2008-A-07707; SSS2-1WE5P-0726
Impacts of earthworm, Pheretima (Amynthas) cornosa on nutrient loss from soil in microcosm experiment

Y0727; EGU2008-A-07841; SSS2-1WE5P-0727
van Mourik, J.; Schilder, M.
Soil ecological Response of various Substrates on Fagus Reforestations
SSS24 Soil microbial activity. Assessment, monitoring and modelling

Convener: Nannipieri, P.
Co-Conveners: Guerrero, C., Trasar-Cepeda, C.
Display Time: Wednesday, 10:00–10:45
Poster Area Halls X/Y
Chairperson: N.N.

XY0732; 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)

13:30–13:45; EGU2008-A-00234; SSS24-1WE3O-002
Lagomarsino, A.; Grego, S.; Marhan, S.; Moscatelli, M.C.; Kandel, 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-11212; SSS24-1WE3O-005
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 activity: concepts and applications in national-scale monitoring schemes

15:00 END OF SESSION
IS60 - 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/HS5.2-1WE1O-001
van Leeuwen, S.M.
North Sea riverine nutrient loads: a 1980-2002 trend analysis

8:45–9:00; EGU2008-A-11120; IS60 - SSS3/HS5.2-1WE1O-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/HS5.2-1WE1O-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/HS5.2-1WE1O-004
Schöliefeld, 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/HS5.2-1WE1O-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/HS5.2-1WE1O-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/HS5.2-1WE2O-001
Scherer, U.; Zehe, E.; Träbing, K.
Modelling sediment transport in agriculturally used loess catchments

10:45–11:00; EGU2008-A-02207; IS60 - SSS3/HS5.2-1WE2O-002
Evrett, O.; Vandaele, K.; van Wesemael, B.; Bielders, 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/HS5.2-1WE2O-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/HS5.2-1WE2O-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/HS5.2-1WE2O-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/HS5.2-1WE2O-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

IS60 - 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
Guniere, S.J.G.; Le Bissonnais, Y.L.B; Raclot, D.R.
Mhydas-Erosion : A physically based erosion model for watershed application.

XY0748; EGU2008-A-02584; IS60 - SSS3/HS5.2-1WE5P-0748
Ramos, M.C.; Martinez-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
Nitrogen balance and land use in three different agricultural watersheds of the Po Valley (Italy)

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

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

Study of agricultural effect on water quality in weishan irrigated area in China

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

Dynamic geomorphically-driven soil property evolution in the agricultural landscape

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

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

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

Mapping nitrate vulnerable zones in Hungary

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

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

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

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

Thursday

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

Bleuten, W; Naumov, A; Huttunen, J; Repo, M; Kosykh, N; Mironicheva-Tokareva, N; Borren, W; Lapshina, E

Minke, M.; Haile, E.; Brozyna, M.; Augustin, J.; Schalitz, G.; Behrendt, A.; Justczak, R.

Márton, L.

Mörtler, C.

Mörth, C.

Drösler, M.; Augustin, J.; Förster, Ch.; Freibauer, A.; Höper, H.; Kantelhardt, J.; Minke, M.; Petschow, M.; Schaller, L.; Sommer, M.

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

Development of Finnish peatland area and carbon storage 1950–2000
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.; Antúnez, 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
Meyssner, T.; Szajdak, L.
Effect of shelterbelt on two kinds of soils on redox processes

XY0622; EGU2008-A-01846; SSS8-1TH5P-0622
Marygano, 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
Marygano, 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.; Übler, M.; Korhonen, R
Chemical properties of peat in 7 mires with balneological potential in Estonia

XY0626; EGU2008-A-02099; SSS8-1TH5P-0626
Szajdak, L.; Styla, 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
Towards developing sustainable method of isolating humic acids from humidified materials

XY0628; EGU2008-A-0336; 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.; Szatylowicz, 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-Hladen, 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
Arczyńska-Chudy, E.; Jeziierska-Madziar, M.; Goldyn, H.; Pinskiwar, 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.; Cocozza, G.; 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
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-Conveners: 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
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
Carriick, 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-Conveners: 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
Kutilek, M.; Germe, 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
Jelinková, V.; Pohlmeier, A.; Císlerová, 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  
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  
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-Conveners: 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.; Verrang, 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
8:45–9:00; EGU2008-A-09942; SSS21-1TH10-002
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; SSS21-1TH10-003
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; SSS21-1TH10-004
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; SSS21-1TH10-005
O’Geen, A.; Pettypgove, G.; Southard, R.
Development of geographic nutrient management zones for winegrapes based on soil-landscape characteristics.

9:45–10:00; EGU2008-A-03977; SSS21-1TH10-006
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.

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.

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

XY0674; EGU2008-A-00986; SSS21-1TH5P-0674
Sofo, A; Celano, G; Dichi, B; Montanaro, G; Xiolyanis, 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.; Brahiam, M.; Ben El Hadi, 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
**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

**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 XY
Chairperson: BECH.J, FUGE.R, BANUELOS.G.

XY0647; EGU2008-A-04292; SSS7-1FR5P-0647
Pérez-Sirvent, C.; Martínez-Sánchez, M.J.; García-Lorezo, M.L.; Martíntor, W.; Solano, A.; Agudo, I.; Bech, J.
Enrichment of selenium and its relationship with other heavy metals in rocks, soils, and crops in the area covered with black shal in Korea

XY0648; EGU2008-A-04630; SSS7-1FR5P-0648
Korobova, E.; Kouvlyine, 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-Lorezo, M.L.; Martíntor, W.; Martíntor –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 Borras, J.
Selenium Contents in Salts from Natural Pan and Mining Areas in the Salar de Uyuni", Central Altiplano, Bolivia.
The level of selenium and some other trace elements in Mediterranean Spanish soils
Miras, J; Mota, J; Boluda, R; Gil, C; Roca-Pérez, L; Becerra, L; Ramos-
EGU2008-A-10400; SSS7-1FR5P-0655
XY0651; EGU2008-A-06450; SSS7-1FR5P-0651
Longchamp, M.; Angelì, N.; Bariac, T.; Biron, P.; Richard, P.; Castrec-Rouelle, M.
Study of selenium uptake by the higher plant Zea mays sspb. mays (L.): methodology and first results.

Shimamoto, Y.; Takahashi, Y.
Iodine speciation in the soil-water systems using XANES and HPLC-ICP-MS

Pezzarossa, B.; Petruzelli, G.; Malorgio, F.
Addition of selenium to the growing substrate for Se enrichment of edible plant parts

Bech, J.; Suarez, M.; Reverté, F.; Tume, P.; Lansac, A
Selenium and other trace elements in phosphate rock of Sechura (North Peru)

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 – 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
Hirsch, 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.; Bouremanne, 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
Maftei, R.; Cristea, C.; Rusu, R.; Manj, M.
Geophysical tests on shallow landslides- case study Teleaga, Romania

XY0662; EGU2008-A-03240; SSS25-1FR5P-0662
Carizoni, M.
The investigation of arable soils with cross hole seismic.

XY0663; EGU2008-A-06782; SSS25-1FR5P-0663
Thiessen, 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
Cepruden, C.; 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
Penlezk, V.; boruva, L.; Vrabcova, T.
Prediction of hydromorphic soils using compound topographic index

XY0668; EGU2008-A-09985; SSS25-1FR5P-0668
Pásztor, L.; Szabó, J.; Bakacs, 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.; Daldorf, 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
Aageb, 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 landscapes

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 landforms – 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 podzol landscape in Atlantic Canada

XY0677; EGU2008-A-05341; SSS26-1FR5P-0677
De Alba, S.; Guerrero, 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.; Peres-Gonzalez, A.; Barbero, F.; Malvar, M.; Coelho, C.; Keizer, J.
Mechanical erosion in forest management following wildfires,

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.
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

XY0686; EGU2008-A-10129; SSS28-1FR5P-0686
Fontes, J.C.; Porto, J.; Dentinho, T.; Pereira, L. S
Erosion and non-point-source pollutants simulation in catchments of the largest natural lagoons of Pico island, Azores

XY0687; EGU2008-A-02130; SSS28-1FR5P-0687
RIZZI, F.R.; Stoll, S.; Senesi, N.; Buffle, J.
Fractal properties and aggregation phenomena of humic acids studied by electron transmission microscopy

XY0688; EGU2008-A-02999; SSS28-1FR5P-0688
SINESI, N.; Rizzi, F. R.
Fractal behavior and aggregation processes of humic acids in aqueous suspension as a function of concentration, pH, ionic strength and time