
EGU 2008 Meeting Programme

Biogeosciences

Monday

BG2.4 Terrestrial biogeochemical cycles (and global change) (co-listed in SSS)

Convener: Schmidt, M.
Co-Convener(s): Kogel-Knabner, I., Krull, E.
Lecture Room 21
Chairperson: SCHMDT, M. W. I.

13:30–13:45; EGU2008-A-01149; BG2.4-1MO3O-001
Hammerle, A.; Bahn, M.; Tappeiner, U.; Cernusca, A.; Wohlfahrt, G.
Carbon storage potential of a temperate mountain grassland as affected by management: a combined experimental and modeling analysis

13:45–14:00; EGU2008-A-03953; BG2.4-1MO3O-002
Wutzler, T.; Reichstein, M.; Hamer, U.
Colimitation of decomposition by substrate and decomposers – Challenging models by incubation experiments

14:00–14:15; EGU2008-A-01819; BG2.4-1MO3O-003
Worrall, F.; Burt, TP
The prognosis for carbon storage in northern peatlands – evidence from peatlands in the UK

14:15–14:30; EGU2008-A-05517; BG2.4-1MO3O-004
Clark, J.M.; Heinemeyer, A.; Martin, P.; Bottrell, S.
Link between carbon and sulphur cycling during simulated drought cycles in six UK ombrotrophic peats

14:30–14:45; EGU2008-A-00371; BG2.4-1MO3O-005
Krull, E.; Baldock, J.; Douglas, G.; McGowan, J.; Spouncer, L.
From soils to rivers and estuaries: the movement of black C across a sub-tropical landscape

14:45–15:00; EGU2008-A-07218; BG2.4-1MO3O-006
Hoosbeek, M.R.
Will temperate forest soil take up or release C under future elevated atmospheric CO₂: A synthesis based on forest FACE experiments

15:00 COFFEE BREAK

Chairperson: KRULL, E. / KÖGEL-KNABNER I.

15:30–15:45; EGU2008-A-00607; BG2.4-1MO4O-001
Joos, O.; Hagedorn, F.; Siegwolf, R.; Saurer, M.; Heim, A.; Schmidt, M.
Effects of an artificial Summer Drought on the relative Contributions of new and old Carbon to the CO₂-Efflux of Swiss Grassland Soils

15:45–16:00; EGU2008-A-05138; BG2.4-1MO4O-002
Foereid, B.; Dawson, L.A.; Johnson, D.; Rangel-Castro, J.I.
Fate of carbon in upland grassland subjected to liming

16:00–16:15; EGU2008-A-09843; BG2.4-1MO4O-003
Knoblauch, C.; Awang Besar; Raffie, N.; Pfeiffer, E.-M.
Impact of land use on carbon sequestration in young coastal soils determined by stable carbon isotope and carbon turnover measurements

16:15–16:30; EGU2008-A-00632; BG2.4-1MO4O-004
Hofmann, A.; Heim, A.; Gioacchini, P.; Gehre, M.; Schmidt, M.
Soil organic carbon and lignin dynamics in an arable soil as affected by nitrogen fertilization

16:30–16:45; EGU2008-A-01702; BG2.4-1MO4O-005
Steinbeiss, S.; Beßler, H.; Engels, C.; Temperton, V.M.; Buchmann, N.; Roscher, C.; Kreutziger, Y.; Baade, J.; Habekost, M.; Gleixner, G.
Plant biodiversity positively affects short-term soil carbon storage in experimental grasslands

16:45 END OF SESSION

BG2.4 Terrestrial biogeochemical cycles (and global change) (co-listed in SSS) – Posters

Convener: Schmidt, M.
Co-Convener(s): Kogel-Knabner, I., Krull, E.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 08:30–10:00
Poster Area BG
Chairperson: N.N.

BG0001; EGU2008-A-11909; BG2.4-1MO1P-0001
Wu, W.; Sun, S; Yang, Y
Responses of subalpine *Betula albo-sinensis* soil invertase activity to elevated atmospheric temperature and carbon dioxide concentration in Western Sichuan

BG0002; EGU2008-A-10547; BG2.4-1MO1P-0002
Schmidt, MWI; Heim, A; Wiesenberger, GLB; Schwark, L.
Can we estimate soil organic matter turnover by combining ¹³C isotopic and molecular marker information? – Trying a synthesis

BG0003; EGU2008-A-00350; BG2.4-1MO1P-0003
Schneider, M.; Hilf, M; Schmidt, MWI
Can we use BPCA as molecular markers to trace the formation temperature of wood char?

BG0004; EGU2008-A-06694; BG2.4-1MO1P-0004
Nehls, T.; Brodowski, S.
Paved urban soils as sinks for black carbon

BG0005; EGU2008-A-07643; BG2.4-1MO1P-0005
Glombitza, C.; Mangelsdorf, K.; Horsfield, B.
Alkaline ester cleavage to examine the feedstock potential of low mature coals for deep microbial populations

BG0006; EGU2008-A-03439; BG2.4-1MO1P-0006
Habekost, M.; Eisenhauer, N.; Scheu, S.; Gleixner, G.
Seasonal Changes of a Microbial Community in a Grassland Plant Diversity Gradient Four Years after Establishment

BG0007; EGU2008-A-01793; BG2.4-1MO1P-0007
Heim, A.; Abiven, S.
How good is ¹³C isotope analysis in assessing dynamics of organic compounds in soil? - The example of lignin

BG0008; EGU2008-A-02250; BG2.4-1MO1P-0008
Abiven, S.; Heim, A
Quantification of the lignin in plants and soils – literature review and experimental approaches

BG0009; EGU2008-A-05329; BG2.4-1MO1P-0009
Uchida, M.; Kondo, M.; Murayama, S.; Ohtsuka, T.; Shirato, Y.
Radiocarbon-based Turnover Time Estimates of Soil Organic Carbon in a Cool-temperate Deciduous Forest in Asian Monsoon Region

BG0010; EGU2008-A-08683; BG2.4-1MO1P-0010
Joos, O.; Hagedorn, F.; Saurer, M.; Heim, A.; Schmidt, M.; Siegwolf, R.
Can we simplify the Keeling Plot Approach to measure Soil $^{13}\text{CO}_2$?

BG0011; EGU2008-A-11653; BG2.4-1MO1P-0011
Rey, M.; Trasar-Cepeda, C.; Leirós, M.C.; Trasar-Cepeda, F.
Effect of soil temperature and moisture on emission of N_2O

BG0012; EGU2008-A-11648; BG2.4-1MO1P-0012
Rey, M.; Leirós, M.C.; **Trasar-Cepeda, C.**; Gil-Sotres, F.
Effect of temperature on the emission of N_2O in water saturated soils

BG0013; EGU2008-A-10108; BG2.4-1MO1P-0013
Van Hemelryck, H.; Fiener, P.; Govers, G.; Van Oost, K.
Effects of soil erosion and deposition on CO_2 respiration

BG0014; EGU2008-A-07787; BG2.4-1MO1P-0014
Eaton, J.; McGoff, N.; Byrne, K.; Leahy, P.; Kiely, G.
Quantifying organic carbon stocks in Irish soils

BG0015; EGU2008-A-05685; BG2.4-1MO1P-0015
Zhuang, Q.; Xu, K.; Tang, J.
Responses of global soil methane consumption to changes of climate, land-use and CO_2 ; land-cover, and atmospheric chemistry deposition during the 20th century

BG0016; EGU2008-A-11731; BG2.4-1MO1P-0016
Bouwman, A.; Beusen, A.; van der Hoek, K.; van Drecht, G.; Heuberger, P.
Global inventory of ammonia emissions from global livestock production: approaches and uncertainties

BG0017; EGU2008-A-09569; BG2.4-1MO1P-0017
Graz, Y.; collaborators
The fate of the fossil organic carbon released from marls weathering: application to the experimental watersheds of Draix.

BG0018; EGU2008-A-11698; BG2.4-1MO1P-0018
Albert, KA; Ro-Poulsen, HRP; Mikkelsen, TM
Biological responses to current uv-b radiation in arctic regions.

BG0019; EGU2008-A-01492; BG2.4-1MO1P-0019
Norström, S H; Vestin, J L K; Bylund, D; Lundström, U S
Influences of dissolved organic carbon (DOC) on water chemistry in two forested catchments

BG0020; EGU2008-A-03775; BG2.4-1MO1P-0020
Grote, R; de Bruijn, A; Kiese, R
A new Modular Biosphere Modelling

BG0021; EGU2008-A-00344; BG2.4-1MO1P-0021
Xu-Ri, -; Prentice, I.C.
Terrestrial nitrogen cycle simulation with a dynamic global vegetation model

BG0022; EGU2008-A-03968; BG2.4-1MO1P-0022
Eigemeier, E.; Beirle, S.; Platt, U.; Wagner, T.
Global Monitoring of annual Vegetation Cycles using spectrally resolved UV/Vis Satellite Observations

BG0023; EGU2008-A-06310; BG2.4-1MO1P-0023
Szajdak, L; Zyczynska-Baloniak, I
Function of shelterbelt on the changes of nitrogen compounds in ground water and soils

BG0024; EGU2008-A-02053; BG2.4-1MO1P-0024
Jaskulska, R; **Szajdak, L**
The function of shelterbelts of different age as biogeochemical barrier on decreasing of nitrogen and phosphorus in agricultural landscape

BG0025; EGU2008-A-02049; BG2.4-1MO1P-0025
Szajdak, L; Gaca, W
Activity of nitrate reductase in soils under shelterbelts of different age and adjoining cultivated fields

BG5.2 Natural and anthropogenic environmental change as evidenced in high-resolution continental archives (co-listed in CL and SSP)

Convener: Lotter, A.
Co-Convener(s): Heiri, O., MAGNY, M.
Lecture Room 21
Chairperson: LOTTER, A.F.

8:30–8:45; EGU2008-A-08467; BG5.2-1MO1O-001
Engels, S; Helmens, KF; Bohncke, SJP; Bos, JAA; Brooks, SJ; Heiri, O; Välranta, M
A multi-proxy record of environmental and climate changes during Oxygen Isotope Stages-3 and -5C from an unusual location: Finnish Lapland

8:45–9:00; EGU2008-A-04669; BG5.2-1MO1O-002
von Gunten, L.; Grosjean, M.; Rein, B.; Urrutia, R.
A high-resolution summer temperature reconstruction for Central Chile back to AD 850 based on in-situ reflectance spectroscopy from lake sediments

9:00–9:15; EGU2008-A-09496; BG5.2-1MO1O-003
Finsinger, W.; ACCESA Members
Early to mid-Holocene climate changes on the Italian Peninsula: a pollen-based reconstruction

9:15–9:30; EGU2008-A-11105; BG5.2-1MO1O-004
Westover, K.; Bigler, C.
High-resolution diatom-inferred climate reconstruction (AD1500 to 1950) from the eastern Swiss Alps

9:30–9:45; EGU2008-A-10473; BG5.2-1MO1O-005
Garcia-Amorena, I.; Hodgson, DJ.; Marchant, R.; Tzedakis, P.C.
Time series analysis of long term palaeoecological records for the understanding of climate change impacts on vegetal ecosystems

9:45–10:00; EGU2008-A-05845; BG5.2-1MO1O-006
Daryin, A.; Kalugin, I.; Maksimova, N.; Ovchinnikov, D.; Myglan, V.; Shaporenko, A.
High-resolution geochemical proxies of environmental change in annually laminated lake sediments and tree-rings

10:00 COFFEE BREAK

Chairperson: HEIRI, O.

10:30–10:45; EGU2008-A-10656; BG5.2-1MO2O-001
Koinig, K.A.; Ilyashuk, E.; Hirt, A.; Tessadri, R.; Lami, A.; May, B.; Wagenbach, D.; Drescher-Schneider, R.; Psenner, R.
A multi-proxy approach allows disentangling oxic from anoxic and acid from alkaline conditions during warm and cold periods in a high alpine lake

10:45–11:00; EGU2008-A-03728; BG5.2-1MO2O-002
Reuss, N.; Hammarlund, D.; Rosén, P.; Rundgren, M.
Lake ecosystem response to changes in climate and nutrient cycling during the Holocene at the subarctic treeline in northern Sweden

11:00–11:15; EGU2008-A-00755; BG5.2-1MO2O-003
Wall, A.; Magny, M.; Gilbert, D.; Millet, L.; Vannière, B.; Ruffaldi, P.
Subfossil thecamoebians response to climate variations during the transition Lateglacial / Holocene: a case study from Lake Lautrey (Jura, France)

11:15–11:30; EGU2008-A-01108; BG5.2-1MO2O-004
Wagner, B.; Lotter, A.F.; Nowaczyk, N.; Reed, J.; Schwalb, A.; Sulpizio, R.; Valsecchi, V.; Wessels, M.; Zanchetta, G.
The Glacial and Holocene palaeorecord from Lake Ohrid (Albania and Macedonia)

11:30–11:45; EGU2008-A-06469; BG5.2-1MO2O-005
Enters, D.; Jahns, S.; Kirilova, E.; Kuhn, G.; Lotter, A.; Lücke, A.; Parplies, J.; Zolitschka, B.
Holocene palaeoenvironmental change in NE Germany: the multi-proxy record from Sacrower See

11:45–12:00; EGU2008-A-06175; BG5.2-1MO2O-006
Castanet, C.; Garcin, M.; Lamothe, M.; Cyprien, A.L.; Camerlynck, C.; Burnouf, J.; Carcaud, N.
Response of the Middle Loire River to climatic and environmental variability during the last deglaciation (Val d'Orléans, France)

12:00 END OF SESSION

BG5.2 Natural and anthropogenic environmental change as evidenced in high-resolution continental archives (co-listed in CL and SSP) – Posters

Convener: Lotter, A.
Co-Convener(s): Heiri, O., MAGNY, M.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 13:30–15:00
Poster Area BG
Chairperson: LOTTER, A.F.

BG0026; EGU2008-A-06531; BG5.2-1MO3P-0026
Newman, L.; Gibson, J.A.E.; Hodgson, D.A.; Wagner, B.; Barmuta, L.; Swadling, K.M.
The response of the Antarctic freshwater fauna to past environmental changes

BG0027; EGU2008-A-07269; BG5.2-1MO3P-0027
Heiri, O.; Ilyashuk, B.P.; Ilyashuk, E.A.
Chironomid-based reconstruction of Lateglacial temperatures and the Holocene thermal optimum in the Altai-Sayan mountain region, southern Siberia

BG0028; EGU2008-A-05428; BG5.2-1MO3P-0028
Ilyashuk, E.A.; Heiri, O.; Koinig, K.A.; Psenner, R.
Holocene climatic changes in the Austrian Alps inferred from fossil chironomid assemblages

BG0029; EGU2008-A-09369; BG5.2-1MO3P-0029
Kuiper, S.; Lammertsma, E.I.; **Heiri, O.**; Hoek, W.Z.; Kasse, C.
A chironomid-based temperature reconstruction for the Younger Dryas – Holocene transition from a palaeo-channel of the Niers-Rhine, Germany

BG0030; EGU2008-A-09540; BG5.2-1MO3P-0030
Axford, Y.; Geirsdóttir, Á.; Miller, G.; Langdon, P.
Climate events from the early Holocene to the Little Ice Age in North Iceland: Paleolimnological reconstructions from midges and other proxies

BG0031; EGU2008-A-11088; BG5.2-1MO3P-0031
Kamenik, C.; Gisler, P.; **Grosjean, M.**
The Central European heat-wave as recorded by chrysophyte stomatocyst assemblages in lake sediments

BG0032; EGU2008-A-08397; BG5.2-1MO3P-0032
Thielemann, A.; Daut, D.; Mäusbacher, R.; Raphael, F.
Investigations of the sediment dynamic and debris flow activity of Lake Braies (N-Italy) by using sediment traps and sediment cores

BG0033; EGU2008-A-08372; BG5.2-1MO3P-0033
Leroux, A.; **Bichet, V.**; Magny, M.; Walter-Simonnet, A.-V.; Richard, H.; Gauthier, E.; Adatte, T.; Simonnet, J.-P.
Evolution of detrital input to the Lac Saint Point (Jura Mountains, France)

BG0034; EGU2008-A-10563; BG5.2-1MO3P-0034
Olsen, J.; Björck, S.
Preliminary results from three Faroese lakes

BG0035; EGU2008-A-05260; BG5.2-1MO3P-0035
Francus, P.; Crémer, J.-F.; Verschuren, D.; Kröpelin, S.
Annually laminated sediments at Ounianga Kebir, Chad, characterized by micro-fluorescence core scanner

BG0036; EGU2008-A-09661; BG5.2-1MO3P-0036
Lotter, A.F.; Heiri, O.; Brooks, S.; van Leeuwen, J.N.F.; Eicher, U.; Schwander, J.; Ammann, B.
Rapid summer temperature changes during Termination 1: multi-proxy reconstructions from Gerzensee (Switzerland)

BG0037; EGU2008-A-03522; BG5.2-1MO3P-0037
Schulte, L.; Burjachs, F.; Baró, M.; Roten, L.; Julià, R.; Veit, H.; Carvalho, F.; Oliva, M.
Fan delta evolution and environmental changes in the Bernese Alps during Late Holocene: natural and anthropogenic contributions

BG0038; EGU2008-A-08514; BG5.2-1MO3P-0038
Cremaschi, M.; Bernabò Brea, M.; Aceti, A.; Ferrari, P.; Mutti, A.; Pizzi, C.; Ravazzi, C.; Rottoli, M.; Salvioni, M.; Zerbini, A.
The Noceto “pool”: a detailed lacustrine anthropogenic record for the middle-late Holocene in the central Po Plain

BG0039; EGU2008-A-08232; BG5.2-1MO3P-0039
Schneider, H.; Höfer, D.; Trog, C.; Daut, G.; Hilbich, C.; Mäusbacher, R.
Geoarchaeological reconstruction of lagoon development in the Algarve Region (South Portugal)

BG0040; EGU2008-A-03580; BG5.2-1MO3P-0040
Elmqvist, M.; Zencak, Z.; **Gustafsson, Ö.**
A 700-year sediment record of black carbon combustion particles in Aspvreten, a Swedish background area

BG0041; EGU2008-A-01472; BG5.2-1MO3P-0041
De Vleeschouwer, F.; Lamentowicz, M.; **Piotrowska, N.**; Mauquoy, D.; Cheburkin, A.; Le Roux, G.; Fagel, N.; Sikorski, J.; Renson, V.; Fialkiewicz, B.
Recent climatic instability in Poland and the effect of the Little Ice Age on human activities

BG0042; EGU2008-A-02809; BG5.2-1MO3P-0042
Shumilov, O.I.; Kasatkina, E.A.; Masloboev, V.A.; Kirtsideli, I.Yu.; Kanatjev, A.G.
The 4th technogenic timberline in dendroclimatology: Climatic sensitivity of tree-ring samples collected in polluted areas

BG0043; EGU2008-A-00574; BG5.2-1MO3P-0043
Court-Picon, M.; Walter-Simonnet, A.V.; Linoir, D.; Bossuet, G.; de Beaulieu, J.L.; Peyron, O.
Palaeoenvironments, climate and human impact during the Late-Glacial and Holocene in mountainous ecosystems: the high-resolution multi-proxy record of the Lauza peat bog (Champsaur, French Alps)

BG0044; EGU2008-A-05994; BG5.2-1MO3P-0044
Valsecchi, V.; **Finsinger, W.;** Tinner, W.; Ammann, B.
Testing the influence of climate, human impact, and fire on the Holocene population expansion of *Fagus sylvatica* in the southern Prealps (Italy)

BG0045; EGU2008-A-04359; BG5.2-1MO3P-0045
Lawson, IT; Edwards, KJ; Church, MJ; Newton, AJ; Cook, GT; Gathorne-Hardy, FJ; Dugmore, AJ
Human impact on an island ecosystem: Pre- and post-settlement environmental change in the Faroes

BG0046; EGU2008-A-10501; BG5.2-1MO3P-0046
Lamentowicz, M.; van der Knaap, W.O.; van Leeuwen, J.; Lamentowicz, E.; Mitchell, E.A.D; Kamenik, C.
High-resolution palaeohydrology of an Alpine mire since AD 1864: the impact of recent temperature trends

BG5.3 Towards a process based understanding of Biomineralization

Convener: Nehrke, G.
Co-Convener(s): Blamart, D., Reynaud, S.
Lecture Room 20
Chairperson: N.N.

15:30–16:00; EGU2008-A-05054; BG5.3-1MO4O-001
Arlinghaus, H.F.
Novel mass spectrometry techniques for 2D and 3D elemental and molecular imaging (solicited)

16:00–16:15; EGU2008-A-02218; BG5.3-1MO4O-002
Meibom, A.
Coral biomineralization: A sharper optic reveals ultra-structural properties (solicited)

16:15–16:30; EGU2008-A-04147; BG5.3-1MO4O-003
Perez-Huerta, A.; Cusack, M; Janousch, M; Finch, A
Magnesium location in calcite brachiopod shells by synchrotron analysis: Implications for Mg/Ca thermometry

16:30–16:45; EGU2008-A-08897; BG5.3-1MO4O-004
Ziegler, A.; Hild, S.
Deposition of amorphous calcium carbonate within the terrestrial crustacean *Porcellio scaber* by epithelial calcium and proton transport.

16:45–17:00; EGU2008-A-09914; BG5.3-1MO4O-005
Reichart, G.J.; Duenas Bohorquez, A.; Nehrke, G.; Haig, J.; Wit, J.; Bijma, J.; de Nooijer, L.; Wolthers, M.; Ernst, S.; Ni Flaithearta, S.
Towards a process-based understanding of biomineralization in foraminifera (solicited)

17:00 END OF SESSION

BG5.3 Towards a process based understanding of Biomineralization – Posters

Convener: Nehrke, G.
Co-Convener(s): Blamart, D., Reynaud, S.
Display Time: Monday, 08:00–19:30
Authors in Attendance: Monday, 13:30–15:00
Poster Area BG
Chairperson: N.N.

BG0047; EGU2008-A-00161; BG5.3-1MO3P-0047
Rogerson, M.; Pedley, H.M.; Wadhawan, J.; Middleton, R.
New Insights into Biological influence on the geochemistry of freshwater carbonate deposits

BG0048; EGU2008-A-00213; BG5.3-1MO3P-0048
Langer, G.; Ziveri, P.; Geisen, M.; Thoms, S.
Oxygen isotope fractionation during calcification in *Calcidiscus leptoporus*: the influence of carbonate chemistry

BG0049; EGU2008-A-00995; BG5.3-1MO3P-0049
Thoms, S.; Langer, G.; Gussone, N.; Nehrke, G.; Stoll, H.M.
Modeling the strontium to calcium ratios in coccoliths of *Emiliania huxleyi*

BG0050; EGU2008-A-01781; BG5.3-1MO3P-0050
Wolthers, M.; Nehrke, G.; Fokkema, M.
Coupled effects of aspartic acid and magnesium on biocalcification

BG0051; EGU2008-A-02552; BG5.3-1MO3P-0051
Nouet, J.; Bassinot, F.
The effects of post-deposition dissolution on the crystallinity and Mg/Ca content of calcite from planktonic foraminifera *Globorotalia tumida*.

BG0052; EGU2008-A-02602; BG5.3-1MO3P-0052
Baronnet, A.; Cuif, J.P.; Dauphin, Y.; **Farre, B.;** Williams, C.T.
Distribution of chemical components in coral skeletons provides evidence for an overall control of crystallization at a submicrometre scale.

BG0053; EGU2008-A-02650; BG5.3-1MO3P-0053
Farre, B.; Dauphin, Y.; Cuif, J.P.
Lipids of the mollusks shells

BG0054; EGU2008-A-03110; BG5.3-1MO3P-0054
Dauphin, Y.; Dufour, E.; **Nouet, J.**
Nanostructures of the aragonitic otolith of cod (*Gadus morhua*) - environmental implications

BG0055; EGU2008-A-04515; BG5.3-1MO3P-0055
Stolarski, J.; Mazur, M.; D³użewski, P.; Kret, S.
Influence of biological processes on the structure of calcium carbonate biominerals: Microscopic approach

BG0056; EGU2008-A-04829; BG5.3-1MO3P-0056
Cusack, M.; Pérez-Huerta, A.; Chung, P.; Parkinson, D.; Dauphin, Y.; Cuif, J-P.
Oxygen isotope equilibrium in brachiopod shells in the context of biological control

BG0057; EGU2008-A-04921; BG5.3-1MO3P-0057
Shirokova, L.S.; **Pokrovsky, O.S.;** Schott, J.; Oelkers, E.H.; Martinez, R.; Kompantseva, E.I.
Experimental modeling of CaCO₃ precipitation in the presence of oxygenic and anoxygenic phototrophic bacteria

BG0058; EGU2008-A-06191; BG5.3-1MO3P-0058
Nehrke, G.; Nouet, J.
Structural details of foraminifera tests revealed by an etching technique

BG0059; EGU2008-A-06917; BG5.3-1MO3P-0059
Detsi, K.; **Kiliass, S. P.**; Naden, J.; Typas, M. A.; Benning, L.;
Pancost, R. D.; Boyce, A. J.
Biogenicity of Mn-mineralized Microbes from a Seafloor-
Paleohydrothermal Vent System, Vani, Milos, Greece:
Relevance to Mn-oxide Biomineralization

BG0060; EGU2008-A-08515; BG5.3-1MO3P-0060
Meulenkamp, R.J.A.; Bijmans, M.F.M.; Lenz, M.; Wei-
jma, J.; Buisman, C.J.N.; van der Weijden, R.D.
Investigating the Possibilities and Conditions for Production
of re-usable Bio-precipitates from Waste Streams

BG0061; EGU2008-A-08839; BG5.3-1MO3P-0061
Hild, S.; Ziegler, A.
The isopod cuticle: A model to study formation and function
of amorphous calcium carbonate in calcified tissues

BG0062; EGU2008-A-09288; BG5.3-1MO3P-0062
Alvarez-Lloret, P.; Rodriguez-Navarro, A.B.; Lind, M.;
Yebra-Rodriguez, A.; Almendros, A.; Gaines, K.F.; Ro-
manek, Ch.S.
Use of biominerals as indicators and records of environmen-
tal pollution

BG0063; EGU2008-A-09361; BG5.3-1MO3P-0063
Alvarez-Lloret, P.; Rodriguez-Navarro, A.B.; Checa, A.G
Determining microstructural growth patterns on mollusk
shells with synchrotron x-ray microdiffraction

BG0064; EGU2008-A-10946; BG5.3-1MO3P-0064
Schmahl, W. W.; Griesshaber, E.; Neuser, R. D.; Merkel, C.;
Götz, A.
crystal morphology and hybrid fibre composite architecture
modern calcitic brachiopod shells

**IS4 - BG7.2/SSP34 The Early Earth: inside, out and alive
(co-sponsored by the ESF research network "Archean
Environment" & EAG; co-organized by BG & SSP;
co-listed in GD, GMPV, MPRG & TS)**

Convener: Parman, S.
Co-Convener(s): van Hunen, J., Javaux, E., Arndt, N.,
Zegers, T., Samuel, H.
Lecture Room 20
Chairperson: JAVAUX, E.

8:30–8:45; EGU2008-A-05214; IS4 - BG7.2/SSP34-
1MO1O-001
Benzerara, K.; Bernard, S.; Lepot, K.; Miot, J.; Mei-
bom, A.; Lopez-Garcia, P.; Beyssac, O.; Philippot, P.;
Kazmierczak, J.; Brown Jr., G.E.
Preservation of microbial structures in modern and ancient
fossil assemblages: a microscopy and spectroscopy assess-
ment

8:45–9:00; EGU2008-A-05247; IS4 - BG7.2/SSP34-
1MO1O-002
Lepot, K.; **Benzerara, K.**; Brown, G.E.; Philippot, P.
Nanoscale evidence for microbial mineralization of 2.7 Ga
stromatolites

9:00–9:15; EGU2008-A-00483; IS4 - BG7.2/SSP34-
1MO1O-003
Medvedev, P.V.; Javaux, E.J.
Palaeoproterozoic microfossils from the Kondopoga Forma-
tion (Eastern Fennoscandian shield).

9:15–9:30; EGU2008-A-04604; IS4 - BG7.2/SSP34-
1MO1O-004
Westall, F.; Lemelle, L.; Simionovici, A.; Southam, G.;
salomé, M.; MacLean, L.; Wirick, S.; Toporski, J.; jauss, A.
Vertical geochemical profile across a 3.33 Ga microbial mat
from the Barberton Greenstone Belt.

9:30–9:45; EGU2008-A-04565; IS4 - BG7.2/SSP34-
1MO1O-005
Cavalazzi, B.; Westall, F.; Barbieri, R.; Foucher, F.
Astrobiological implications of microbes in basaltic pillow
lava crusts (Atlantic Ocean)

9:45–10:00; EGU2008-A-09879; IS4 - BG7.2/SSP34-
1MO1O-006
Pitcairn, I. K.; Arndt, N. T.
Mineralogical and chemical changes during seafloor alter-
ation in the Archaean

10:00 COFFEE BREAK

Chairperson: ARNDT, N.

10:30–10:45; EGU2008-A-11593; IS4 - BG7.2/SSP34-
1MO2O-001
Bekker, A.; Barley, M.E.; Fiorentini, M.L.; Rouxel, O.J.;
Rumble, D.; Beresford, S.W.
Multiple S and Fe isotope constraints on the origin of NiS
mineralization hosted in Archean komatiites (solicited)

10:45–11:00; EGU2008-A-02004; IS4 - BG7.2/SSP34-
1MO2O-002
Rollinson, H
The Oman ophiolite – some useful analogues for the very
early Earth (solicited)

11:00–11:30; EGU2008-A-00565; IS4 - BG7.2/SSP34-
1MO2O-003
Love, G.D.; Stalvies, C.; Bowden, S.A.; Grosjean, E.;
Marshall, C.P.; Meredith, W.; Snape, C.E.; Summons, R.E.
Utilizing molecular biomarkers bound into kerogen to
follow biological evolution and environmental change in the
Precambrian ocean (solicited)

11:30–11:45; EGU2008-A-11010; IS4 - BG7.2/SSP34-
1MO2O-004
Parman, S.W.; **Grocke, D.R.**; Armstrong, H.A.; Pear-
son, D.G.; Nowell, G.M.; van Hunen, J.
Early Earth catastrophic melting events and biosphere-
atmosphere-ocean evolution

11:45–12:00; EGU2008-A-05384; IS4 - BG7.2/SSP34-
1MO2O-005
Zhong, S. J.
A Case for Degree-1 Mantle Convection During and Shortly
After Pangea Formation (solicited)

12:00 LUNCH BREAK

Chairperson: VAN HUNEN, J.

13:30–13:45; EGU2008-A-10033; IS4 - BG7.2/SSP34-
1MO3O-001
Pietranik, A.; Hawkesworth, C.J.; Storey, C.; Kemp, A.I.S;
Sircombe, K.N.; Whitehouse, M.J.
Secular evolution of continental crust: evidence from Hf and
O isotopes in zircon from Slave Province, Canada.

13:45–14:00; EGU2008-A-05041; IS4 - BG7.2/SSP34-
1MO3O-002
Moyen, JF; **Stevens, G.**; Belcher, R; Kisters, A
High- and low- pressure sub-series in archaean TTGs: a
case study from the mid-archaean Barberton Granite –
Greenstone Terrain, South Africa. (solicited)

14:00–14:15; EGU2008-A-09945; IS4 - BG7.2/SSP34-
1MO3O-003
Coltice, N.; Labrosse, S.; Hernlund, J.
Geochemical consequences of the crystallization of a basal
magma ocean

14:15–14:30; EGU2008-A-09522; IS4 - BG7.2/SSP34-1MO3O-004

Boyet, M.; Carlson, R.W.

Terrestrial variation in $^{142}\text{Nd}/^{144}\text{Nd}$ and implications for early mantle dynamics (solicited)

14:30–14:45; EGU2008-A-03356; IS4 - BG7.2/SSP34-1MO3O-005

Samuel, H.; Tackley, P.

Heat partitioning during core formation in terrestrial planets

14:45–15:00; EGU2008-A-08317; IS4 - BG7.2/SSP34-1MO3O-006

Tarduno, J A; Cottrell, R D; Watkeys, M K; Hofmann, A

Strength of the Archean geomagnetic field, the paleomagneto-sphere, and magnetic shielding against the young active Sun (solicited)

15:00 END OF SESSION

IS4 - BG7.2/SSP34 The Early Earth: inside, out and alive (co-sponsored by the ESF research network "Archean Environment" & EAG; co-organized by BG & SSP; co-listed in GD, GMPV, MPRG & TS) – Posters

Convener: Parman, S.

Co-Convener(s): van Hunen, J., Javaux, E., Arndt, N., Zegers, T., Samuel, H.

Display Time: Monday, 08:00–19:30

Authors in Attendance: Monday, 15:30–17:00

Poster Area BG

Chairperson: PARMAN, S.

BG0065; EGU2008-A-00228; IS4 - BG7.2/SSP34-1MO4P-0065

Wolstencroft, M.; Davies, J Huw

The influence of convective vigour on phase change induced layering at 660 km in early Earth's mantle

BG0066; EGU2008-A-01306; IS4 - BG7.2/SSP34-1MO4P-0066

Sharkov, E.; Bogatkov, O.

Formation and evolution of the Earth and the Moon: evidence from petrological data

BG0067; EGU2008-A-06023; IS4 - BG7.2/SSP34-1MO4P-0067

Flament, N; Rey, P; Coltice, N

Modeling the thermal and mechanical response of 3.4-2.2 Ga continental crust to the emplacement of sills

BG0068; EGU2008-A-07926; IS4 - BG7.2/SSP34-1MO4P-0068

Arndt, N.T.

Temperatures in the Archean mantle

BG0069; EGU2008-A-08752; IS4 - BG7.2/SSP34-1MO4P-0069

Monteux, J.; Coltice, N.; Dubuffet, F.; Ricard, Y.

Thermo-mechanical adjustment after impact during planetary growth.

BG0070; EGU2008-A-09590; IS4 - BG7.2/SSP34-1MO4P-0070

van Hunen, J; van Thienen, P

The evolution of Wilson cycles

BG0071; EGU2008-A-10902; IS4 - BG7.2/SSP34-1MO4P-0071

Robin, C.M.I

Recycling early supracrustal metavolcanics to the lower crust by diapiric density inversion.

BG0072; EGU2008-A-00697; IS4 - BG7.2/SSP34-1MO4P-0072

Dokukina, K.; Konilov, A.N.

Archean high pressure subduction-collision transition zone (Belomorian eclogite province)

BG0073; EGU2008-A-05115; IS4 - BG7.2/SSP34-1MO4P-0073

Wilson, A

The volcanology of the White Mfolozi inlier of the c. 3.0 Ga Pongola Supergroup, South Africa: an example of repeated transgressive shallow water to subaerial volcanism on a stable continental margin (solicited)

BG0074; EGU2008-A-05349; IS4 - BG7.2/SSP34-1MO4P-0074

Benn, K.; Kamber, B. S.; Moyen, J.-F.

The Late Archean Abitibi-Opatika terrane, Superior Province: a modified oceanic plateau

BG0075; EGU2008-A-05786; IS4 - BG7.2/SSP34-1MO4P-0075

Brandt, S.; Rasskazov, S.; Brandt, I.; Saranina, E.; Fefelov, N.; Ivanov, V.

Conjugate Holmes-Houtermans and Concordia-Discordia model for common lead: Constraints for geological history of terrains with ore deposits in East Asia

BG0076; EGU2008-A-10668; IS4 - BG7.2/SSP34-1MO4P-0076

Taylor, J; Stevens, G

A case for Archean S-type granite genesis from metapelites of the Ancient Gneiss Complex; Swaziland

BG0077; EGU2008-A-12262; IS4 - BG7.2/SSP34-1MO4P-0077

Leiming, Y. ; Xunlai, Y.; Fanfan, K.

Archean-palaeoproterozoic graphic discs extracted from highly metamorphosed rocks in North China

BG0078; EGU2008-A-07402; IS4 - BG7.2/SSP34-1MO4P-0078

JIMENEZ-LOPEZ, C.; Romanek, C.; Rodriguez-Navarro, A.; Perez-Gonzalez, T.; Rodriguez-Navarro, C.

Cation incorporation in magnetites formed upon thermal decomposition of ankerites

BG0079; EGU2008-A-11654; IS4 - BG7.2/SSP34-1MO4P-0079

Spadafora, A. ; Perri, E.; Vasconcelos, C.; McKenzie, J.A.

Morphological and geochemical biomarkers in ~3.5 Gyr stromatolites of the Pilbara Block: possible evidence for biomineralization

BG0080; EGU2008-A-04957; IS4 - BG7.2/SSP34-1MO4P-0080

Hofmann, A.; Bekker, A.; Rumble, D.; Master, S.

Multiple sulphur isotope analysis of detrital pyrite as a tool for provenance analysis in Archean sedimentary rocks

BG0081; EGU2008-A-10339; IS4 - BG7.2/SSP34-1MO4P-0081

Bernard, S.; Beyssac, O.; Brown Jr., G.E.; Benzerara, K.

May traces of life be preserved in metamorphic rocks? A nanoscale structural study of high grade metamorphic vegetal fossils.

BG0082; EGU2008-A-03194; IS4 - BG7.2/SSP34-1MO4P-0082

Rozañov, A.; Astafieva, M.; Melezhik, V.; Lepland, A.

Eucaryots and Procaryots from the Early Proterozoic (2.04 Ga) phosphorites from Pechenga Greenstone Belt

Tuesday

BG1.1 Challenges in Biodiversity Science in Europe (EuroDIVERSITY) – Posters

Convener: Jonckheere, I.

Display Time: Tuesday, 08:00–19:30

Authors in Attendance: Tuesday, 15:30–17:00

Poster Area BG

Chairperson: JONCKHEERE, I.

BG0001; EGU2008-A-12026; BG1.1-1TU4P-0001

Jonckheere, I.

ESF-EUROCORES: An overview in Geosciences and Environmental Sciences

BG0002; EGU2008-A-08585; BG1.1-1TU4P-0002

Jantke, K.; Schneider, U.

Systematic biodiversity conservation planning – quantifying area requirements for wetland species conservation in Europe

BG0003; EGU2008-A-08594; BG1.1-1TU4P-0003

Link, P.M.; Schleupner, C.

Potential impacts of agricultural land use changes on the Eiderstedt peninsula (Schleswig-Holstein, Germany) on important bird habitats and species abundance

BG0004; EGU2008-A-03079; BG1.1-1TU4P-0004

Schleupner, C.; Schneider, U.A.

Designing space for wetland conservation by using a cost-effective site-selection model

BG0005; EGU2008-A-00536; BG1.1-1TU4P-0005

Speranskaya, N.A.

Changes in soil moisture and actual evaporation over European Russia during the 20th century

BG0006; EGU2008-A-06801; BG1.1-1TU4P-0006

Belova, I.N.

Application of special types of nonnegative matrices to forest ecosystems modelling

BG0007; EGU2008-A-01658; BG1.1-1TU4P-0007

Koupilová, M.; Moravcová, J.; Mika, K.; Váchal, J.

Historical genesis land structures in the model catchment with specification to sub mountainous area of Šumava Mountains

BG1.2 Climate variability and the carbon cycle (past, present and future): The EuroCLIMATE Programme on multi-proxy reconstructions and coupled climate models at European and regional scales (including Outstanding Young Scientist Award Lecture)

Convener: Bijma, J.

Co-Convener(s): Turk, D.

Lecture Room 20

Chairperson: N.N.

8:30–9:00; EGU2008-A-11673; BG1.2-1TU1O-001

Rickaby, R.E.M.; Elderfield, H.; Roberts, N.; Hendry, K.R.; Hildebrand, C.-D.; Mackensen, A.

A more alkaline Glacial Southern Ocean? Evidence from an 800 kyr record of foraminiferal trace metals in the Weddell Sea (solicited)

9:00–9:15; EGU2008-A-10575; BG1.2-1TU1O-002

Filipsson, H.L.; Lincoln, S.A.; McCorkle, D.C.; Bernhard, J.M.

A first multi-temperature culture study of benthic foraminiferal shell chemistry: oxygen and carbon isotopic results

9:15–9:30; EGU2008-A-10316; BG1.2-1TU1O-003

Ziveri, P.; Thoms, S.; Langer, G.; Probert, I.; Rost, B.

Delta18O vital effects and cell physiology: link to species-specific response to ocean acidification

9:30–9:45; EGU2008-A-09200; BG1.2-1TU1O-004

Wit, J.C.; Reichert, G.-J.; Jung, S.J.A.; Kroon, D.

Seasonality in the Mediterranean Sea: A calibration study using paired single specimen $\delta^{18}O$ and Mg/Ca measurements of *G. ruber alba*

9:45–10:00; EGU2008-A-01576; BG1.2-1TU1O-005

Verschuren, D.; Sinninghe Damste, J.S.; Haug, G.; Kristensen, I.; Moernaut, J.; Milne, I.; Wolff, C.; Fagot, M.; van Geel, B.; Blaauw, M.

A 25,000 years climate record from the East African equator: Half-precessional climate forcing and the history of temperature and hydrological change

10:00 END OF SESSION

BG1.2 Climate variability and the carbon cycle (past, present and future): The EuroCLIMATE Programme on multi-proxy reconstructions and coupled climate models at European and regional scales (including Outstanding Young Scientist Award Lecture) – Posters

Convener: Bijma, J.

Co-Convener(s): Turk, D.

Display Time: Tuesday, 08:00–19:30

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

Poster Area BG

Chairperson: N.N.

BG0008; EGU2008-A-02636; BG1.2-1TU2P-0008

Bauwens, M.; Poulain, C.; Beelaerts, V.; Servaes, F.; Schoukens, J.; Dehairs, F.

A non-linear multi-proxy approach for climate reconstruction based on archaeological shells

BG0009; EGU2008-A-03122; BG1.2-1TU2P-0009

Dissard, D.; Reichert, G.J.; Bijma, J.

Development of a mechanistic understanding of trace elements incorporation into biogenic calcite (benthic foraminifera)

BG0010; EGU2008-A-08323; BG1.2-1TU2P-0010

Martinez-Boti, M.A.; Mortyn, P.G.; Vance, D.; Field, D.B.; Schmidt, D.N.

Factors influencing the Mg/Ca ratio in planktonic foraminifera: new evidence from plankton tows

BG0011; EGU2008-A-07934; BG1.2-1TU2P-0011

Martinez-Boti, M.A.; Vance, D.; Mortyn, P.G.

Nd/Ca ratios in plankton-towed and core-top foraminifera confirm the water column acquisition of Nd

BG0012; EGU2008-A-08254; BG1.2-1TU2P-0012

Mas, R.; Poulain, C.; Claeys, P.; Dehairs, F.; Keppens, E.

Stable isotope (C, N) composition of bivalve shell organic matter and salinity

BG0013; EGU2008-A-08435; BG1.2-1TU2P-0013

Klinder, M. H.; Hippler, D.; Frei, D.; Witbaard, R.; Immenhauser, A.; Eisenhauer, A.

Ontogenetic influence on *Mytilus edulis* growth rates and calcite Mg/Ca ratio

BG0014; EGU2008-A-07543; BG1.2-1TU2P-0014

Auliaheryliaty, L.; Stoll, H.M.; Ziveri, P.; Malinverno, E.; Triantaphyllou, M.; Stavrakakis, S.; Lykousis, V.

Coccolith Sr/Ca ratios in the Eastern Mediterranean: production versus export processes

BG0015; EGU2008-A-05105; BG1.2-1TU2P-0015
Felis, T.; Suzuki, A.; Kuhnert, H.; Kawahata, H.
Amplification of inferred temperature changes on interannual timescales – implications from a long-term calibration study of coral Sr/Ca and U/Ca using local temperatures

BG0016; EGU2008-A-02776; BG1.2-1TU2P-0016
Lauterbach, S.; Brauer, A.; Dulski, P.; Plessen, B.; Zamelczyk, K.; Milecka, K.; Andersen, N.; Hüls, M.; DecLakes Participants, and
Multi-proxy evidence for delayed early Holocene warming in Northeastern Poland from Lake Hałczyńska sediments

BG0017; EGU2008-A-04120; BG1.2-1TU2P-0017
Blaga, C.I.; Reichert, G.-J.; Heiri, O.; Sinninghe Damste, J.S.
Tetraether membrane lipid distributions in lake particulate matter and sediments: A study of 47 European lakes along a North-South transect

BG0018; EGU2008-A-05297; BG1.2-1TU2P-0018
Garreta, V.; Miller, P.; Guiot, J.; Hély, C.
Climate and vegetation dynamics reconstructed by inverse vegetation modeling

BG0019; EGU2008-A-08604; BG1.2-1TU2P-0019
Engels, S.; Bohncke, SJP; Heiri, O.; Vandenberghe, J
Exploring Middle Weichselian climate variability in NW Europe by applying chironomids as a proxy

BG0020; EGU2008-A-06010; BG1.2-1TU2P-0020
Finsinger, W.; Wagner-Cremer, F.
Atmospheric CO₂ concentration changes inferred from stomatal frequencies: a calibration and validation approach for palaeoatmospheric reconstructions

BG0021; EGU2008-A-03628; BG1.2-1TU2P-0021
Kern, Z.; Popa, I.; Varga, Zs.
Dendrochronological comparison of Carpathian stone pine tree ring width chronologies and biogeochemical reason of their recent deviation

BG0022; EGU2008-A-05419; BG1.2-1TU2P-0022
Triantaphyllou, M.V.; Ziveri, P.; **Lianou, V.;** Mortyn, G.; Lykousis, V.; Dermitzakis, M.D.
Sea water δO₁₈ variability surrounding sapropel S1 deposition in the Aegean Sea

BG0023; EGU2008-A-06161; BG1.2-1TU2P-0023
Kontakiotis, G.; Antonarakou, A.; Mortyn, P.G.; Triantaphyllou, M.V.; Bouloubassi, I.; Ziveri, P.; Lykousis, V.; Dermitzakis, M.D.
Temperature and water column conditions linked to sapropel S1 formation in the Aegean Sea: planktonic foraminiferal, Mg/Ca, and U³⁷ evidence

BG0024; EGU2008-A-07972; BG1.2-1TU2P-0024
Fletcher, W.J.; Sánchez Goñi, M.F.
Modulation of millennial-scale climate variability by orbital-scale forcing factors during the last 48 ka in the Atlantic-Mediterranean transition zone

BG0025; EGU2008-A-07138; BG1.2-1TU2P-0025
Rampen, SW.; Schouten, S.; Koning, E.; Brummer, GJA; Sinninghe Damste, JS
A 90 ky upwelling record from the Northwestern Indian Ocean using a novel long-chain diol index

BG0026; EGU2008-A-05215; BG1.2-1TU2P-0026
Naughton, F. ; Sanchez Goñi, M. F.; Kageyama, M.; Bard, E.; Duprat, J.; Cortijo, E.; Malaizé, B.; Joly, C.; Rostek, F.; Turon, J.-L.
Alternative mechanisms explaining the complex pattern of Heinrich events in the North Atlantic mid-latitudes

BG0027; EGU2008-A-09889; BG1.2-1TU2P-0027
Wolff, C.; Haug, G.; Plessen, B.; Verschuren, D.; CHALLACEA Participants, &
Lake Challa (Kenya/Tanzania) sediments as archive of climate and environmental variability in equatorial East Africa

BG0028; EGU2008-A-08385; BG1.2-1TU2P-0028
Van Meerbeeck, C.J.; Renssen, H.; Roche, D.M.
Strong seasonality in the northern high latitudes is a prerequisite for glacial abrupt climate change: perspectives from the 3-D earth system model LOVECLIM

BG0029; EGU2008-A-08085; BG1.2-1TU2P-0029
Grunewald, K.; **Scheithauer, J.**
Geoarchives in the Pirin Mountains (Bulgaria)

BG1.3 The Role of Cities and Urban Land Use in altering of the Main Biogeochemical Cycles – Posters

Convener: Svirejeva-Hopkins, A.
Co-Convener(s): Bielefeld Nardoto, G.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 15:30–17:00
Poster Area BG
Chairperson: N.N.

BG0030; EGU2008-A-11220; BG1.3-1TU4P-0030
Svirejeva-Hopkins, A.; Schellnhuber, H.-J.
Cities as a compartment of Biosphere: exploring options for investigating matter flows on its territory and forecasting cross-boundary pollution.

BG0031; EGU2008-A-01049; BG1.3-1TU4P-0031
Nardoto, GB.; Svirejeva-Hopkins, A; Martinelli, LA
Urban land-use change effects on nitrogen biogeochemical cycle in the São Paulo metropolitan area of Brazil

BG0032; EGU2008-A-06807; BG1.3-1TU4P-0032
Churkina, G.; Brown, D.; Keoleian, G.
Carbon Stored in Human Settlements of the USA

BG0033; EGU2008-A-11007; BG1.3-1TU4P-0033
Zoran, M.; Savastru, R.; Savastru, D.; Ciobanu, M.; Miclos, S.; Tautan, M.N.; Dontu, S.I.
Use of remote sensing imagery for characterization of urban heat radiation flux

BG1.4 Application of stable isotopes in biogeosciences (co-listed in IG)

Convener: Böttcher, M.
Co-Convener(s): Bouillon, S., Buchmann, N.
Lecture Room 20
Chairperson: BÖTTCHER, M.E., BOUILLON, S.

10:30–10:45; EGU2008-A-06346; BG1.4-1TU2O-001
Koeniger, P.; Marshall, J.D.
Stable isotopes used as artificial tracers of snow melt infiltration and plant water uptake

10:45–11:00; EGU2008-A-11470; BG1.4-1TU2O-002
Siegwolf, R.; Kayler, Z.; Reynolds, Ch.; Saurer, M.
Leaf water 18O enrichment is controlled by stomatal conductance, ambient vapor pressure and oxygen isotope ratio of water vapor

11:00–11:15; EGU2008-A-03845; BG1.4-1TU2O-003
Kress, A.; Saurer, M; Siegwolf, R; Bugmann, H
The Role of Climate and Larch Budmoth Outbreaks reflected in δ¹³C- and δ¹⁸O-Signatures of an Alpine Tree-Ring Chronology

11:15–11:30; EGU2008-A-05198; BG1.4-1TU2O-004
Kromdijk, J.; Albanito, F.; Fitton, N.; Lanigan, G.;
Finnan, J.; Carroll, F.; Jones, M.; Schepers, H.E.; Grif-
fiths, H.
Is CO₂-uptake by C4-Grass Canopies limited by Leakage of
CO₂ from Bundle Sheath Cells?

11:30–11:45; EGU2008-A-01697; BG1.4-1TU2O-005
Steinbeiss, S.; Temperton, V. M.; Gleixner, G.
Mechanisms of short-term soil carbon storage in experimen-
tal grasslands

11:45–12:00; EGU2008-A-09563; BG1.4-1TU2O-006
Mangelsdorf, K.; Wohlfahrt, K.; Kämpf, H.; Pfanz, H.
Investigation of the impact of degassing geogenic CO₂ on
the grass *Deschampsia cespitosa* in a mofette area

12:00 LUNCH BREAK

Chairperson: BÖTTCHER, M.E., BOUILLON, S.

13:30–13:45; EGU2008-A-06551; BG1.4-1TU3O-001
Chaplin, B.; Meyer, H.; Marent, A.; Friedrichsen, H.;
Hubberten, H.-W.
Oxygen isotopes of diatom silica from El'gygytyn Crater
Lake, NE Russia - Analyses using a remotely-operated
laser-fluorination based mass spectrometry unit

13:45–14:00; EGU2008-A-01368; BG1.4-1TU3O-002
Mansfeldt, T.; Schulte, U.; Weihmann, J.
Stable Carbon (12/13C) and Nitrogen (14/15N) isotopes as
a tool for identifying the sources of cyanide in wastes and
contaminated soils

14:00–14:15; EGU2008-A-09360; BG1.4-1TU3O-003
Wouds, C.; Andersson, J. H.; Cowie, G. L.; Middelburg, J.
J.; Levin, L. A.
Factors affecting the short-term fate of organic carbon in
marine sediments: evidence from stable isotope enrichment
studies

14:15–14:30; EGU2008-A-05352; BG1.4-1TU3O-004
Millo, C.; Dupraz, S.; Ader, M.; Menez, B.
Carbon isotope tracing of CO₂ sequestration during CaCO₃
precipitation induced by ureolytic bacteria

14:30–14:45; EGU2008-A-09435; BG1.4-1TU3O-005
Mortazavi, B.; Conte, M.; Smith, M.; Chanton, J.C.;
Weber, J.; Crumsey, J.; Barkman, J.
Contribution of stored carbon pools to leaf level biosynthesis
and respiration as revealed by 13C labeling experiments

14:45–15:00; EGU2008-A-09006; BG1.4-1TU3O-006
Gottschalk, PG; Bellarby, JB; Foereid, BF; Watten-
bach, MW; Chenu, CC; Smith, JS
Evaluation of RothC at three chronosequence sites in
Zimbabwe and France using 13Carbon measurement data

15:00 COFFEE BREAK

Chairperson: BÖTTCHER, M.E., BOUILLON, S.

15:30–15:45; EGU2008-A-08077; BG1.4-1TU4O-001
Huygens, D.; Rütting, T.; Paulino, L.; Godoy, R.;
Oyarzun, C.; Van Cleemput, O.; Templer, P.; Müller, C.;
Boeckx, P.
Refining the paradigm of N cycling in temperate rainforests
in southern Chile

15:45–16:00; EGU2008-A-01407; BG1.4-1TU4O-002
Sivan, O.; Sela, M.; Yaari, N.G.; Eckert, W.
The redox couplings between carbon, sulfur and iron in Lake
Kinneret (Israel)

16:00–16:15; EGU2008-A-05937; BG1.4-1TU4O-003
Sebilo, M.; Billen, G.; Garnier, J.; Lot, K.; Pillet, E.;
Aubry, E.; Mariotti, A.
Isotopic biogeochemistry of agricultural nitrate contamina-
tion of surface water in the Seine watershed (France)

16:15–16:30; EGU2008-A-04756; BG1.4-1TU4O-004
Paetsch, J.; Serna, A.; Daehnke, K.; Schlarbaum, T.;
Emeis, K.-C.
Reconstruction of the Nitrogen Cycle in the German
Bight/South East North Sea by means of Stable Nitrogen
Isotopes in surface sediments, suspended matter and nitrate
- A Model Study

16:30–16:45; EGU2008-A-06444; BG1.4-1TU4O-005
Riou, V.; Colaço, A.; Bouillon, S.; Chevalier, E.; Man-
gion, P.; Korntheuer, M.; Connelly, D.; Khripounoff, A.;
Dehairs, F.; Santos, R.S.
Assimilation of carbon and nitrogen from dissolved and
particulate material in the Mid-Atlantic Ridge deep sea
hydrothermal mytilid *Bathymodiolus azoricus* : use of stable
isotopes

16:45–17:00; EGU2008-A-01355; BG1.4-1TU4O-006
Schimmelmann, A
Conversion of ammonium to organic nitrogen in maturing
kerogen

17:00 END OF SESSION

BG1.4 Application of stable isotopes in biogeosciences (co-listed in IG) – Posters

Convener: Böttcher, M.
Co-Convener(s): Bouillon, S., Buchmann, N.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 08:30–10:00
Poster Area BG
Chairperson: BÖTTCHER, M.E., BOUILLON, S.

BG0034; EGU2008-A-02323; BG1.4-1TU1P-0034
Böttcher, M.E.; Piel, C.
Kinetic S-34/S-32 fractionation during degassing and
hydroxylation of hydrogen sulfide, and protonation of
hydrogen bisulfide

BG0035; EGU2008-A-03454; BG1.4-1TU1P-0035
Zopf, J.; **Böttcher, M.E.;** Jorgensen, B.B.
Biogeochemistry and stable isotope geochemistry of sulfur
in Thioploca-colonized

BG0036; EGU2008-A-10613; BG1.4-1TU1P-0036
Bottrell, S.H.; **Böttcher, M.E.;** Schippers, A.; Parkes, R.J.;
Jorgensen, B.B.; Raiswell, R.; Telling, J.; Gehre, M.
Abiotic sulfide oxidation via manganese fuels the deep
biosphere: Stable isotope evidence

BG0037; EGU2008-A-03391; BG1.4-1TU1P-0037
Bartlett, R.; Coulson, J.; Bottrell, S.; Chapman, P.; Clark, J;
Carlton, G
Recovery from acidification in organic soils: sulfur cycling
and dissolved organic carbon dynamics

BG0038; EGU2008-A-02377; BG1.4-1TU1P-0038
Bouillon, S.; Veuger, B.; Dehairs, F.; Middelburg, J.
Differential fate of C and N from labile organic matter
in intertidal mangrove sediments: results from an in situ
13C-15N labeling experiment

BG0039; EGU2008-A-06958; BG1.4-1TU1P-0039

Serna, A.; Paetsch, J.; Daehnke, K.; Schlarbaum, T.; Emeis, K.

Reconstruction of the Nitrogen Cycle in the German Bight/South East North Sea by means of Stable Nitrogen Isotopes in surface sediments, suspended matter and sediment cores - An empirical study

BG0040; EGU2008-A-03960; BG1.4-1TU1P-0040

Stange, C. F.

Inverse analytical approach to quantify the fraction of heterotrophic nitrification on trace gas emissions based on indirect isotope labelling of soil organic matter

BG0041; EGU2008-A-07773; BG1.4-1TU1P-0041

Accoe, F.; Berglund, M.; Geypens, B.; Taylor, P.

Improved determination of the oxygen isotopic composition of nitrates and other nitrogen containing compounds by TC-EA-IRMS.

BG0042; EGU2008-A-07792; BG1.4-1TU1P-0042

Torrentó, C.; Otero, N.; Menció, A.; Soler, A.; Mas-Pla, J. Environmental isotopes (N, S, C, O, D) to evaluate occurrence and temporal variability of natural denitrification processes in a regional system (Osona, NE Spain)

BG0043; EGU2008-A-07892; BG1.4-1TU1P-0043

Spott, O.

Facing the 15N tracer technique with the process of codenitrification

BG0044; EGU2008-A-08974; BG1.4-1TU1P-0044

Barrett, G.; Mair, L.; Weitz, H.; Mahmood, S.; Baggs, E

Using stable isotope enrichment approaches to determine the significance of nitrifier denitrification as a soil source of nitrous oxide

BG0045; EGU2008-A-09172; BG1.4-1TU1P-0045

Puig, R.; Folch, A.; Bach, J.; Soler, A.; Mas-Pla, J.; Otero, N. Natural attenuation of nitrate in some vulnerable areas in Catalonia (NE Spain)

BG0046; EGU2008-A-11853; BG1.4-1TU1P-0046

Woule Ebongue, V.; Verhack, J.; Bronders, J.; Van Keer, I.; Swennen, R.; Geypens, B.; Berglund, M.

Assessment of the relative contribution of the degradation and the sources for chlorinated ethenes in groundwater using stable carbon isotopes

BG0047; EGU2008-A-07234; BG1.4-1TU1P-0047

El gaouzi, E.; Sebilo, S.; Plagnes, P.; Ribstein, R.; Zakeossian, Z.; Somon, S.

Characterization of sources of water in karstic aquifers in the watershed of Paris by measurement of the isotopic composition of nitrogen and oxygen in nitrate

BG0048; EGU2008-A-07702; BG1.4-1TU1P-0048

Accoe, F.; Duta, S.; Hennessy, C.; Berglund, M.; Taylor, P.; Van Hoof, K.; De Smedt, S.

Combined use of N and O isotopes in nitrate and B isotopes to identify sources of nitrate pollution in surface water in Flanders.

BG0049; EGU2008-A-07769; BG1.4-1TU1P-0049

Rothfuss, Y.; Bariac, T.; Braud, I.; Durand, J.L.; Biron, P.; Richard, P.; Canale, L.

Realising a partition of evapotranspiration into soil evaporation and plant transpiration using isotopes of water in controlled conditions

BG0050; EGU2008-A-04634; BG1.4-1TU1P-0050

Biasi, C.; Lind, S.E.; Pekkarinen, N.M.; Huttunen, J.T.; Shurpali, N.J.; Hyvönen, N.P.; Repo, M.E.; Martikainen, P.J. Using stable isotopes to separate lime-borne CO₂ from biotic CO₂ in managed peat soils

BG0051; EGU2008-A-05943; BG1.4-1TU1P-0051

Wang, L.; **Macko, S.A.;** Okin, G.

Soil carbon sources and variations in southern African savannas

BG0052; EGU2008-A-10404; BG1.4-1TU1P-0052

Dilly, O.; Zyakun, A.

The 13C-12C ratio as a tool to study soil microbial metabolism

BG0053; EGU2008-A-09802; BG1.4-1TU1P-0053

Inglima, I.; Cotrufo, M.F.

Quantification of carbon (C) reservoirs and belowground C input in soil in terrestrial ecosystems of the Italian peninsula under different land-uses.

BG0054; EGU2008-A-02064; BG1.4-1TU1P-0054

Keppler, F.; Röckmann, T.; Vigano, I.; McRoberts, C.W.; Hamilton, J.T.G

Methoxyl groups of plant pectin as a precursor compound for atmospheric methane: evidence from deuterium labelling studies

BG0055; EGU2008-A-09580; BG1.4-1TU1P-0055

Mortazavi, B.; Chanton, J.; **Conte, M.;** Martin, T.

Influence of tree height on the carbon isotopic discrimination of canopy photosynthesis in southeastern US pine forest ecosystems

BG0056; EGU2008-A-05266; BG1.4-1TU1P-0056

Uchida, M.; Kumata, H.; Kondo, M.; Murayama, S.; Sigusa, N.

Coupled 13C and 14C isotopic signatures of plant derived organic molecule in forest fine aerosol: Implication for a proxy for photosynthetic carbon isotopic discrimination at ecosystem-scale

BG2.1 Interactions of Land Cover and Climate

Convener: Reissell, A.

Co-Convener(s): Andreae, M., Kabat, P.

Lecture Room 21

Chairperson: N.N.

8:30–8:45; EGU2008-A-08681; BG2.1-1TU1O-001

Fritz, S.M.F.; See, L.S

Identifying and quantifying uncertainty and spatial disagreement in the comparison of Global Land Cover for different applications

8:45–9:00; EGU2008-A-01174; BG2.1-1TU1O-002

Lathiere, J.; Pike, R.; Wild, O.; Beerling, D.; Hewitt, N.; Pyle, J.

Assessing the evolution of biogenic isoprene emissions in the future and their impact on the chemical composition of the atmosphere

9:00–9:15; EGU2008-A-03876; BG2.1-1TU1O-003

Ganzeveld, L.; Altimir, N

The dry deposition process at the substrate- to global scale (solicited)

9:15–9:30; EGU2008-A-07654; BG2.1-1TU1O-004

Seneviratne, S.I.; Corti, T.; Hirschi, M.; Jäger, E.; Lehner, I.; Roesch, A.; Teuling, A.J.

Land-climate interactions from models and observations (solicited)

9:30–9:45; EGU2008-A-06125; BG2.1-1TU1O-005

Fu, C.

Land cover-climate interaction research in Monsoon Asia Integrated Regional Study(MAIRS) (solicited)

9:45–10:00; EGU2008-A-10367; BG2.1-1TU1O-006

Reichstein, M.; Papale, D.; Baldocchi, D.

Towards quantifying and understanding global spatio-temporal variability of ecosystem-atmosphere exchange with the world-wide FLUXNET network (solicited)

10:00 END OF SESSION

BG2.1 Interactions of Land Cover and Climate – Posters

Convener: Reissell, A.

Co-Convener(s): Andreae, M., Kabat, P.

Display Time: Tuesday, 08:00–19:30

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

Poster Area BG

Chairperson: N.N.

BG0057; EGU2008-A-04040; BG2.1-1TU2P-0057

Arneth, A.; Olofsson, J.; Hickler, T.; Miller, P.; Schurgers, G.; Smith, B

Pre-industrial is not pristine

BG0058; EGU2008-A-06298; BG2.1-1TU2P-0058

Kvalevåg, MM.; Myhre, G.; Bonan, G.; Levis, S.

Human impact on atmospheric water vapor due to land use changes

BG0059; EGU2008-A-05515; BG2.1-1TU2P-0059

Vidyakina, S.V.

Natural background and the stress reaction of natural biosystems

BG0060; EGU2008-A-02171; BG2.1-1TU2P-0060

Romanova, E. P.; Alekseev, B. A.; Alekseeva, N. N.

GIS-technology for the regionalization of Landscape-environmental systems

BG0061; EGU2008-A-11846; BG2.1-1TU2P-0061

Olehowski, C.; Siegmund, A

Vulnerability- and Degradation Analysis of semiarid Island ecosystem in the marginal tropics on the example of Fogo (Cape Verde Islands) – a study based on Remote Sensing and GIS

BG0062; EGU2008-A-09663; BG2.1-1TU2P-0062

Machwitz, M.; Schramm, M.; Landmann, T.; Dech, S.

Remote sensing based determination of percentage tree cover in West Africa

BG0063; EGU2008-A-08618; BG2.1-1TU2P-0063

Preuschmann, S.; Jacob, D.

Sensitivity Study for parameterization of woods in the regional climate model REMO

BG0064; EGU2008-A-06030; BG2.1-1TU2P-0064

Tu, G.; Liu, H.Z.; Guo, W.D.

Variation of evapotranspiration over degraded grassland and cropland surfaces in semi-arid area of China

BG0065; EGU2008-A-07739; BG2.1-1TU2P-0065

Zhang, JH.; Yao, FM

Response of Grassland Ecosystem to Climate Variations in Northern Tibet Plateau

BG0066; EGU2008-A-10389; BG2.1-1TU2P-0066

Zavalishin, N.N.

Vegetation pattern dynamics in Northern Euro-Asia under the climate change

BG0067; EGU2008-A-05866; BG2.1-1TU2P-0067

Kharuk, VI.; Ranson, KJ

The south Siberian mountain treeline ecotone response to climate change

BG0068; EGU2008-A-05722; BG2.1-1TU2P-0068

Oglesby, R.; Rowe, C.; Erickson, D

Transitioning from Corn to Switchgrass in the US Great Plains: Implications for Climate and Water Resources

BG0069; EGU2008-A-06889; BG2.1-1TU2P-0069

van der Velde, M.; Bouraoui, F.

European biodiesel production: current and future environmental impacts of rapeseed cultivation at pan-European scale

BG0070; EGU2008-A-10992; BG2.1-1TU2P-0070

Wattenbach, M.; Beer, C.; Jung, M.; Ciais, P.; Smith, P.

Uncertainties in the estimation of the European cropland NPP

BG0071; EGU2008-A-08205; BG2.1-1TU2P-0071

Altimir, N.; Soy-Massoni, E.; Garcia-Pausas, J.; Sebastià, M-T

Land-use change in the Pyrenees: effect of abandonment on the C and N distribution of mountain grasslands.

BG0072; EGU2008-A-05246; BG2.1-1TU2P-0072

Wolf, S.; Buchmann, N.; Eugster, W.

Land use effects on carbon sequestration potentials in tropical Panama

BG0073; EGU2008-A-09418; BG2.1-1TU2P-0073

Wohland, P.; Veenendaal, E.; Mantlana, B.; Kolle, O

Energy partitioning in tropical grassland ecosystems

BG0074; EGU2008-A-11333; BG2.1-1TU2P-0074

Lara, L.; Artaxo, P.; Pauliquevis, T.; Oliveira, P.H.; Carmargo, P

Strong couplings in the biosphere-atmosphere interaction in Atlantic Forest and Amazonia

BG0075; EGU2008-A-04890; BG2.1-1TU2P-0075

Artaxo, P.; Lara, L.; Oliveira, P.; Pauliquevis, T.

Natural biogenic aerosols in the Atlantic Forest and Amazonia: Impact on radiation balance, CCN production and optical properties

BG2.2 Interactions between the carbon and hydrological cycle and the climate system

Convener: Beer, C.

Co-Convener(s): Reichstein, M.

Lecture Room 21

Chairperson: N.N.

10:30–10:45; EGU2008-A-07012; BG2.2-1TU2O-001

Tu, K.; Knohl, A.; Mambelli, S.; Ma, S.; Baldocchi, D.; Dawson, T.

Observations and scaling of water use efficiency from leaf to globe (solicited)

10:45–11:00; EGU2008-A-11438; BG2.2-1TU2O-002

Pereira, J. S.; David, J. S.; Paco, T.A.; David, T. S.; Mateus, J. A.; Pita, P.G.; Banza, J.

Effects of drought on ecosystem carbon and water fluxes in an evergreen Mediterranean oak woodland

11:00–11:15; EGU2008-A-09056; BG2.2-1TU2O-003

Köhler, I.H.; Poulton, P.; Auerswald, K.; Schnyder, H.

Trends in ¹³C discrimination of temperate grassland since 1864

11:15–11:30; EGU2008-A-08441; BG2.2-1TU2O-004

Goerner, A.; Reichstein, M.; Rambal, S.

Using the satellite-derived Photochemical Reflectance Index to estimate photosynthetic Light Use Efficiency in semi-arid ecosystems

11:30–11:45; EGU2008-A-00160; BG2.2-1TU2O-005
Moore, D.J.P.; Hu, J; Sacks, W.J.; Schimel, D.S.; Monson, R.K.
Estimating transpiration and the sensitivity of carbon uptake to water availability in a subalpine forest using a simple ecosystem process model informed by measured net carbon dioxide and water fluxes.

11:45–12:00; EGU2008-A-08078; BG2.2-1TU2O-006
Magnani, F.; Cotrufo, M.F.; Peressotti, A.; Valentini, R.; Borghetti, M.; Miglietta, F.
The response of terrestrial ecosystems to drought extremes (solicited)

12:00 END OF SESSION

BG2.2 Interactions between the carbon and hydrological cycle and the climate system – Posters

Convener: Beer, C.
Co-Convener(s): Reichstein, M.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 08:30–10:00
Poster Area BG
Chairperson: N.N.

BG0076; EGU2008-A-07814; BG2.2-1TU1P-0076
Schymanski, S. J.; Sivapalan, M.; Roderick, M. L.; Hutley, L. B.; Beringer, J.
An Optimality-based Model of the dynamic Feedbacks between natural Vegetation and the Water Balance (solicited)

BG0077; EGU2008-A-09986; BG2.2-1TU1P-0077
Wolf, A.; Bugmann, H.
Modelling land use and species effects on carbon and water cycle feedbacks (cancelled)

BG0078; EGU2008-A-07677; BG2.2-1TU1P-0078
Julich, S.; Kemanian, A.; Green, C.H.; Arnold, J.G.; Williams, J.R.; Breuer, L.; Frede, H.G.
Integrating a carbon routine in a mesoscale watershed model

BG0079; EGU2008-A-07571; BG2.2-1TU1P-0079
Lehner, I.; Gurtz, A.; Schroff, K.; Seneviratne, S.I.
Hydrological and meteorological measurements in a pre-alpine catchment: past and future

BG0080; EGU2008-A-10987; BG2.2-1TU1P-0080
Le Dantec, V.; The V. Le Dantec Team
Carbon and water exchange measurements from leaf to canopy scale in a semi-arid ecosystem (Mali)

BG0081; EGU2008-A-09322; BG2.2-1TU1P-0081
Linderson, M-L.; Mikkelsen, T. N.; Ibrom, A.; Lindroth, A.; Pilegaard, K.
Water use efficiency as a means of up scaling carbon flux from leaf to stand

BG0082; EGU2008-A-06655; BG2.2-1TU1P-0082
Raz Yaseef, N.; Yakir, D.
Ecohydrological Controls over ET Partitioning at a Semi-Arid Forest

BG0083; EGU2008-A-09023; BG2.2-1TU1P-0083
Clausnitzer, F.; Koestner, B.
Relationship between tree transpiration, stem growth and carbon fluxes during soil drought of an old spruce forest.

BG0084; EGU2008-A-10657; BG2.2-1TU1P-0084
Leahy, P.; Kiely, G.
Effects of hydrological extremes of 2006 and 2007 on net ecosystem exchange of a temperate grassland.

BG0085; EGU2008-A-09816; BG2.2-1TU1P-0085
Ammann, C.; Neftel, A.; Fuhrer, J.
Effect of soil moisture on the carbon budget and water use efficiency of managed grassland

BG0086; EGU2008-A-02743; BG2.2-1TU1P-0086
Jongen, M.; Aires, L.; Pio, C.; Pereira, J. S.
Interannual rainfall variability effects on carbon sequestration capacity of a mediterranean grassland ecosystem

BG0087; EGU2008-A-11552; BG2.2-1TU1P-0087
Belelli Marchesini, L.; Valentini, R.
Water use efficiency and carbon dioxide fluxes of siberian natural steppe and recovering grassland ecosystems

BG0088; EGU2008-A-02612; BG2.2-1TU1P-0088
Wittmer, M.; Auerswald, K.; Tunglag, R.; Bai, Y.F.; Schäufele, R.; Bai, C.H.; Schnyder, H.
Carbon isotope discrimination of C3 vegetation in Central Asian Grassland as related to long-term and short-term precipitation patterns

BG0089; EGU2008-A-11884; BG2.2-1TU1P-0089
Alberti, G.; Peressotti, A.; Delle Vedove, G.; Zuliani, M.; Zerbi, G.
Evidence for carbon losses in the short period following maize to alfalfa conversion

BG0090; EGU2008-A-09513; BG2.2-1TU1P-0090
Sottocornola, M.; Kiely, G.
Evapotranspiration and water balance in an Atlantic blanket bog in South-western Ireland

BG0091; EGU2008-A-09275; BG2.2-1TU1P-0091
Curriel Yuste, JCY.; Continuous NEE vs SR analyses
The role of Photosynthetic activity on short-term temporal variation of soil CO2 efflux: A synthesis study

BG0092; EGU2008-A-10442; BG2.2-1TU1P-0092
Zanchi, F. B.; Waterloo, M. J.; Kesselmeier, J.; de Araujo, A.C.; Dolman, A. J.; Luizão, F. J.
Spatial distribution of soil respiration in the central amazon

BG0093; EGU2008-A-07331; BG2.2-1TU1P-0093
McGoff, N.; Eaton, J.; Leahy, P.; Byrne, K.; Kiely, G.
Dissolved organic carbon in Irish streams

BG0094; EGU2008-A-00435; BG2.2-1TU1P-0094
Mukhortova, L.;
The effect of high water table on carbon storage in the soil of forest ecosystems in forest-tundra zone of Central Siberia

BG0095; EGU2008-A-06632; BG2.2-1TU1P-0095
Gornall, J.L.; Mencuccini, M.; Huntley, B.; Baxter, R.
Using water-use efficiency to interpret tree-line dynamics

BG2.3 Biogeochemistry and ecohydrology of arid and semi-arid ecosystems

Convener: Meixner, F.
Co-Convener(s): Mamtimin, B.
Lecture Room 21
Chairperson: N.N.

13:30–13:45; EGU2008-A-09146; BG2.3-1TU3O-001
Fay, P.; Polley, W.; Wilsey, B.; Tiner, K.; Jin, V.
Plant composition and the effects of temperature, soil moisture, and aboveground biomass on soil respiration in grassland (solicited)

13:45–14:00; EGU2008-A-12282; BG2.3-1TU3O-002
Delgado, J.A.; Martínez, T.
Seasonal and Depth-Related Patterns of Fine Root Biomass in Mediterranean Riparian Forests in Central Spain

14:00–14:15; EGU2008-A-01414; BG2.3-1TU3O-003
Wohlfahrt, G.; Fenstermaker, L.; **Arnone, J.**
Large Annual Net Ecosystem CO₂ Uptake of a Mojave
Desert Ecosystem

14:15–14:30; EGU2008-A-00436; BG2.3-1TU3O-004
Scheer, C.; Wassmann, R.; Lamers, J.
Biosphere-Atmosphere exchange of C and N trace gases in
annual and perennial land use systems of the irrigated areas
in the Aral Sea Basin, Uzbekistan

14:30–14:45; EGU2008-A-06519; BG2.3-1TU3O-005
Feig, G.T.; Andreae, M.O.; Meixner, F.X.
The biogenic emission of nitric oxide from three ecosystems
in the Namib Desert: a laboratory study

14:45–15:00; EGU2008-A-12188; BG2.3-1TU3O-006
Marques, M.J.; Ackhtar-Schuster, M.
Networking to strengthen research and solutions on land
degradation and desertification. European Desert-Net.

15:00 END OF SESSION

BG2.3 Biogeochemistry and ecohydrology of arid and semi-arid ecosystems – Posters

Convener: Meixner, F.
Co-Convener(s): Mamtimin, B.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 10:30–12:00
Poster Area BG
Chairperson: N.N.

BG0096; EGU2008-A-00885; BG2.3-1TU2P-0096
Toch, S.L.
Too Much or Too Little: Eco-hydrology in Arid and Semi-
arid Regions (solicited)

BG0097; EGU2008-A-04358; BG2.3-1TU2P-0097
Moawad, B. M.; Grunert, J.; **Mamtimin, B.**
Digital simulation of small-scale drainage basins using
SRTM satellite images: validity and competence analysis.

BG0098; EGU2008-A-12189; BG2.3-1TU2P-0098
García-Estringana, P.; Alonso-Blazquez, N.; Mar-
qués, M.J.; Bienes, R.; Alegre, J.
Incidence of Grass cover on the infiltration rate in a semi-arid
abandoned land in Guadalajara (Central Spain)

BG0099; EGU2008-A-12190; BG2.3-1TU2P-0099
Martínez, T.; Delgado, J.A.
Effect of Habitat Type on Soil Organic Carbon Content in
Central Spain

BG0100; EGU2008-A-08321; BG2.3-1TU2P-0100
Serrano-Ortiz, P.; Kowalski, A. S.; Domingo, F.; Were, A.;
Cuezva, S.; Sánchez-Moral, S.; Villagarcía, L.; Cazorla, A.;
Ruiz, B.; Alados-Arboledas, L.
Interannual variability in net CO₂ exchange in a semi-arid
carbonaceous ecosystem located in the Southeast of Spain

BG0101; EGU2008-A-04001; BG2.3-1TU2P-0101
Mamtimin, B.; Meixner, F. X.; Andreae, M. O.
Up-scaling of biogenic soil emissions of nitric oxide for the
Tohsun depression in Northwest China using GIS techniques

BG0102; EGU2008-A-12146; BG2.3-1TU2P-0102
Mamtimin, B.; Beirle, S.; Wagner, T.; Andreae, M.O.;
Meixner, F.X.
The Potential Role of Biogenic Soil Emissions of Nitric Ox-
ide for the Tropospheric Nitrogen Dioxide Column Density
over Oasis Ecosystems in the Extremely Arid Regions of
Northwestern China

BG0103; EGU2008-A-00391; BG2.3-1TU2P-0103
LI, Y.H.; JIN, H.L.; HU, J.L.
Study on Characters and Formation Mechanism of Soil
Quality

BG0104; EGU2008-A-00393; BG2.3-1TU2P-0104
Jin, H.L.; Li, Y.H.; Hu, J.L.
Study on Formation Mechanism and Change of Land Use

BG2.7 Land - atmosphere interactions and human activity in Monsoon Asia (co-sponsored by iLEAPS)

Convener: Fu, C.
Co-Convener(s): Kabat, P., Reissell, A.
Lecture Room 21
Chairperson: N.N.

15:30–15:45; EGU2008-A-12455; BG2.7-1TU4O-001
Fu, C.
Research of Land-atmosphere interactions in Monsoon Asia
Integrated Regional Study (solicited)

15:45–16:00; EGU2008-A-11405; BG2.7-1TU4O-002
Su, Z.
Water, Climate and Ecosystem Interactions in Monsoon Asia
(solicited)

16:00–16:15; EGU2008-A-00952; BG2.7-1TU4O-003
Zhang, H.
Exploring uncertainties in climate model simulations of the
impacts of land-cover change on Asian monsoon climate

16:15–16:30; EGU2008-A-12454; BG2.7-1TU4O-004
Zhou, G.; Zhou, L.; Sui, X.; Wang, Y.
Simulating water vapor, sensible heat and carbon dioxide
fluxes over typical terrestrial ecosystems in northeast China
based on modified integrated biosphere simulator (IBIS)

16:30–16:45; EGU2008-A-04479; BG2.7-1TU4O-005
Sun, G.D.; Mu, M.
The response of vegetation carbon and net primary produc-
tion (NPP) to land-use change in China

16:45–17:00; EGU2008-A-08555; BG2.7-1TU4O-006
Masumoto, T.; Taniguchi, T.; Horikawa, N.; Yoshida, T.;
Shimizu, K.
A distributed water circulation model for assessing human
interaction in agricultural water use of the Monsoon Asia

17:00 END OF SESSION

BG2.7 Land - atmosphere interactions and human activity in Monsoon Asia (co-sponsored by iLEAPS) – Posters

Convener: Fu, C.
Co-Convener(s): Kabat, P., Reissell, A.
Display Time: Tuesday, 08:00–19:30
Authors in Attendance: Tuesday, 13:30–15:00
Poster Area BG
Chairperson: N.N.

BG0105; EGU2008-A-07205; BG2.7-1TU3P-0105
Mügler, I.; Gleixner, G.; Mäusbacher, R.; Daut, G.;
Schütt, B.; Schwalb, A.; Xu, B.; Yao, T.; Zhu, L.; Yi, Ch.
A multi-proxy approach to reconstruct hydrological changes
and Holocene climate development of Nam Co, Central Tibet

BG0106; EGU2008-A-11526; BG2.7-1TU3P-0106
Hayano, M; Horikawa, N; Kuwagata, T; Furuya, J;
Ishigooka, Y; Hasegawa, Y; Sawano, S; Taniguchi, T;
Shimizu, K; Shimizu, A; MAWF project team
Features of the AFFRC model for evaluating the relationship
between the water cycle and rice production

BG0107; EGU2008-A-01961; BG2.7-1TU3P-0107
Toritani, H; THE NIAES/KHON KAEN TEAM
Evaluation of the Relationship between the Variability in the
Water Cycle and the Demand for Water for Food Production
in the Northeastern Region of Thailand

BG0108; EGU2008-A-06662; BG2.7-1TU3P-0108
Olchev, A.; Panferov, O.; Kreilein, H.; Priess, J.; Erasmi, S.;
Gravenhorst, G.
Modelling estimations of El Nino and La Nina impacts on
water and carbon budgets of tropical rain forest areas in
Central Sulawesi (Indonesia)

BG0109; EGU2008-A-04500; BG2.7-1TU3P-0109
Cui, C.; Wei, R.; Li, Y.
Changes in the Duration and Depth of Snow Cover in
Xinjiang During 1956-2005 and Their Climatic Causes

BG0110; EGU2008-A-05767; BG2.7-1TU3P-0110
Mao, H.Q; Yan, X.D
Climate change consequences on vegetation distribution and
net primary production in china

BG0111; EGU2008-A-05972; BG2.7-1TU3P-0111
Tu, G.; Liu, H.Z.; Dong, W.J.
The characteristics of land surface heat fluxes over degraded
grassland and cropland in the semi-arid area of China

BG0112; EGU2008-A-06013; BG2.7-1TU3P-0112
Ma, Y.; Ma, W.; Li, M.; Zhong, L.; Sun, F.; Tian, H.;
Zhu, K.; Chen, X.
Study on the atmosphere-land interaction over heteroge-
neous landscape of the Mt. Qomolangma (Mt. Everest) area

Wednesday

BG2.8 Land-atmosphere interactions in Northern Eurasia (co-sponsored by iLEAPS and NEESPI; co-listed in CR)

Convener: Groisman, P.
Co-Convener(s): Kabat, P., Hibbard, K., van Huissteden, K.
Lecture Room 20
Chairperson: KABAT, P.

8:30–8:45; EGU2008-A-03979; BG2.8-1WE1O-001
Groisman, P; Lawford, R
Northern Eurasia Earth Science Partnership Initiative
(NEESPI): An update

8:45–9:00; EGU2008-A-09253; BG2.8-1WE1O-002
Qi, J.; Ailikon, A.; Groisman, P.
Synergizing MAIRS and NEESPI Region Study Programs:
Complementary and Potential for Collaboration

9:00–9:15; EGU2008-A-07319; BG2.8-1WE1O-003
Mokhov, I.I.; Eliseev, A.V.; Arzhanov, M.M; Dem-
chenko, P.F.; Denisov, S.N.
Climate changes simulated by the IAP RAS global model
with CO₂ and CH₄ exchange between climate system
components

9:15–9:30; EGU2008-A-01153; BG2.8-1WE1O-004
Shkolnik, I.M.; Kattsov, V.M.
Changes in temperature and precipitation extremes over
Northern Eurasia: AOGCM and RCM projections (solicited)

9:30–9:45; EGU2008-A-11271; BG2.8-1WE1O-005
Bhatt, U; Walker, D; Raynolds, M; Comiso, J
Examining Relationships between Sea Ice and Arctic Vege-
tation on the Pan-Arctic, Regional and Site Scales

9:45–10:00; EGU2008-A-06019; BG2.8-1WE1O-006
Anisimov, O.; Lobanov, V.; Zhiltcova, E.; Zaharova, O.
Regional coherence of climatic changes in northern Eurasia:
implications for predictive permafrost modeling

10:00 COFFEE BREAK

Chairperson: VAN HUISSTEDEN, J.

10:30–10:45; EGU2008-A-10738; BG2.8-1WE2O-001
Heimann, M.; ZOTTO Consortium
The Zotino Tall Tower Observatory (ZOTTO): A 300m tall
tower for long-term atmospheric monitoring of biogeochem-
ical changes in central Siberia (solicited)

10:45–11:00; EGU2008-A-08567; BG2.8-1WE2O-002
Boike, J; THE SPARC TEAM
Ten years of water and energy balance studies at a Siberian
Arctic polygonal tundra site- what do we observe?

11:00–11:15; EGU2008-A-00519; BG2.8-1WE2O-003
Walter, K.M.; Zimov, S.A.; Chapin III, F.S.; Grosse, G.;
Edwards, M.E.; Smith, L.C.
Understanding the impacts of thermokarst lakes on at-
mospheric methane, carbon cycling, and climate change
(solicited)

11:15–11:30; EGU2008-A-01526; BG2.8-1WE2O-004
Shakhova, N; Semiletov, I; Salyuk, A; Kosmac, D
Anomalies of methane in the atmosphere over the East
Siberian shelf: Is there any sign of methane leakage from
shallow shelf hydrates? (solicited)

11:30–11:45; EGU2008-A-06961; BG2.8-1WE2O-005
van der Molen, M.K.; van Huissteden, J.; Parmentier, F.; de
Jeu, R.; Holmes, T.; Dolman, A.J.
Greenhouse gas fluxes at a continental tundra site in NE
Siberia and radiative forcing of advancing of the growing
season

11:45–12:00; EGU2008-A-09233; BG2.8-1WE2O-006
Sachs, T.; Giebels, M.; Boike, J.; Kutzbach, L.
Environmental controls on plot-scale CH₄ emission from
polygonal tundra in the Lena River Delta, Siberia

12:00 LUNCH BREAK

Chairperson: OLTICHEV, A.

13:30–13:45; EGU2008-A-07835; BG2.8-1WE3O-001
Shvidenko, A.; McCallum, I.; Nilsson, S.; Schmullius, C.;
The Siberia-II Team
Regional terrestrial vegetation full greenhouse account for
Northern Eurasia: a system approach

13:45–14:00; EGU2008-A-00541; BG2.8-1WE3O-002
Peregona, A.; Maksyutov, S.; Naumov, A.; Glagolev, M.
Land-cover classification for inventory of the methane fluxes
in west Siberian wetlands

14:00–14:15; EGU2008-A-04484; BG2.8-1WE3O-003
Marchenko, S.; Romanovsky, V.
Effect of Organic Matter and Soil Water Content on Per-
mafrost Dynamics in the Northern Hemisphere: Modeling
Approach

14:15–14:30; EGU2008-A-04050; BG2.8-1WE3O-004
Shuman, J; Shugart, H; Krankina, O
Assessing Regional Differences in Carbon Storage across Russia Using the Individual Based Gap Model FAREAST and Detailed Forest Inventory Data

14:30–14:45; EGU2008-A-05382; BG2.8-1WE3O-005
Hughes, M
A modeling approach to the interpretation of tree rings from Northern Eurasia. (solicited)

14:45–15:00; EGU2008-A-03751; BG2.8-1WE3O-006
Velichko, A; Borisova, O; Zelikson, E; Morozova, T
Equilibrium and non-equilibrium scenarios using paleodata as a tool to assess the future environmental changes on the east-european territory (solicited)

15:00 COFFEE BREAK

Chairperson: HIBBARD, K.

15:30–15:45; EGU2008-A-05697; BG2.8-1WE4O-001
Walker, D.A. ; Greening of the Arctic Team
Application of space-based technologies and models to address land-cover/land-use change problems on the Yamal Peninsula, Russia

15:45–16:00; EGU2008-A-01198; BG2.8-1WE4O-002
Gordov, E.; Kabanov, M.; Lykosov, V.; Vaganov, E.
First results of SIRS NEESPI megaproject on land – atmosphere processes in Siberia

16:00–16:15; EGU2008-A-06742; BG2.8-1WE4O-003
Shmakin, A.B.; Turkov, D.V.; Mikhailov, A.Yu.
Modeling annual cycle of heat/water exchange in the system soil – vegetation – atmosphere with advanced parameterization of snow cover

16:15–16:30; EGU2008-A-04438; BG2.8-1WE4O-004
Nicolsky, D.J.; Alexeev, V.A.; Romanovsky, V.E.; Lawrence, D.M.
Improved modeling of permafrost dynamics in Alaska with CLM3

16:30–16:45; EGU2008-A-02074; BG2.8-1WE4O-005
Rinke, A.; Kuhry, P.; Dethloff, K.
Soil organic layer: Importance Implications for Arctic climate

16:45–17:00; EGU2008-A-10372; BG2.8-1WE4O-006
Hibbard, K.; Kattsov, V.; Wood, E.; Lettenmaier, D.; Lawrence, D.; Kabat, P.; Groisman, P.
Northern Eurasia: evaluating processes and feedbacks in the context of climate change

17:00 END OF SESSION

BG2.8 Land-atmosphere interactions in Northern Eurasia (co-sponsored by iLEAPS and NEESPI; co-listed in CR) – Posters

Convener: Groisman, P.
Co-Convener(s): Kabat, P., Hibbard, K., van Huissteden, K.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 17:30–19:00
Poster Area BG
Chairperson: GROISMAN, P.

BG0001; EGU2008-A-12096; BG2.8-1WE5P-0001
Sokolov, A.
Impact of decreases in the Arctic sea ice on climate in high latitudinal land areas of the Northern Hemisphere (solicited)

BG0002; EGU2008-A-01230; BG2.8-1WE5P-0002
Balzter, H; CLASSIC/GEOLAND TEAM
Changes of the Arctic Oscillation, Vegetation Phenology and Forest Fires in Siberia

BG0003; EGU2008-A-11778; BG2.8-1WE5P-0003
Loboda, T.; Csiszar, I.
Long-term forecasting of fire danger in the Russian Far East using climate change scenarios

BG0004; EGU2008-A-11150; BG2.8-1WE5P-0004
Westberg, D.; Soja, A.; Stackhouse Jr., P.
Wildfire, ecosystem and climate in siberia: developing weather and climate data sets for use in fire weather and bioclimatic models

BG0005; EGU2008-A-05305; BG2.8-1WE5P-0005
Soja, A.; Tchebakova, N.; Westberg, D.; Parfenova, E.; Kanzai, V.; Sukhinin, A.; Shishikin, A.; Ivanova, G.; Stackhouse, P.
Climate-induced change in Siberia: A focused view of Tuva and Sakha.

BG0006; EGU2008-A-05969; BG2.8-1WE5P-0006
Tchebakova, N.M.; Parfenova, E.I.; Soja, A.J.
Potential climate-induced vegetation change in Siberia during the 21st century

BG0007; EGU2008-A-11915; BG2.8-1WE5P-0007
Sukhinin, A.I.; Soja, A.J.; McRae, D.J.
Space monitoring and analysis of catastrophic fires in Central Siberia (solicited)

BG0008; EGU2008-A-00525; BG2.8-1WE5P-0008
Kurbatova, J.; Varlagin, A.; Tatarinov, F.; Vygodskaya, N.
Carbon dioxide fluxes in southern European taiga (solicited)

BG0009; EGU2008-A-05284; BG2.8-1WE5P-0009
Olchev, A.; Radler, K.; Panferov, O.; Sogachev, A.; Gravenhorst, G.
Effects of a small clear-cut on microclimatic conditions of a spruce forest ecosystem: results of experimental and modeling studies

BG0010; EGU2008-A-01636; BG2.8-1WE5P-0010
Molchanov, A.; Tatarinov, F.; Kurbatova, J.; **Olchev, A.**
Heterotrophic and autotrophic respirations of soils in forest ecosystems of the European part of Russia

BG0011; EGU2008-A-08399; BG2.8-1WE5P-0011
Tatarinov, F.; Bochkarev, Y.; Kurbatova, J.
Radial tree growth in spruce forest stands of the Russian South-European taiga

BG0012; EGU2008-A-09293; BG2.8-1WE5P-0012
Panferov, O.; Sogachev, A.; Radler, K.; Olchev, A.; Gravenhorst, G.
Effects of Gap Size on Wind Damage Factors and on radiative Regime in a boreal Forest Ecosystem.

BG0013; EGU2008-A-12034; BG2.8-1WE5P-0013
Pridacha, V.; Sazonova, T.
Morphophysiological response of coniferous plants to industrial pollution in northwest Russia

BG0014; EGU2008-A-11496; BG2.8-1WE5P-0014
Kozlova, E.; Manning, A.; Kisilyakhov, Y.; Seifert, T.; Heimann, M.
Biogeochemical trace gas and O₂ concentrations in central Siberia from a 300-m tall tower: Seasonal, synoptic and diurnal scale variability

BG0015; EGU2008-A-06649; BG2.8-1WE5P-0015
Shvidenko, A.; Shchepashchenko, D.; McCallum, I.; Nilsson, S.; Maksyutov, S.; Peregona, A.
Assessment of productivity of terrestrial vegetation in Western Siberia: an attempt at system aggregation of remote sensing and ground data

- BG0016;** EGU2008-A-09464; BG2.8-1WE5P-0016
Gusti, M.; Jonas, M.; et, al.
 How well do we know Russia's carbon budget for 1988-1992? Critical look from uncertainty study of IASA's Full Carbon Account
- BG0017;** EGU2008-A-01289; BG2.8-1WE5P-0017
Lin, J.; Yu'e, L.; Qingzhu, G.; Yuntong, L.; Yunfan, W.; Xiaobo, Q.; Feng, S.
 Estimate of Carbon Sequestration under Cropland Management in China (cancelled)
- BG0018;** EGU2008-A-09127; BG2.8-1WE5P-0018
Kiepe, I.; Johansson, T.; Friborg, T.; Soegaard, H.
 Carbon dioxide exchange of arctic tundra in the northern part of European Russia
- BG0019;** EGU2008-A-12154; BG2.8-1WE5P-0019
Yu, Q.; Epstein, H.
 Evaluating Arctic tundra system resilience to grazing disturbances: A modeling approach
- BG0020;** EGU2008-A-04406; BG2.8-1WE5P-0020
Epstein, H.; Walker, D.; Kuss, P.; Kaarlejavi, E.; Matyshak, G.
 Tundra vegetation properties along a latitudinal gradient of the Yamal Region of Russia
- BG0021;** EGU2008-A-00669; BG2.8-1WE5P-0021
Langer, M.; **Boike, J.**
 Surface characteristics of polygonal tundra and their influence on energy balance at Samoylov Island, Lena River Delta, Siberia
- BG0022;** EGU2008-A-00473; BG2.8-1WE5P-0022
Schaepman-Strub, G.; Claverie, M.; Schaepman, M.
 Trends in land surface albedo of Siberian tundra as inferred from MODIS satellite albedo products
- BG0023;** EGU2008-A-07162; BG2.8-1WE5P-0023
Bartsch, A.; Boike, J.
 Validation of diurnal thaw and refreeze patterns of the snow surface from satellite and field data from the Lena Delta
- BG0024;** EGU2008-A-10980; BG2.8-1WE5P-0024
Zona, D.; **Oechel, W.**
 Continuous measurements of methane fluxes by eddy covariance in the Arctic: Results of a large-scale manipulation of water status at Barrow, Alaska.
- BG0025;** EGU2008-A-10974; BG2.8-1WE5P-0025
Bolton, W.R.; Boike, J.
 Simulation of mass and energy fluxes at a polygonal tundra site, Lena River Delta, Siberia
- BG0026;** EGU2008-A-06992; BG2.8-1WE5P-0026
Wania, R.; Ross, I.; Prentice, I. C.
 Can a new methane model help to fill the gaps in methane emissions data from permafrost areas?
- BG0027;** EGU2008-A-06504; BG2.8-1WE5P-0027
Parmentier, F.J.W.; van Huissteden, J.; Petrescu, A.M.R.; Maximov, T.C.; Dolman, A.J.
 Effects of hydrological versus temperature changes on methane emissions from arctic tundra lowlands in north-eastern Siberia
- BG0028;** EGU2008-A-02581; BG2.8-1WE5P-0028
Berrittella, C.; Van Huissteden, K.
 Modelling CH₄ emissions from northern wetlands: importance of vegetation in past and present climates.
- BG0029;** EGU2008-A-06977; BG2.8-1WE5P-0029
Baklanov, A.A.; Gordov, E.P.; Heimann, M.; Kabanov, M.V.; Lykosov, V.N.; Onuchin, A.A.; Penenko, V.V.; Pushistov, P.Yu.; Shvidenko, A.Z.; Zakarin, E.A.
 Man-induced Environmental Risks: Monitoring, Management and Remediation of Man-made Changes in Siberia
- BG0030;** EGU2008-A-06793; BG2.8-1WE5P-0030
Eliseev, A.V.; Arzhanov, M.M.; Demchenko, P.F.; Mokhov, I.I.
 Changes in state of permafrost and seasonal frosted during the 21st century as simulated by the IAP RAS climate model under the anthropogenic SRES scenarios
- BG0031;** EGU2008-A-03126; BG2.8-1WE5P-0031
Kuchment, L.S.; Romanov, P.; Gelfan, A.N.; Demidov, V.N.; Tarpley, D.
 Coupling Satellite and Ground-Based Snow Data With Physically Based Model of Runoff Generation for Long-Range Forecasting Snowmelt Floods
- BG0032;** EGU2008-A-03125; BG2.8-1WE5P-0032
Kharuk, VI.; Ranson, KJ
 Response to climate change within northern Asian tree line
- BG0033;** EGU2008-A-01234; BG2.8-1WE5P-0033
Ohta, T.; Dolman, H.; Maximov, T. C.; Nakai, T.; van der Molen, M. K.; Kononov, A. V.; Maximov, A.; Hiyama, T.; Moors, E. J.; Yabuki, H.
 Interannual variation of water balance and importance of soil moisture content for evapotranspiration in an eastern Siberian larch forest over a 7-year period (1998??E006)
- BG0034;** EGU2008-A-02345; BG2.8-1WE5P-0034
Suzuki, R.; Kobayashi, H.; Delbart, N.; Hiyama, T.; Asanuma, J.
 Importance of forest floor information for vegetation remote sensing over boreal forest
- BG0035;** EGU2008-A-00868; BG2.8-1WE5P-0035
Speranskaya, N.A.; Tsytsenko, K.V.
 Dynamics of surface water balance over the East-European Plain during the second part of the 20th century
- BG0036;** EGU2008-A-00582; BG2.8-1WE5P-0036
Kravchenko, O.; Kussul, N.
 Simulation cascade of NWP and land surface model for drought monitoring
- BG0037;** EGU2008-A-02477; BG2.8-1WE5P-0037
Galos, B.; Matyas, Cs.
 Effect of increasing drought frequency on vegetation cover at the forest/steppe limit
- BG0038;** EGU2008-A-11706; BG2.8-1WE5P-0038
Flachner, Zs.; Flachner
 Evaluation of a harmonized land and water management concept in the Bodrogek region
- BG0039;** EGU2008-A-01616; BG2.8-1WE5P-0039
Bányai, T.; Bányai, Á.
 Economical optimisation of land use aspects of recycling networks
- BG0040;** EGU2008-A-00464; BG2.8-1WE5P-0040
Agaltseva, N
 Prospective change of the Central Asian rivers runoff with glaciers feeding under different climate scenarios
-
- BG2.15 Synergistic use of Earth Observation products and Terrestrial Biosphere models**
- Convener: Schmullius, C.
 Co-Convener(s): Reichstein, M., Verstraeten, W., Veroustraete, F., Fernandes, R., Baret, F.
 Lecture Room 21
 Chairperson: N.N.
- 8:30–8:45;** EGU2008-A-04065; BG2.15-1WE10-001
Verstraeten, W.W.; Coppin, P.
 Integration of in situ and hyperspectral remote sensing data for steering plant production systems

8:45–9:00; EGU2008-A-09903; BG2.15-1WE1O-002
Fontana, F.; Ahrends, H. E.; Stöckli, R.; Wunderle, S.; Eugster, W.
A linkage of satellite data and digital camera images in phenological monitoring – a case study

9:00–9:15; EGU2008-A-09413; BG2.15-1WE1O-003
Fernandes, R.; Canisius, F.; Rochdi, N.; Khurshid, S.
Integrating a priori in-situ information within satellite based LAI products.

9:15–9:30; EGU2008-A-09638; BG2.15-1WE1O-004
Jung, M.; Reichstein, M.; Gobron, N.; Verstraete, M.; Papale, D.; Bondeau, A.; Robustelli, M.; Pinty, B.
European and global assessment of gross primary production using the SeaWiFS FAPAR product from the EU-Joint Research Centre and FLUXNET data

9:30–9:45; EGU2008-A-09612; BG2.15-1WE1O-005
Bacour, C.; Peylin, P.; Baret, F.; Weiss, M.; Demarty, J.; Rayner, P.; Chevallier, F.; Prunet, P.
Complementarity between satellite derived vegetation characteristics and flux tower measurements to optimize ecosystem model parameters

9:45–10:00; EGU2008-A-10933; BG2.15-1WE1O-006
Carvalho, N.; Reichstein, M.; Seixas, J.
Uncertainty analysis of net ecosystem fluxes over the Iberian Peninsula

10:00 END OF SESSION

BG2.15 Synergistic use of Earth Observation products and Terrestrial Biosphere models – Posters

Convener: Schullius, C.
Co-Convener(s): Reichstein, M., Verstraeten, W., Veroustraete, F., Fernandes, R., Baret, F.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 10:30–12:00
Poster Area BG
Chairperson: N.N.

BG0041; EGU2008-A-00099; BG2.15-1WE2P-0041
Somers, B.; Delalieux, S.; Gysels, V.; Verstraeten, W.W.; Coppin, P.
Soil reflectance modeling and spectral mixture analysis: a solution for the mixed pixel problem in orchards?

BG0042; EGU2008-A-00148; BG2.15-1WE2P-0042
Hufkens, K.; Bogaert, J.; Dong, Q.H.; Lu, L.; Huang, C.L.; Ma, M.G.; Che, T.; Li, X.; Veroustraete, F.; Ceulemans, R.
Impacts and uncertainties of upscaling of remote sensing data validation for a semi-arid woodland

BG0043; EGU2008-A-00979; BG2.15-1WE2P-0043
Stuckens, J.; Somers, B.; **Verstraeten, W.W.;** Coppin, P.
Simulation of physiology induced hyperspectral changes in a virtual citrus orchard as detected by medium and high resolution remote sensing platforms

BG0044; EGU2008-A-02669; BG2.15-1WE2P-0044
Urban, M.; Herold, M.H.
Synergistic analysis of global land cover data sets indicating areas of loss in Russian agriculture between 1992 - 2001

BG0045; EGU2008-A-02089; BG2.15-1WE2P-0045
Hüttich, C.; Gessner, U.; Schmidt, M.; Keil, M.; Dech, S.
Vegetation structure and land dynamics in Southern Africa's Savannas: Multi-scale earth observation data for ecosystem and biodiversity monitoring

BG0046; EGU2008-A-04018; BG2.15-1WE2P-0046
Pitacco, A.; Meggio, F.; Fila, G.
Testing MODIS products against eddy fluxes and biometric features in a vineyard in North-Eastern Italy

BG0047; EGU2008-A-04541; BG2.15-1WE2P-0047
Park, H.; Yamazaki, T.; Yamamoto, K.; Ohta, T.; Ohata, T.
Modeling tempo-spatial characteristics of energy and energy budgets in the Eastern Siberia

BG0048; EGU2008-A-04787; BG2.15-1WE2P-0048
Delalieux, S.; Somers, B.; Verstraeten, W.W.; Keulemans, W.; Coppin, P.
Implementing a novel hyperspectral based LAI predicting index for fruit orchards

BG0049; EGU2008-A-05002; BG2.15-1WE2P-0049
Ogureeva, G.;
Biological diversity of forestry biomes of Russia

BG0050; EGU2008-A-06879; BG2.15-1WE2P-0050
Van der Zande, D.; Mereu, S.; Nadezda, N.; Cermak, J.; Muys, B.; Manes, F.; Coppin, P.
Using the detailed 3D structure of a forest stand for upscaling purposes of transpiration from leaf to tree.

BG0051; EGU2008-A-06950; BG2.15-1WE2P-0051
Ibrom, A.; Otchev, A.; Panferov, O.; Kreilein, H.; June, T.; Rakkibu, G.; Gravenhorst, G.
A simple alternative to the light-use efficiency approach that considers canopy photosynthesis saturation with light

BG0052; EGU2008-A-07223; BG2.15-1WE2P-0052
Tsiros, E.; Kanellou, E.; Domenikiotis, C.; Dalezios, N.R.
The role of satellite derived Vegetation Health Index and Aridity Index in agroclimatic zoning

BG0053; EGU2008-A-07366; BG2.15-1WE2P-0053
Kuttappan Pillai, D.; Gerbig, C.; Ravan, A.; Thompson, R.; Kretschmer, R.; Körner, S.; Rödenbeck, C.
Scaling C fluxes from point to region using observational constraints from flux and mixing ratio measurements

BG0054; EGU2008-A-07911; BG2.15-1WE2P-0054
Moreno, J.; Moya, I.; Miglietta, F.; Rascher, U.; Berger, M.; Verhoef, W.; Agati, G.; Olioso, A.; Zarco-Tejada, P.; **Magnani, F.;**
Assessing gross primary production from solar-induced chlorophyll fluorescence: field results and integration into biogeophysical models

BG0055; EGU2008-A-08049; BG2.15-1WE2P-0055
Bijker, W.;
Daily NDVI patterns: implications and opportunities for monitoring

BG0056; EGU2008-A-09997; BG2.15-1WE2P-0056
Wolf, A.; Berry, J.; Asner, G.; Myneni, R.
Sequential data assimilation of canopy attributes from multispectral bidirectional reflectance

BG0057; EGU2008-A-11290; BG2.15-1WE2P-0057
Herold, M.; Sambale, J.; Jung, M.; Schultz, M.; Schmulius, C.
A comparative assessment on agreement and accuracy of existing 1 km land cover datasets

BG0058; EGU2008-A-08304; BG2.15-1WE2P-0058
Demarty, J.; Weiss, M.; Baret, F.; Peylin, P.; Rayner, P.; Bacour, C.; Prunet, P.; Gascon, F.
High spatial resolution fAPAR time course estimated from the combination of few SPOT images and frequent MERIS observations

BG0059; EGU2008-A-12264; BG2.15-1WE2P-0059
Veroustraete, F.; Verstraeten, W. W.
The impact of Soil Moisture Content on Net Carbon Sequestration

BG3.1 Reducing uncertainties in the quantification of the oceanic sink for anthropogenic carbon (CARBOOCEAN) (co-listed in CL & OS)

Convener: Heinze, C.
Co-Convener(s): Bakker, D., Wallace, D.
Lecture Room 21
Chairperson: N.N.

15:30–15:45; EGU2008-A-09204; BG3.1-1WE4O-001
Schuster, U.; CARBOOCEAN TEAM
North Atlantic sea surface pCO₂ and air-sea flux trends and uncertainties (solicited)

15:45–16:00; EGU2008-A-01958; BG3.1-1WE4O-002
Smith, M.; Law, C.; Ho, D.; Stevens, C.; Popinet, S.
Open ocean gas exchange parameterization uncertainties

16:00–16:15; EGU2008-A-12256; BG3.1-1WE4O-003
Levine, N.; **Wanninkhof, R.;** Doney, S.
Uncertainties in the Anthropogenic Carbon Inventory in the Atlantic Ocean along Section A16 over the Last Decade

16:15–16:30; EGU2008-A-07000; BG3.1-1WE4O-004
Henry-Edwards, A. G.; Karstensen, J.; Khaliwala, S.
A water mass analysis based method to determine anthropogenic carbon uptakes and transit times

16:30–16:45; EGU2008-A-11695; BG3.1-1WE4O-005
Gehlen, M.; Bopp, L.
Predicted changes in intermediate and deep water carbonate chemistry in response to the invasion of anthropogenic CO₂.

16:45–17:00; EGU2008-A-12129; BG3.1-1WE4O-006
Haugan, P.M.; Alendal, G.; Enstad, L.I.; Rygg, K.
Carbon sequestration: Significant for 21st century ocean carbon storage?

17:00 END OF SESSION

BG3.1 Reducing uncertainties in the quantification of the oceanic sink for anthropogenic carbon (CARBOOCEAN) (co-listed in CL & OS) – Posters

Convener: Heinze, C.
Co-Convener(s): Bakker, D., Wallace, D.
Display Time: Wednesday, 08:00–19:30
Authors in Attendance: Wednesday, 13:30–15:00
Poster Area BG
Chairperson: N.N.

BG0060; EGU2008-A-12068; BG3.1-1WE3P-0060
Volbers, A.; Heinze, C.; Pfeil, B.; Høiland, H.; De Baar, H.; CARBOOCEAN Consortium
The CARBOOCEAN Integrated Project: Europe's motor for a marine carbon sources and sinks assessment

BG0061; EGU2008-A-02416; BG3.1-1WE3P-0061
Ucha, I.R.; González-Dávila, M.; Santana-Casiano, J.M.
Quantification of CO₂ Fluxes for different domains of the Eastern Atlantic Ocean

BG0062; EGU2008-A-12130; BG3.1-1WE3P-0062
Lauvset, S.K.; Olsen, A.; Johannessen, T.; Neill, C.; CARBOOCEAN team
Assessment of the temporal and spatial changes of surface ocean fCO₂ in the Nordic Seas, Barents Sea and northern North Atlantic (solicited)

BG0063; EGU2008-A-09688; BG3.1-1WE3P-0063
Olafsson, J.; Arnarson, T.S.; Olafsdottir, S.R.
Air-sea fluxes of CO₂ and hydrographic variability in the North Atlantic near Iceland (solicited)

BG0064; EGU2008-A-08335; BG3.1-1WE3P-0064
Friedrich, T.; Oschlies, A.
North Atlantic surface pCO₂ estimated from ARGO float data

BG0065; EGU2008-A-09013; BG3.1-1WE3P-0065
Corbière, A.; Metzl, N.; Reverdin, G.; Brunet, C.; Thuillier, D.; Ramonet, M.
The very rapid decrease of the north Atlantic subpolar gyre carbon sink during recent years (2001-2007)

BG0066; EGU2008-A-07365; BG3.1-1WE3P-0066
Barbero-Munoz, L.; Boutin, J.; Merlivat, L.; Sallée, J.B.; Takahashi, T.; Sutherland, S.C.
Time series study of the air-sea CO₂ flux in frontal regions of the Southern Ocean from in situ data

BG0067; EGU2008-A-10836; BG3.1-1WE3P-0067
Geilfus, NX.; Tison, J.L.; Carnat, G.; Borges, A.V.; Ackley, S.F.; Delille, B.
Sea ice pCO₂ dynamics and related air-ice CO₂ fluxes during a flood-freeze cycle (Bellingshausen Sea, Antarctica).

BG0068; EGU2008-A-08239; BG3.1-1WE3P-0068
Geilfus, NXG.; Delille, B.D.; Verbeke, V.V.; Tison, J.L.T.
Measuring CO₂ in sea ice: caveats and improvements

BG0069; EGU2008-A-03393; BG3.1-1WE3P-0069
Griessbaum, F.; Moat, B. I.; Narita, Y.; Yelland, M. J.; Klemm, O.; Uematsu, M.
Uncertainties in CO₂ transfer velocities due to bias in shipboard wind measurements caused by airflow distortion (solicited)

BG0070; EGU2008-A-08048; BG3.1-1WE3P-0070
Segschneider, J.; Bopp, L.; Heinze, C.; Joos, F.; Froehlicher, T.
Reducing uncertainties of oceanic CO₂ uptake estimates: A multi model approach (solicited)

BG0071; EGU2008-A-11156; BG3.1-1WE3P-0071
Winguth, A.; Cope, J.; Shields, C.; Winguth, C.
Modelling of Changes in Marine Carbon Uptake During Warm Climates (solicited)

BG0072; EGU2008-A-09938; BG3.1-1WE3P-0072
Pfeil, B.; Olsen, A.; Bakker, D.; Dittert, N.
Surface Ocean CO₂ global dataset

BG0073; EGU2008-A-05400; BG3.1-1WE3P-0073
Heinze, C.;
Is the present ocean carbon data base sufficient for calibrating prognostic models?

BG3.7 Methane fluxes in the sea: Approaches to observing, mapping and quantifying gas fluxes and associated processes

Convener: Boetius, A.
Co-Convener(s): Charlou, J.
Lecture Room 21
Chairperson: BOETIUS, A, CHARLOU, J.L

10:30–10:45; EGU2008-A-03883; BG3.7-1WE2O-001
Charlou, J. L.; Donval, J. P.; Konn, C.; Birot, D.; Sudarikov, S.; Jean-Baptiste, P.; Fouquet, Y.; Ondreas, H.
High flux of hydrogen, abiogenic methane and heavier hydrocarbons from ultramafics along the slow-spreading Mid-Atlantic Ridge.

10:45–11:00; EGU2008-A-06664; BG3.7-1WE2O-002
Dando, P.R.; Mitchelson-Jacob, E.G.; Linke, P.; Aliani, S.
Mapping hydrothermal sites and methane plume off Milos, Aegean Sea: a comparison of ship and aerial surveys

11:00–11:15; EGU2008-A-04664; BG3.7-1WE2O-003
Nikolovska, A.; Sahling, H.; Quast, C.; Spiess, V.; Bohrmann, G.

Use of the sonar systems for analyzing the spatial and temporal variations of gas seepage in deep water

11:15–11:30; EGU2008-A-10234; BG3.7-1WE2O-004
Marquardt, M.; Henke, T.; Gehrman, R.; Hensen, C.; Wallmann, K.

Gas hydrate quantification: A general function allowing for regional conditions to estimate 2D-gas hydrate inventories by means of combined geochemical and geophysical modelling.

11:30–11:45; EGU2008-A-11335; BG3.7-1WE2O-005
Feseker, T.; Lichtschlag, A.; Felden, J.; Wenzhöfer, F.; de Beer, D.; Ertefai, T.; Schmidt-Schierhorn, F.; Boetius, A.
In-situ measurements of temperature, geochemical porewater composition, and microbial activity suggest that methane emission and turnover at Dvurechenskii mud volcano is controlled by upward fluid flow

11:45–12:00; EGU2008-A-09974; BG3.7-1WE2O-006
Wenzhoefer, F.; Felden, J.; Lichtschlag, A.; deBeer, D.; Feseker, T.; Foucher, J.P.; Bohrmann, G.; Inagaki, F.; Boetius, A.
Quantification of methane-driven biogeochemical processes at cold seeps: Implications for local and global scales

12:00 LUNCH BREAK

Chairperson: BOETIUS, A, CHARLOU, JL

13:30–13:45; EGU2008-A-08787; BG3.7-1WE3O-001
Pierre, C.; Dupré, S.; Mascle, J.; Bayon, G.; Bouloubassi, I.; Brosolo, L.; Camera, L.; Harmegnies, F.; Loncke, L.; Mostafa, A.; Praeg, D.
New geological insights on fluid related systems on the Nile Deep Sea Fan and Calabrian Arc accretionary prism from the HERMES-Medeco2 expedition

13:45–14:00; EGU2008-A-07308; BG3.7-1WE3O-002
Felden, J.; Lichtschlag, A.; Grünke, S.; Wenzhöfer, F.; deBeer, D.; Boetius, A.
Methane, sulfide and oxygen fluxes at methane and brine seeps of the Nile Deep Sea Fan (Eastern Mediterranean)

14:00–14:15; EGU2008-A-03543; BG3.7-1WE3O-003
Stadnitskaia, A.; Nadezhkin, D.; Abbas, B.; Blinova, V.; Ivanov, M.K.; Sinninghe Damsté, J.S.
Palaeo-methanotrophy and carbonate formation: insight from integrated molecular organic, inorganic and fossil 16S rDNA studies

14:15–14:30; EGU2008-A-06432; BG3.7-1WE3O-004
Ramette, A.; Wallmann, K.; Boetius, A.
Effects of methane fluxes on the structure of bacterial communities in cold seep sediments

14:30–14:45; EGU2008-A-10500; BG3.7-1WE3O-005
Deusner, C.; Ferdelman, T.G.; Widdel, F.
High-pressure continuous-incubation studies of sediments containing highly active communities of anaerobic methanotrophs

14:45–15:00; EGU2008-A-07338; BG3.7-1WE3O-006
Niemann, H.; Fischer, D.; Graffe, D.; Knittel, K.; Montiel, A.; Heilmeyer, O.; Pfeiffer, K.; Pape, T.; Kasten, S.; Bohrmann, G.
A low-activity cold seep in the Larsen B area, western Weddell Sea, Antarctica

15:00 END OF SESSION

BG3.7 Methane fluxes in the sea: Approaches to observing, mapping and quantifying gas fluxes and associated processes – Posters

Convener: Boetius, A.

Co-Convener(s): Charlou, J.

Display Time: Wednesday, 08:00–19:30

Authors in Attendance: Wednesday, 15:30–17:00

Poster Area BG

Chairperson: N.N.

BG0074; EGU2008-A-01497; BG3.7-1WE4P-0074

Konn, C.; Charlou, J.L.; Donval, J.P.; Holm, N.G.; Bouillon, S.; Dehairs, F.; scientific party of the Serpentine cruise, The
Organics in hydrothermal fluids from 4 ultramafic-hosted vents of the MAR. Results from the SERPENTINE cruise (2007). (solicited)

BG0075; EGU2008-A-04668; BG3.7-1WE4P-0075

Blinova, V.; Ivanov, M

Unsaturated and cyclic hydrocarbons in the mud volcanic gases of the Gulf of Cadiz (results of TTR-16)

BG0076; EGU2008-A-08834; BG3.7-1WE4P-0076

Kozlova, E.; Ivanov, M.; Blinova, V.

Organic matter from the rock clasts in the mud volcanoes of the Gulf of Cadiz

BG0077; EGU2008-A-10577; BG3.7-1WE4P-0077

Ivanov, M.; Akhmanov, G.; Blinova, V

Is salt tectonics influenced mud volcanism in the Gulf of Cadiz? (solicited)

BG0078; EGU2008-A-07615; BG3.7-1WE4P-0078

Matveeva, T.; Kulikova, M.; Poort, J.; Mazurenko, L.; van Weering, T.C.E.; Ivanov, M.; Stadnitskaia, A.

Gas hydrate accumulation associated to the Bonjardim mud volcano (Gulf of Cadiz): mechanisms of formation, thermal models, quantitative gas budget estimations

BG0079; EGU2008-A-11371; BG3.7-1WE4P-0079

Feseker, T.; Pape, T.; Schmidt-Schierhorn, F.; Klauke, I.; Wallmann, K.; Bohrmann, G

Sediment temperature distribution, sea floor morphology, and gas hydrate stability at Dvurechenskii mud volcano

BG0080; EGU2008-A-08106; BG3.7-1WE4P-0080

Pape, T.; Bahr, A.; Abegg, F.; Hohnberg, H.-J.; Wallmann, K.; Klapp, S.A.; Bruening, M.; v. Halem, G.; Bohrmann, G.

Vertical distributions and chemical properties of shallow-buried gas hydrates at the Batumi seep area, Eastern Black Sea

BG0081; EGU2008-A-08230; BG3.7-1WE4P-0081

Abegg, F.; Hohnberg, H.-J.; **Pape, T.;** Bohrmann, G.

Autoclave tools for the recovery of pressurized samples from the deep sea

BG0082; EGU2008-A-09449; BG3.7-1WE4P-0082

Ertefai, T.; Prieto-Mollar, X.; Sylva, S.; Seewald, J.; Hinrichs, K.U.

A biogeochemical perspective on sorbed gaseous hydrocarbons and its vertical distribution in marine sediments (solicited)

BG0083; EGU2008-A-10543; BG3.7-1WE4P-0083

Holler, T.; Kuypers, M.M.M.; **Deusner, C.;** Boetius, A.; Widdel, F.

Stable Carbon and Hydrogen Isotope Fractionation Associated with the Anaerobic Oxidation of Methane in ANME-Enrichment Cultures

BG0084; EGU2008-A-08660; BG3.7-1WE4P-0084
Santillano, D; **Ramette, A;** Knittel, K; Boetius, A
How does the community structure of Sulfate Reducing Bacteria (SRB) shift along the gradient of methane fluxes at Hydrate-Ridge (Cascadia Margin, Oregon, USA)?

BG0085; EGU2008-A-07640; BG3.7-1WE4P-0085
Felden, J.; Lichtschlag, A.; Niemann, H.; deBeer, D.; Wenzhöfer, F.; Boetius, A.
Sulfate reduction and methane oxidation at different habitat scales: implications for oxygen and methane budgets of the Håkon Mosby Mud Volcano (HMMV) (solicited)

BG0086; EGU2008-A-06809; BG3.7-1WE4P-0086
Niemann, H.; Linke, P.; Knittel, K; Boetius, A; Brückmann, W; Schacht, U; Hilton, D; Rehder, G; Brown, K; AT11-28 and M66-2 shipboard scientific parties, and Methane fluxes into the benthic food web at cold seeps – a chase study from the Costa Rica subduction zone (Mound 12, 1020 m water depth) (solicited)

BG0087; EGU2008-A-06234; BG3.7-1WE4P-0087
Bahr, A.; Pape, T.; Bohrmann, G.; Abegg, F.; Mazzini, A.; Haeckel, M.; Reitz, A.; Ivanov, M.
Methane seep-related carbonates from the Dolgovskoy Mound and the Batumi Seep Area in the eastern Black Sea: two case studies (cancelled)

BG0088; EGU2008-A-03226; BG3.7-1WE4P-0088
Damm, E.; Kiene, R.; Schwarz, J.; Falck, E.; Dieckmann, G.
Methane cycling and its relationship with DMSP during a phytoplankton bloom

BG0089; EGU2008-A-10355; BG3.7-1WE4P-0089
Del Sontro, T.; McGinnis, D.; Sobek, S.; Wehrli, B.
Quantifying Methane Ebullition in Shallow Waters

BG0090; EGU2008-A-02078; BG3.7-1WE4P-0090
Greinert, J.; Naudts, L.; McGinnis, D.
Monitoring of temporally and spatially transient bubble release and the spatial extrapolation of methane fluxes: Use of hydroacoustic methods in the Black Sea (solicited)

BG0091; EGU2008-A-03088; BG3.7-1WE4P-0091
Huetten, E.; **Greinert, J.**
Software controlled guidance, recording and post-processing of seafloor observations by ROV and other towed devices: The software package OFOP

BG0092; EGU2008-A-11518; BG3.7-1WE4P-0092
MacDonald, I.; Garcia, O; Zimmerman, B; Speiss, V; Deng, F; Escobar, E; Naehr, T
Satellites, sonars, and seafloor cameras: a tripod approach for mapping marine hydrocarbon fluxes (solicited)

BG0093; EGU2008-A-02114; BG3.7-1WE4P-0093
Naudts, L.; Greinert, J.; Artemov, Y.; Beaubien, S.E.; Borowski, C.; De Batist, M.
Abnormally high acoustic sea-floor backscatter patterns in active methane venting areas, Dnepr paleo-delta, northwestern Black Sea

BG0094; EGU2008-A-06940; BG3.7-1WE4P-0094
Reitz, A.; Haeckel, M.; Klauke, I.
Methane flux budget of the Batumi Seep area offshore Georgia, Black Sea

BG0095; EGU2008-A-02317; BG3.7-1WE4P-0095
Fekete, N.; Spiess, V.; Keil, H.; Bohrmann, G.; Güney, H.
3D Marine Seismic Investigations of the Batumi Seep Site, Eastern Black Sea

BG0096; EGU2008-A-07935; BG3.7-1WE4P-0096
Dupré, S.; Brosolo, L.; Pierre, C.; Mascle, J.; Harmegnies, F.; Foucher, J.-P.
High resolution seafloor acoustic imagery of the Menes mud volcano caldera complex (Nile Margin)

BG0097; EGU2008-A-10819; BG3.7-1WE4P-0097
Iadanza, A.; Sampalmieri, G.; Cosentino, D.; Cipollari, P.; Lo Mastro, S.
Record of methane paleofluxes in the Mediterranean Sea: evidences from the Messinian deposits of the Maiella Mts (Central Apennines, Italy)

Thursday

BG2.5 Peatlands and the carbon cycle

Convener: Worrall, F.
Co-Convener(s): Glatzel, S.
Lecture Room 21
Chairperson: N.N.

8:30–9:00; EGU2008-A-08202; BG2.5-1TH1O-001
Turetsky, M.R.
Peatlands, wildfire, and climate change in Boreal North America (solicited)

9:00–9:15; EGU2008-A-11020; BG2.5-1TH1O-002
Graf, M.D.; Rochefort, L.
The restoration of cutaway peatlands in North America

9:15–9:30; EGU2008-A-11762; BG2.5-1TH1O-004
Dorrepaal, E.; Swart, E.; Van de Weg, M.J.; Van Logtestijn, R.S.P; Toet, S.; Aerts, R.
CO₂-emissions in warming, northern peatlands: where does the increase come from?

9:30–9:45; EGU2008-A-06554; BG2.5-1TH1O-005
Lloyd, A. R.; Heinemeyer, A.; Ineson, P.; Huntley, B.; Baxter, R.
Investigating carbon fluxes in a UK peatland

9:45 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-05694; BG2.5-1TH2O-001
Grover, S.; Baldock, J
Carbon cycling in peat soils in the Australian Alps

10:45–11:00; EGU2008-A-06643; BG2.5-1TH2O-002
Knorr, K.-H.; Glaser, B.; Blodau, C.
Effects of experimental drought and rewetting of a northern temperate fen soil as assessed by delta13C and thermodynamics

11:00–11:15; EGU2008-A-03296; BG2.5-1TH2O-003
Rowson, J.G.; Worrall, F.; Ostle, N.
A new mechanism for dissolved and gaseous carbon dioxide production in peat

11:15–11:30; EGU2008-A-09383; BG2.5-1TH2O-004
Blodau, C.; Beer, J.
Geochemical constraints on organic matter decomposition in deep peatlands

11:30–11:45; EGU2008-A-02531; BG2.5-1TH2O-005
Vonk, J.; Gustafsson, Ö.; van Dongen, B.
A strong molecular biomarker signal for Sphagnum suggests importance of peatlands as a carbon source to Russian and Scandinavian sub-Arctic coastal surface sediments

11:45–12:00; EGU2008-A-10308; BG2.5-1TH2O-006
Zavalishin, N.N.
Dynamics of the carbon cycle functioning in Russian peatlands under the climate change

12:00–12:15; EGU2008-A-10929; BG2.5-1TH2O-007
Drösler, M.; Freibauer, A.; peatland site managers team
Drivers and patterns of greenhouse gas fluxes in peatlands along European climate and land use gradients

12:15 END OF SESSION

BG2.5 Peatlands and the carbon cycle – Posters

Convener: Worrall, F.

Co-Convener(s): Glatzel, S.

Display Time: Thursday, 08:00–19:30

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

Poster Area BG

Chairperson: N.N.

BG0001; EGU2008-A-00837; BG2.5-1TH3P-0001

Quillet, A.; Garneau, M.; van Bellen, S.; Loisel, J.; Booth, R. K.; Peng, C.

Water table fluctuations and the carbon accumulation in two fens and two bogs of the James Bay lowlands in Québec, Canada

BG0002; EGU2008-A-00896; BG2.5-1TH3P-0002

Ivanova, E.

Estimation of carbon dioxide emission from the peat deposit surface in territory of forest drainage on Vasyugan Bog

BG0003; EGU2008-A-01647; BG2.5-1TH3P-0003

Page, S.; Banks, C.

Carbopeat: Carbon-climate-human interactions in tropical peatlands – vulnerabilities, risks and mitigation measures

BG0004; EGU2008-A-01822; BG2.5-1TH3P-0004

Worrall, F.; Rowson, JG

The potential for carbon storage in UK peatlands

BG0005; EGU2008-A-02039; BG2.5-1TH3P-0005

Pawson, R.; Evans, M; Allott, T

Evaluation of the in-channel interactions of organic carbon during transport: an in-stream source of DOC?

BG0006; EGU2008-A-02590; BG2.5-1TH3P-0006

Clay, G.; Worrall, F; Fraser, E

Effects on water quality and CO₂ fluxes following a managed burn of a UK blanket bog

BG0007; EGU2008-A-02631; BG2.5-1TH3P-0007

Aurela, M.; Laurila, T.; Lohila, A. ; Hatakka, J.; Tuovinen, J.-P.; Riutta, T.; Penttilä, T.; Viisanen, Y.

Carbon dioxide and methane exchange on a northern boreal peat mire

BG0008; EGU2008-A-02643; BG2.5-1TH3P-0008

Koehler, A.-K.; Murphy, K.; Kiely, G.

The intra-annual variation of DOC and POC and its importance for the annual carbon balance of a blanket peat catchment

BG0009; EGU2008-A-03084; BG2.5-1TH3P-0009

Scheithauer, J.; Grunewald, K.

Biogeochemistry of peat and environmental change in the "Erzgebirge" Mountains (Central Europe)

BG0010; EGU2008-A-05705; BG2.5-1TH3P-0010

Neta, T.; **Cheng, Q.;** Bello, R.; Hu, B.

Lichens and mosses moisture content assessment in the Hudson Bay Lowlands through hyperspectral remote sensing technology

BG0011; EGU2008-A-07217; BG2.5-1TH3P-0011

Jones, T.; **Evans, C.;** Freeman, C; Ostle, N; Burden, A; Cooper, M

The impact of changing acidity on carbon and nitrogen cycling in peatlands

BG0012; EGU2008-A-07425; BG2.5-1TH3P-0012

Minke, M.; Donner, N.; de Klerk, P.; Karpov, N.S.; Sofronov, R.R.; Joosten, H.

Spatial and temporal variation in carbon accumulation in a Northeast Siberian arctic polygon mire over the last millennium

BG0013; EGU2008-A-09005; BG2.5-1TH3P-0013

Austnes, K.; Evans, C.D.; Naden, P.; Old, G.

Effects of rain episodes on the quality and quantity of dissolved organic matter (DOM) in streamwater from a blanket peat in Wales

BG0014; EGU2008-A-09443; BG2.5-1TH3P-0014

Wu, J.; Sagerfors, J.; Nilsson, M.; Roulet, N.

Six year simulation of carbon fluxes for a minerotrophic mire in Northern Sweden using the McGill Wetland Model (MWM)

BG0015; EGU2008-A-09469; BG2.5-1TH3P-0015

Wendel, S.; Moore, T.; Bubier, J.; Blodau, C.

The effect of nitrogen addition on carbon cycling and water- and temperature budget in a northern peatland

BG0016; EGU2008-A-09579; BG2.5-1TH3P-0016

Deppe, M.; McKnight, D.M.; Knorr, K.H.; Blodau, C.

Effects of small-scale water table level fluctuations on carbon dynamics and redox processes in mesocosms of an alpine and a temperate wetland

BG0017; EGU2008-A-09921; BG2.5-1TH3P-0017

Xing, Y. P.; Blodau, C; Wendel, S.

Mobility and transformation of N under increasing N load in a northern peatland

BG0018; EGU2008-A-10050; BG2.5-1TH3P-0018

Xing, Y. P.; Blodau, C; Wendel, S

Mobility and transformation of N under increasing N load in a northern peatland

BG0019; EGU2008-A-10958; BG2.5-1TH3P-0019

Freibauer, A.; Drosler, M.; Augustin, J.; Bergmann, L.; Fiedler, S.; Hoell, B.; Jungkunst, H.

The methane fraction of the carbon balance in restored temperate peatlands

BG3.2 Biogeochemical Modeling of Land-Ocean Transition Systems (co-listed in OS)

Convener: Regnier, P.

Co-Convener(s): Arndt, S., Lancelot, C.

Lecture Room 21

Chairperson: REGNIER

15:30–15:45; EGU2008-A-09453; BG3.2-1TH4O-001

Ducharne, A.; Billen, G.; Garnier, J.; Ledoux, E.; Viennot, P.

Integrated modelling of river output change during the 21st century (solicited)

15:45–16:00; EGU2008-A-11748; BG3.2-1TH4O-002

Beusen, A.; Dürr, H.; Bouwman, A.; Dekkers, A.

Modelling the Global River Transport of Dissolved Silica

16:00–16:15; EGU2008-A-12397; BG3.2-1TH4O-003

Savenije, H.; Arndt, S.; Regnier, P.

Analytical solution of the equations describing tidal dynamics in alluvial estuaries: a basis for a biogeochemical classification of estuaries

16:15–16:30; EGU2008-A-01609; BG3.2-1TH4O-004
Raimonet, M.; Laruelle, G.; Regnier, P.; Ragueneau, O.; Kempa, M.; Moriceau, B.; Ni Longphuit, S.; Leynaert, A.; Thouzeau, G.; Chauvaud, L.
Benthic-pelagic coupling in the bay of Brest (France): New insights from a coupled physical-biological model

16:30–16:45; EGU2008-A-04013; BG3.2-1TH4O-005
Lovato, T.; Ciavatta, S.; Pastres, R.; Rubino, A.
Modeling the seasonal evolution and the spatial distribution of chlorophyll-a in the lagoon of Venice using a 2D biogeochemical model

16:45–17:00; EGU2008-A-12186; BG3.2-1TH4O-006
Green, R E.; Breed, G.A.; Dagg, M.J.; Lohrenz, S.E.
Modeling the response of primary production and sedimentation to variable nitrate loading in the Mississippi River plume

17:00 COFFEE BREAK

Chairperson: REGNIER

17:30–17:45; EGU2008-A-07604; BG3.2-1TH5O-001
Moll, A.; Pätsch, J.; Kühn, W.
Review of three-dimensional biogeochemical/ecological modelling of a coastal region (solicited)

17:45–18:00; EGU2008-A-06816; BG3.2-1TH5O-002
Su, J.; Tian, T.; Wirtz, K.
Validation of coastal ecosystem models with time series and remote sensing data in the German Bight

18:00–18:30; EGU2008-A-06270; BG3.2-1TH5O-003
Gruber, N.; Deutsch, C. A.; Lachkar, Z.; Loher, D.; Frenzel, H.; Jin, X.; McWilliams, J. C.; Plattner, G.-K.
Global modeling of the coastal carbon cycle – A roadmap (solicited)

18:30–18:45; EGU2008-A-09757; BG3.2-1TH5O-004
Laruelle, G. G.; Dürr, H. H.; Van Kempen, C.; Slomp, C. P.; Middelkoop, H.; Meybeck, M.
Modeling Nitrogen and Phosphorus Retention in the Coastal Ocean at the Global Scale

18:45–19:00; EGU2008-A-01115; BG3.2-1TH5O-005
Lerman, A.; Mackenzie, F. T.; Andersson, A. J.; Bouchez, J.
Long-term role of the coastal ocean in the carbon cycle, land-to-ocean transfer, and atmosphere-ocean CO₂ exchange

19:00 END OF SESSION

BG3.2 Biogeochemical Modeling of Land-Ocean Transition Systems (co-listed in OS) – Posters

Convener: Regnier, P.
Co-Convener(s): Arndt, S., Lancelot, C.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 13:30–15:00
Poster Area BG
Chairperson: N.N.

BG0020; EGU2008-A-10154; BG3.2-1TH3P-0020
Bustillo, V.; Moatar-Bertrand, F.; Ducharme, A.; Moulin, L.
Coupled modelling of the hydrological and biogeochemical functioning of the Loire River (France)

BG0021; EGU2008-A-00631; BG3.2-1TH3P-0021
Arndt, S.; Vanderborght, J-P; Lacroix, G.; Guypens, N; Lancelot, C; Regnier, P
Physical controls on biogeochemical dynamics along the land-ocean continuum: implications for coastal ocean modeling

BG0022; EGU2008-A-11042; BG3.2-1TH3P-0022
Vanderborght, J.-P.

Modeling the nitrogen retention in the river-estuary continuum of the Scheldt: Seasonal evolution and response to pollution abatement within the catchment

BG0023; EGU2008-A-02858; BG3.2-1TH3P-0023
Barry, K.; O’Kane, J.P.

Developing engineering solutions using hydroinformatic tools for the protection of shellfish and water-contact recreation waters from contamination by the Norovirus

BG0024; EGU2008-A-06677; BG3.2-1TH3P-0024

Gypens, N.; Arndt, S.; Borges, A.V.; Lancelot, C.; Regnier, P.
Estuarine controls on the coastal ocean sink of CO₂: a reactive-transport modelling study

BG0025; EGU2008-A-01050; BG3.2-1TH3P-0025

Brigolin, D.; Lovato, T.; Pastres, R.
Budgets of C, N and P for the Northern Adriatic mussel farms: a model study

BG0026; EGU2008-A-01470; BG3.2-1TH3P-0026

Hansen, FTH; Rosshaug, PSR
Agentbased modelling: a methodology for simulating individual behaviour and states

BG0027; EGU2008-A-01662; BG3.2-1TH3P-0027

Erichsen, aer; Sørensen, jts; Hansen, ish; Mohlenberg, flm
Operational biogeochemical modelling and data assimilation

BG0028; EGU2008-A-08102; BG3.2-1TH3P-0028

Desmit, X.; van Wesenbeeck, B; Blaas, M; Friocourt, Y; Los, FJ
From the Dutch coastal zone to the North Sea: a phytoplankton perspective

BG0029; EGU2008-A-10340; BG3.2-1TH3P-0029

Kuehn, W.; Paetsch, J.
Nitrogen cycling in the North Sea and exchange with the North Atlantic – a model study

BG0030; EGU2008-A-04090; BG3.2-1TH3P-0030

Ragueneau, O.; Laruelle, G.; Si-WEBS team, and; Si-WEBS
The Global Biogeochemical Cycle of Silicon: Role of the Land-Ocean Transition and Sensitivity to Anthropogenic Perturbation with a special focus on invasive species

BG0031; EGU2008-A-09374; BG3.2-1TH3P-0031

Bernard, C.; Heinze, C; Dürr, H
Contribution of riverine nutrients to the biogeochemistry of the global ocean.

BG3.5 Coupling biogeochemistry and ecology to fluid dynamics in aquatic ecosystems (co-listed in OS & NP)

Convener: Richards, K.
Co-Convener(s): Clercx, H., Seuront, L., Berdalet, E.
Lecture Room 21
Chairperson: RICHARDS, K. J.

13:30–13:45; EGU2008-A-01131; BG3.5-1TH3O-001

Pécseli, H. L.; Trulsen, J. K.
Planktonic contact and capture rates in turbulent environments (solicited)

13:45–14:00; EGU2008-A-04017; BG3.5-1TH3O-002

Desmet, N.; Van Belleghem, S.; Bouma, T.J.; Van Duren, L.A.; Seuntjens, P.; De Doncker, L.; Buis, K.; Verhoeven, R.; Meire, P.
Flow patterns, turbulence and hydraulic resistance in freshwater macrophyte stands

14:00–14:15; EGU2008-A-10185; BG3.5-1TH3O-003
Artigas, M.L.; Quesada, R.; **Berdalet, E.**; Piera, J.;
Fernández-Tejedor, M.; Diogène, J.; Estrada, M.
Exploring the link between small-scale hydrodynamic
properties and harmful phytoplankton blooms in the Ebro
Delta (NW Mediterranean)

14:15–14:30; EGU2008-A-10142; BG3.5-1TH3O-004
Roudesli, S.; Oliver, K.; Edwards, N.; Lenton, T.
Impact of surface mixed layer on ocean biological carbon
pump

14:30–14:45; EGU2008-A-03259; BG3.5-1TH3O-005
McKiver, W.; Neufeld, Z.
Statistical properties of plankton ecosystems in turbulent
flows

14:45–15:00; EGU2008-A-11387; BG3.5-1TH3O-006
Mahadevan, A.
Bio-physical coupling at meso- to submeso-scales in the
upper ocean (solicited)

15:00 END OF SESSION

BG3.5 Coupling biogeochemistry and ecology to fluid dynamics in aquatic ecosystems (co-listed in OS & NP) – Posters

Convener: Richards, K.
Co-Convener(s): Clercx, H., Seuront, L., Berdalet, E.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 15:30–17:00
Poster Area BG
Chairperson: BERDALET, E.

BG0032; EGU2008-A-00315; BG3.5-1TH4P-0032
Kulinski, K.; Dzierzbicka-G³owacka, L.; Pempkowiak, J.
Parameterization of a particulate pelagic detritus model

BG0033; EGU2008-A-00720; BG3.5-1TH4P-0033
de Brauwere, A.; Passerat, J.; Servais, P.; Deleersnijder, E.;
Gourgue, O.; de Brye, B.
Modelling fecal bacteria in the Scheldt river and estuary

BG0034; EGU2008-A-01250; BG3.5-1TH4P-0034
Gulin, M.
Changes with depth in the Black Sea benthic redox-
environment with regard to oxygen availability for deep-sea
fauna

BG0035; EGU2008-A-01712; BG3.5-1TH4P-0035
Omta, A.W.; Llido, J.; Bruggeman, J.; Kooijman, S.;
Garcon, V.; Dijkstra, H.A.
Satellite chlorophyll observations and how to interpret them:
a case study about the Mozambique Channel

BG0036; EGU2008-A-01727; BG3.5-1TH4P-0036
Omta, A.W.; Kooijman, S.; Dijkstra, H.A.
Critical turbulence revisited: the impact of geophysical tur-
bulence on three-dimensional plankton distribution patterns

BG0037; EGU2008-A-03087; BG3.5-1TH4P-0037
Dzierzbicka-Glowacka, L.; Jakacki, J.; Osinski, R.; Je-
drasik, J.; Brzezinska, B.
Long-term variations of hydrological and hydrobiological
parameters in the southern Baltic Sea

BG0038; EGU2008-A-03103; BG3.5-1TH4P-0038
Brzezinska, B.; **Dzierzbicka-Glowacka, L.**
Development time of Mysis mixta in the southern Baltic Sea

BG0039; EGU2008-A-03112; BG3.5-1TH4P-0039
Dzierzbicka-Glowacka, L.; Brzezinska, B.
Development time of Acartia spp. in the southern Baltic Sea

BG0040; EGU2008-A-07904; BG3.5-1TH4P-0040
Oliveira, A.P.; Costa, S.; **Cabeçadas, G.**
Variability of CO₂ parameters along tidal cycles in Tagus
estuary

BG0041; EGU2008-A-08475; BG3.5-1TH4P-0041
Cabeçadas, G.; Brogueira, M.J.; Coutinho, T.; Oliveira, A.P.
Impact of hydrodynamics on the ecology of Douro coastal
waters

BG0042; EGU2008-A-08712; BG3.5-1TH4P-0042
Honeycutt, C.; Canfield, D.; Bjerrum, C.
One dimensional physico-chemical ecological modelling of
sulfidic oceans: applications to Proterozoic ocean chemistry
and euxinic photoic zones

BG0043; EGU2008-A-09406; BG3.5-1TH4P-0043
De Monte, S.; d'Ovidio, F.
Structuration of phytoplankton communities by lateral
stirring

BG0044; EGU2008-A-07253; BG3.5-1TH4P-0044
s. Bonomo, s. B.; MEDSUDMED-06 Team
First data on hydrobiological characterization of western
Libyan sea area (August 2006)

BG0045; EGU2008-A-09778; BG3.5-1TH4P-0045
Bougon, N.; Vandenkoornhuyse, P.; Aquilina, L.;
Briand, M.P.
Influence of fluid circulation on nitrate reducers' activity and
microbial structure community

BG0046; EGU2008-A-02839; BG3.5-1TH4P-0046
Sinha, B.; Anderson, T.R.
Sensitivity of a complex ocean ecosystem model to choice of
physical general circulation model

BG0047; EGU2008-A-10391; BG3.5-1TH4P-0047
Llebot, C.; Delgado, M.; Turiel, A.; Fernández-Tejedor, M.;
Diogène, J.; Camp, J.; Solé, J.; Estrada, M.
Coupling phytoplankton and hydrography in Alfacs Bay
using principal component analysis and empirical mode
decomposition

IS3 - BG4.2/CL45 Data/model interactions: the biolog- ical perspective of understanding past global changes, from Tertiary to present (co-organized by BG & CL)

Convener: Rousseau, D.
Co-Convener(s): Guiot, J., Bonnefille, R.
Lecture Room 20
Chairperson: ROUSSEAU, D.D. - GUIOT, J.

15:30–15:45; EGU2008-A-06699; IS3 - BG4.2/CL45-
1TH4O-001
Prentice, I.C.
How plant physiology influences vegetation and climate
(solicited)

15:45–16:00; EGU2008-A-01135; IS3 - BG4.2/CL45-
1TH4O-002
Sykes, M.T.; Gisecke, T.; Miller, P.A.; Bradshaw, R.H.W.;
Ojala, A.E.K.; Alenius, T.; Seppa, H.
Data-model comparisons (DECVEG): exploring inter-annual
climate variability effects on vegetation in Fennoscandia.

16:00–16:15; EGU2008-A-05172; IS3 - BG4.2/CL45-
1TH4O-003
Boreux, J.J.; Naveau, P.; Perreault, L.; Nicault, A.;
Bernier, J.
Extracting a common signal in Northern Quebec black
spruce tree-rings with a Bayesian hierarchical model

16:15–16:30; EGU2008-A-00179; IS3 - BG4.2/CL45-1TH4O-004
Tarasov, P.; Williams, J.; Andreev, A.; Nakagawa, T.; Brewer, S.
Quantitative tree cover reconstructions for northern Eurasia: method verification and application to late-Quaternary pollen data

16:30–16:45; EGU2008-A-11146; IS3 - BG4.2/CL45-1TH4O-005
Chalié, F.; ESCARSEL-ANR-Program
The last millennium in Africa: a review of the main environmental changes and possible causal mechanisms

16:45–17:00; EGU2008-A-07241; IS3 - BG4.2/CL45-1TH4O-006
Salzmänn, U.; Haywood, A. M.; Lunt, D. J.
Vegetation of a warmer world: Data-model comparison of global biome distributions for the Middle Pliocene and the 21st century

17:00 END OF SESSION

IS3 - BG4.2/CL45 Data/model interactions: the biological perspective of understanding past global changes, from Tertiary to present (co-organized by BG & CL) – Posters

Convener: Rousseau, D.
Co-Convener(s): Guiot, J., Bonnefille, R.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 13:30–15:00
Poster Area BG
Chairperson: ROUSSEAU, D.D. - GUIOT, J.

BG0048; EGU2008-A-00468; IS3 - BG4.2/CL45-1TH3P-0048
Dormoy, I.; Peyron, O.; Combourieu-Nebout, N.; Magny, M.; Kotthoff, U.; Pross, J.; Bordon, A.
Changes in seasonality over the last 15 000 years in Mediterranean area

BG0049; EGU2008-A-00528; IS3 - BG4.2/CL45-1TH3P-0049
Szek, M.; Ubéda, X.
Habitat fragmentation in Les Gavarres, the Area of Natural Interest in Catalonia (Spain). (cancelled)

BG0050; EGU2008-A-01400; IS3 - BG4.2/CL45-1TH3P-0050
Andreev, A.; **Tarasov, P.**; Schirrmeister, L.
Eemian and Holocene palaeoenvironmental reconstruction from Arctic Siberia (Bol'shoy Lyakhovsky, Island Laptev Sea region)

BG0051; EGU2008-A-01556; IS3 - BG4.2/CL45-1TH3P-0051
Peng, CH.; Wu, HB; Guiot, J.; Guo, ZT
New coupled vegetation-carbon model used inversely for reconstructing historical terrestrial carbon storage from pollen data

BG0052; EGU2008-A-05034; IS3 - BG4.2/CL45-1TH3P-0052
Guiot, J.; Wu, H.B.
Dominant Factors Controlling Glacial and Interglacial Variations in the Treeline Elevation in Tropical Africa

BG0053; EGU2008-A-05780; IS3 - BG4.2/CL45-1TH3P-0053
Guo, ZT
Major reorganization of paleoclimate in Asia near the Oligocene/Miocene boundary (solicited) (cancelled)

BG0054; EGU2008-A-06012; IS3 - BG4.2/CL45-1TH3P-0054
Rudaya, N.; Tarasov, P.; Dorofeyuk, N.; Kalugin, I.; Andreev, A.

Holocene vegetation and environments in the Mongolian Altai derived from the Hoton-Nur pollen and diatom records

BG0055; EGU2008-A-07245; IS3 - BG4.2/CL45-1TH3P-0055
Fréchette, B.; **de Vernal, A.**
Onshore-offshore climate changes in southwest Greenland and eastern Baffin Island area since 7000 years

BG0056; EGU2008-A-07335; IS3 - BG4.2/CL45-1TH3P-0056
Brewer, S.; FranÅšois, L.; Cheddadi, R.; Laurent, J.-M.; Favre, E.
Comparison of simulated and observed vegetation for the mid-Holocene in Europe

BG0057; EGU2008-A-08982; IS3 - BG4.2/CL45-1TH3P-0057
Turcq, B.; Braconnot, P.; Cordeiro, R.; Sifeddine, A.; Silva Dias, P.; Jorgetti, T.; Lima da Costa, R.; Abrão, J.
Amazonian climate during the Holocene

BG0058; EGU2008-A-10081; IS3 - BG4.2/CL45-1TH3P-0058
Lombard, F.; **Labeyrie, L.**; Michel, E.; Spero, H.J.; Lea, D.W.; The Forclim Team
The ForamClim Ecophysiological Model for Planktic Foraminifera: How physiology constrain ecological niches, abundance and potential depth and season of growth for eight foraminifera species (solicited)

BG0059; EGU2008-A-11945; IS3 - BG4.2/CL45-1TH3P-0059
Williamson, D.; Majule, A.; Delvaux, D.; Mbebe, E.; Barker, P.; Bergonzini, L.; Bremond, L.; Limyu, J.; Magongo, F.; Mathé, P.-E.; Yanda, P.Z.; Chalié, F.; Guiot, J.; Ortlieb, L.; Valimba, P.; Vincens, A.; RESON team
A 4D approach to unravel the impacts of geodynamics, climate and human activities on biogeochemical cycles, hydrological thresholds, and ecosystems: the Rungwe Environmental Science Observatory Network (Tanzania) (solicited)

BG6.5 Geomicrobiology: geochemical and molecular interactions between microbes, minerals and metals - from cells to environmental systems (including Vladimir Ivanovich Vernadsky Medal Lecture)

Convener: Hutchens, E.
Co-Convener(s): Crovisier, J.
Lecture Room 20
Chairperson: HUTCHENS, E

8:30–9:15; EGU2008-A-12408; BG6.5-1TH1O-001
DeLong, E.F.
Microbial genomics, diversity, and biogeochemistry: describing the living Earth system (Vladimir Ivanovich Vernadsky Medal Lecture) (solicited)

9:15–9:30; EGU2008-A-11900; BG6.5-1TH1O-002
Beech, I.; Campbell, S.; Sunner, J.
Biominalisation in marine environments (solicited)

9:30–9:45; EGU2008-A-09875; BG6.5-1TH1O-003
Bougon, N.; Aquilina, L.; Vandenkoornhuyse, P.
Microbial diversity and activity in a pristine aquifer

9:45–10:00; EGU2008-A-00415; BG6.5-1TH1O-004
Tobler, D. J.; Benning, L. G.
The effects of temperature, salinity and sinter growth rate on microbial diversity in Icelandic hot springs

10:00 COFFEE BREAK

Chairperson: FRIEDRICH, M

10:30–10:45; EGU2008-A-03930; BG6.5-1TH2O-001
Hutchens, E; Clipson, N; McDermott, F
Mineralogical influence on the structure and diversity of bacterial communities associated with silicate minerals

10:45–11:00; EGU2008-A-11708; BG6.5-1TH2O-002
Ngwenya, B.T.; Tournay, T.; Magennis, M.; Kapetas, L.
Proton and metal adsorption clues to a universal surface chemistry for bacterial cells. (solicited)

11:00–11:15; EGU2008-A-02861; BG6.5-1TH2O-003
Phoenix, V; Holmes, W
Magnetic resonance imaging of structure, diffusivity and copper immobilization in a phototrophic biofilm

11:15–11:30; EGU2008-A-08185; BG6.5-1TH2O-004
Bonneville, S; Benning, L; Brown, A; Smits, M; Leake, J
Weathering at the fungi-mineral interface: a FIB-TEM approach. (solicited)

11:30–11:45; EGU2008-A-05420; BG6.5-1TH2O-005
Miot, J.; Benzerara, K.; Morin, G.; Skouri-Panet, F.; Ferard, C.; Guyot, F.; Kappler, A.
Nanometer-scale study of iron biomineralization by anaerobic nitrate-dependent iron-oxidizing bacteria.

11:45–12:00; EGU2008-A-05621; BG6.5-1TH2O-006
Zhang, G; Senko, J; Tan, H; **Burgos, W**
Microbial reduction of iron(III)-rich smectite and uranium(VI)

12:00 LUNCH BREAK

Chairperson: DITTRICH, M.

13:30–13:45; EGU2008-A-07412; BG6.5-1TH3O-001
Ojeda, J. J.; Romero-Gonzalez, M. E.; Banwart, S. A.
Characterisation of the cell surface of three bacterial strains and the interactions at the cell-mineral interface by combining potentiometric titrations, XPS and ATR-FTIR.

13:45–14:00; EGU2008-A-08961; BG6.5-1TH3O-002
JIMENEZ-LOPEZ, C.; Jroundi, F.; Rodriguez-Navarro, C.; Piñar, G.; Rodriguez-Gallego, M.; **Gonzalez-Muñoz, M.T.**
The effects on ornamental stone consolidation by the growth of the bacteria that inhabit the stone

14:00–14:15; EGU2008-A-06479; BG6.5-1TH3O-003
Jorand, F.; Landry, F.; Zegeye, A.; Lartiges, B.; Mustin, C.
Monitoring green rust biomineralization with polymer addition

14:15–14:30; EGU2008-A-11218; BG6.5-1TH3O-004
Kassahun, A.; Hoffmann, M.; Hoth, N.
hydrogen formation from organic matter mediated redox reactions at silicate mineral surfaces

14:30–14:45; EGU2008-A-11349; BG6.5-1TH3O-005
Holmström, S.J.M.; Rosling, A; Finlay, R.D.; van Hees, P.A.W; Lundström, U.S.
Long-term column experiment demonstrates ectomycorrhizal contribution to biogeochemical processes

14:45 END OF SESSION

BG6.5 Geomicrobiology: geochemical and molecular interactions between microbes, minerals and metals - from cells to environmental systems (including Vladimir Ivanovich Vernadsky Medal Lecture) – Posters

Convener: Hutchens, E.
Co-Convener(s): Crovisier, J.
Display Time: Thursday, 08:00–19:30
Authors in Attendance: Thursday, 15:30–17:00
Poster Area BG
Chairperson: CROVISIER, J.

BG0060; EGU2008-A-05591; BG6.5-1TH4P-0060
Senko, J; **Burgos, W;** Bruns, M
Characterization of Fe(II)-oxidizing bacterial communities in Appalachian coal mine drainage (solicited)

BG0061; EGU2008-A-06985; BG6.5-1TH4P-0061
Reinicke, M.; Kothe, E.
Microbial monitoring and population dynamics in an AMD affected field site

BG0062; EGU2008-A-07735; BG6.5-1TH4P-0062
Souza-Egipsy, V.; Aguilera, A.; González-Toril, E.; Rendueles, O.; Amils, R.
Microbial community biofabrics in a geothermal environment from Iceland.

BG0063; EGU2008-A-07874; BG6.5-1TH4P-0063
Guiné, V.; Vitorge, E.; Gaudet, J-P.; Spadini, L.; Martins, J.M.F
Role of bacteria in the accelerated transfer of heavy metals in soils: advantages for polluted soil bio-remediation

BG0064; EGU2008-A-08639; BG6.5-1TH4P-0064
Øvreås, L.; Johannessen, T; Einen, J; Jørgensen, S.L.; Thorseth, I.H.; Pedersen, R.B.
Microbial diversity in low temperature iron deposits at the 71°N hydrothermal vent field along the arctic mid-ocean ridge

BG0065; EGU2008-A-10221; BG6.5-1TH4P-0065
Thorseth, I.H.; Pedersen, R.B; Kruber, C; Kosler, J
Microbial control of the formation of low-temperature hydrothermal iron-deposits at the 71°N vent field at the Arctic Mid-Ocean Ridge

BG0066; EGU2008-A-11439; BG6.5-1TH4P-0066
Matei, S.; Matei, G.; Negoita, T. Gh; **Fendrihan, S.**
Microbiological studies of East Antarctic soils (solicited)

BG0067; EGU2008-A-11533; BG6.5-1TH4P-0067
Sepulveda, J.; Wendler, J.; Summons, R.; Hinrichs, K.-U.
Recovery of marine productivity after the K-T boundary: molecular evidence from Stevns Klint, Denmark

BG0068; EGU2008-A-10483; BG6.5-1TH4P-0068
Jorand, F.; Landry, F.; Ghanbaja, J.
Probable occurrence of green rust mineral in the Sinnamary river (French Guiana), a potential attenuator of mercury contamination

BG0069; EGU2008-A-01630; BG6.5-1TH4P-0069
Farnsworth, C.; Hering, J.
Using a hydrous manganese oxide (HMO) doped gel probe to measure rates of reductive dissolution

BG0070; EGU2008-A-06129; BG6.5-1TH4P-0070
Gazzano, C.; Desana, E.; Kanceff, C.; Favero-Longo, S.E.; Piervittori, R.; Mello, A.; Girlanda, M.
Biomolecular investigations for the identification of rock biodeteriogens in archaeological areas

BG0071; EGU2008-A-06833; BG6.5-1TH4P-0071
Bachelet, M; Crovisier, J.L; Vuilleumier, S; Boutin, R; Geoffroy, V
Definition of a specific growth medium for *Acidithiobacillus* thiooxidans to measure the alteration rate of nuclear glass (solicited)

BG0072; EGU2008-A-07713; BG6.5-1TH4P-0072
Turci, F.; Favero-Longo, S.E.; Daghino, S.; Gazzano, E.; Tomatis, M.; Ghigo, D.; Perotto, S.; Piervittori, R.; Fubini, B.
Chemical and biochemical reactivity of a bioweathered polymineralic fibrous vein (chrysotile-carlosturanite-diopside)

BG0073; EGU2008-A-08549; BG6.5-1TH4P-0073
Balland, C.; Mustin, C.; Vigier, N.; Bolou Bi, E.B.; Poszwa, A.
Impact of bacteria on Mg release and Mg isotope signatures during biotite weathering (solicited)

BG0074; EGU2008-A-12376; BG6.5-1TH4P-0074
Petushkova, J.A.; Petushkova, J.P.
Microbial interactions with limestone treated with water-repellent protective agents

BG0075; EGU2008-A-10665; BG6.5-1TH4P-0075
Pallud, C.; Masue-Slowey, Y.; Fendorf, S.
Spatial patterns in mineral formation driven by dissimilatory iron reduction of ferrihydrite (solicited)

BG0076; EGU2008-A-08274; BG6.5-1TH4P-0076
Straub, K. L.; Kappler, A.; Haderlein, S. B.; Kraemer, S. M.
Rapid microbial respiratory reduction of biologically produced ferric iron minerals (solicited)

BG0077; EGU2008-A-10961; BG6.5-1TH4P-0077
Miot, J.; Morin, G.; Skouri-Panet, F.; Ferard, C.; Ona N'Guema, G.; Guyot, F.; Brown, G. E.
Arsenic detoxification in the model alga *Euglena gracilis*: key role of the glutathione pathway evidenced by XAS.

BG0078; EGU2008-A-10924; BG6.5-1TH4P-0078
Guiné, V.; Sarret, G.; Spadini, L.; Muris, M.; Delolme, C.; Causse, B.; Martins, J.M.F
Combined titration, modelling, and EXAFS study for the complexation of Zinc and Cadmium by three Gram negative bacteria

BG0079; EGU2008-A-01768; BG6.5-1TH4P-0079
Pokrovsky, O.S.; Pokrovski, G.S.; Shirokova, L.S.; Emnova, E.E.
Chemical status of Cu adsorbed on and incorporated into aquatic microorganisms: insights from EXAFS and macroscopic interaction studies

BG0080; EGU2008-A-02430; BG6.5-1TH4P-0080
Hennebelle, R.; Ferrari, C; Delort, AM; Sancelme, M; Barbante, C; Delacour, M; Dommergue, A
Polar yeasts : a sink for methyl-mercury. Implication on mercury cycle in polar regions.

BG0081; EGU2008-A-09038; BG6.5-1TH4P-0081
Torgonskaya, M.L.; Firsova, Yu.E.; **Zyakun, A.M.;** Richnow, H.-H.; Vuilleumier, S.; Doronina, N.V.; Trotsenko, Yu.A.
Compound specific stable isotopes fractionation analysis (CSIA) is an useful approach in studies on the mechanisms involved in dichloromethane degradation by aerobic methylobacteria

BG0082; EGU2008-A-09314; BG6.5-1TH4P-0082
Aller, M.F.; Durand, V; Renshaw, J.C.; Riley, M.S.; Greswell, R.B.; Mackay, R; Tellam, J.H.
Determining the pathways of virus transport through a sandstone aquifer

Friday

BG2.9 From biogenic primary exchange to atmospheric fluxes of reactive trace gases

Convener: Kesselmeier, J.
Co-Convener(s): Schnitzler, J., Rinne, J., Meixner, F., Montzka, S.
Lecture Room 20
Chairperson: N.N.

8:30–8:45; EGU2008-A-06722; BG2.9-1FR1O-001
Feig, G.T.; Mantimin, B.; Andreae, M.O.; Yu, J.B.; Gelfand, I.; Meixner, F.X.
The influence of soil moisture and temperature on the flux of nitric oxide from natural ecosystems

8:45–9:00; EGU2008-A-03515; BG2.9-1FR1O-002
Tsokankunku, A.; Dzikiti, S; Trebs, I; Meixner, F.X.; Milford, J.R.; Chipindu, B
Effects of shading on leaf temperature, photosynthesis and water relations of two navel orange [*Citrus sinensis* (L.) Osbeck] cultivars

9:00–9:15; EGU2008-A-04083; BG2.9-1FR1O-003
Haas, E.; **Grote, R.;** Forkel, R.
A general system to simulate air chemistry processes within biosphere canopies

9:15–9:30; EGU2008-A-03015; BG2.9-1FR1O-004
Ruuskanen, T.M.; Taipale, R.; Rinne, J.; Kajos, M.K.; Hakola, H.; Kulmala, M.
Seasonal to daily patterns of VOC concentrations in boreal forest, over a year of continuous measurements

9:30–9:45; EGU2008-A-03145; BG2.9-1FR1O-005
Wildt, J.; JPAC 07
SOA formation from stress induced BVOC emissions

9:45–10:00; EGU2008-A-02548; BG2.9-1FR1O-006
Barkley, M.; Palmer, P
Net ecosystem fluxes of isoprene over tropical South America inferred from GOME observations of HCHO columns

10:00 COFFEE BREAK

Chairperson: N.N.

10:30–10:45; EGU2008-A-06109; BG2.9-1FR2O-001
Noe, S.M.; Hüve, K.; Rasulov, B.; Niinemets, Ü.
Influence of elevated atmospheric CO₂ levels on BVOC emissions

10:45–11:00; EGU2008-A-08926; BG2.9-1FR2O-002
Müller, M.; Mielke, L.H.; Breitenlechner, M.; Cias, P.; Wisthaler, A.; Shepson, P.B.; Hansel, A.
Quantitative Analysis of different monoterpene isomers using Proton Transfer Reaction LIT and triple quadrupole Mass Spectrometry

11:00–11:15; EGU2008-A-04772; BG2.9-1FR2O-003
Suntharalingam, P.; Kettle, A; Montzka, S; Krakauer, N; Jacob, D
Constraints from atmospheric measurements on the global budget and seasonal cycle of carbonyl sulfide

11:15–11:30; EGU2008-A-01493; BG2.9-1FR2O-004
Notni, J; Schenk, S; Kesselmeier, J; Anders, E
On the Mechanism of COS Hydratation by Carbonic Anhydrase

11:30–11:45; EGU2008-A-05672; BG2.9-1FR2O-005
Montzka, S.; Miller, L.; Sweeney, C.; Tans, P.; Elkins, J.
Exploring the relationship between atmospheric COS and CO₂ in the Northern Hemisphere

11:45 END OF SESSION

BG2.9 From biogenic primary exchange to atmospheric fluxes of reactive trace gases – Posters

Convener: Kesselmeier, J.
Co-Convener(s): Schnitzler, J., Rinne, J., Meixner, F., Montzka, S.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 13:30–15:00
Poster Area BG
Chairperson: N.N.

BG0001; EGU2008-A-02901; BG2.9-1FR3P-0001
Wolf, A.; Baker, I.; Berry, J.A.; Denning, S.; Blake, N.J.; Blake, D.R.; Campbell, E.; Denning, A.S.; Kawa, S.R.; Meinardi, S.; Montzka, S.A.; Seibt, U.; Vay, S.A.; Zhu, Z.
Testing of a global carbon cycle model that includes Carbonyl Sulfide (COS)

BG0002; EGU2008-A-05978; BG2.9-1FR3P-0002
Stimler, K.; Montzka, S.; Rudich, Y.; Yakir, D.
Relationships between Carbonyl Sulfide (COS) and CO₂ during leaf gas exchange

BG0003; EGU2008-A-06641; BG2.9-1FR3P-0003
Kesselmeier, J.; Sandoval-Soto, L.; Schmitt, V.; Wild, A.
Uptake of Carbonyl sulfide by trees under elevated atmospheric carbon dioxide concentrations

BG0004; EGU2008-A-03241; BG2.9-1FR3P-0004
Ghirardo, A.; Gutknecht, J.; Brüggemann, N.; Schnitzler, J.P.
Carbon sources of VOC biosynthesis in poplar.

BG0005; EGU2008-A-02589; BG2.9-1FR3P-0005
Demarcke, M.; THE IMPECVOC TEAM
Measurements of BVOC emissions from *Fagus sylvatica* L. in controlled environmental conditions: preliminary results

BG0006; EGU2008-A-09084; BG2.9-1FR3P-0006
SIMPRAGA, M.; THE IMPECVOC TEAM
Preliminary observations of temperature effects on carbon loss through BVOC emissions in *Fagus sylvatica* L.

BG0007; EGU2008-A-03327; BG2.9-1FR3P-0007
Haapanala, S.; Hakola, H.; Vestenius, M.; Rinne, J
VOC Emissions from Tree Stumps

BG0008; EGU2008-A-10778; BG2.9-1FR3P-0008
Rinnan, R.; Tiiva, P.; Faubert, P.; Michelsen, A.; Rinnan, Å.; Holopainen, J.K.
Biogenic volatile organic compound (BVOC) emissions from a subarctic heath ecosystem as affected by climatic warming

BG0009; EGU2008-A-04194; BG2.9-1FR3P-0009
Ekberg, A.; Arneth, A.; Bäckstrand, K.; Crill, P.M.; Hakola, H.; Stark, H.
BVOC emissions from high-latitude peatlands: Isoprene and monoterpene fluxes in plant communities defined by differences in surface hydrology

BG0010; EGU2008-A-03367; BG2.9-1FR3P-0010
Taipale, R.; Rinne, J.; Ruuskanen, T. M.; Kajos, M. K.; Hakola, H.; Vesala, T.; Kulmala, M.
Direct ecosystem scale measurements of volatile organic compound emissions from a boreal forest

BG0011; EGU2008-A-00526; BG2.9-1FR3P-0011
Bouvier-Brown, N.C.; Worton, D.R.; Matross, D.M.; Goldstein, A.H.
Ambient air measurements of monoterpenes, oxygenated terpenes, and sesquiterpenes

BG0012; EGU2008-A-01860; BG2.9-1FR3P-0012
WISHKERMAN, A.; Gebhardt, S.; McRoberts, C.; Hamilton, J.; Williams, J.; Keppler, F.
Abiotic methyl bromide formation from vegetation at ambient temperatures

BG0013; EGU2008-A-01152; BG2.9-1FR3P-0013
Hörtnagl, L.; Hammerle, A.; Wohlfahrt, G.
Dealing with disjunct concentration measurements in eddy covariance applications: a comparison of available approaches

BG0014; EGU2008-A-06610; BG2.9-1FR3P-0014
Bargsten, A.; Moravek, A.; Huwe, B.; Andreae, M.O.; Meixner, F.X.
Soil flux measurements of reactive and non-reactive trace gases in a mountainous region (Fichtelgebirge, Germany) by a dynamic chamber technique

BG2.11 Synthesis Efforts From the Global Network of Ecosystem-Atmosphere CO₂, Water and Energy Exchange (FLUXNET) (co-sponsored by iLEAPS)

Convener: Reichstein, M.
Co-Convener(s): Papale, D.
Lecture Room 20
Chairperson: N.N.

13:30–13:45; EGU2008-A-04159; BG2.11-1FR3O-001
Amiro, B.; Canada Flux Disturbance Team
Synthesis of fire and harvesting carbon flux measurements in the Canadian boreal forest (solicited)

13:45–14:00; EGU2008-A-05529; BG2.11-1FR3O-002
Drolet, G.; **Margolis, H.;** Piao, S.; Middleton, E.
Midsummer and autumn depressions in carbon fluxes and light-use efficiency across the circumpolar boreal forest

14:00–14:15; EGU2008-A-09069; BG2.11-1FR3O-003
Migliavacca, M.; Reichstein, M.; Colombo, R.; Lasslop, G.; Tomelleri, E.
Semi-empirical modelling of ecosystem respiration at European scale: model optimization and quantification of the associated uncertainty.

14:15–14:30; EGU2008-A-05438; BG2.11-1FR3O-004
Loustau, D.; Berbigier, P.; Balesdent, J.; Guillet, B.; Disnar, J.-R.; Bonnefond, J.-M.; Bosc, A.; Lamaud, E.; Brunet, Y.
Carbon balance of a maritime pine forest over a 11-year long period.

14:30–14:45; EGU2008-A-07974; BG2.11-1FR3O-005
Lasslop, G.; Reichstein, M.
Half hourly GPP and Reco estimates derived from a light response curve including VPD and temperature dependencies

14:45–15:00; EGU2008-A-11978; BG2.11-1FR3O-006
Running, S.W.
Next generation terrestrial monitoring and the role of FLUXNET (solicited)

15:00 END OF SESSION

BG2.11 Synthesis Efforts From the Global Network of Ecosystem-Atmosphere CO₂, Water and Energy Exchange (FLUXNET) (co-sponsored by iLEAPS) – Posters

Convener: Reichstein, M.

Co-Convener(s): Papale, D.

Display Time: Friday, 08:00–19:30

Authors in Attendance: Friday, 15:30–17:00

Poster Area BG

Chairperson: N.N.

BG0015; EGU2008-A-01992; BG2.11-1FR4P-0015

Falge, E. M.; Luyssaert, S.; Papale, D.; Reichstein, M.; Schulze, E.-D.

Cross-evaluation of eddy covariance and independent measurements at flux tower sites

BG0016; EGU2008-A-02360; BG2.11-1FR4P-0016

Ohta, T.; CREST/WECNoF

Do forests have a common ??potential??h response of surface and/or stomatal conductance to environmental conditions?

BG0017; EGU2008-A-02528; BG2.11-1FR4P-0017

Yoshida, R.; Yamazaki, T.; Ito, T.; Ohta, T.

The forest-atmosphere exchange of water/energy based on the concept of potential response characteristics

BG0018; EGU2008-A-03200; BG2.11-1FR4P-0018

Jarvis, A

Partitioning evapotranspiration observations using unobserved component models

BG0019; EGU2008-A-03584; BG2.11-1FR4P-0019

Beer, C.; Reichstein, M.; Buchmann, N.; Law, B.; Knohl, A. Water-use efficiency at different scales and its between-site variability

BG0020; EGU2008-A-04562; BG2.11-1FR4P-0020

Pinty, B.; Laverigne, T.; Kaminski, T.; Gobron, N.; Taberner, M.; Kutsch, W.; Mund, M.; Jung, M.

Consistent partitioning of solar fluxes in the Soil-Vegetation-Atmosphere system from satellite observations: Validation against in-situ FLUXNET observations

BG0021; EGU2008-A-04835; BG2.11-1FR4P-0021

Agarwal, D.; Baldocchi, D.; Goode, M.; Humphreys, M.; **van Ingen, C.;** Papale, D.; Reichstein, M.; Rodriguez, M.; Ryu, Y.; Vargas, R

An Evolving La Thuile Fluxnet Dataset and Support Infrastructure

BG0022; EGU2008-A-06876; BG2.11-1FR4P-0022

Thum, T. ; Aalto, T.; Laurila, T.; Aurela, M.; Lindroth, A.; Vesala, T.

Assessing seasonality with air temperature, CO₂ eddy covariance measurements and CO₂ mixing ratio in northern boreal coniferous forests

BG0023; EGU2008-A-08052; BG2.11-1FR4P-0023

Groenendijk, M.; Dolman, A. J.

Global distribution of ecosystem model parameters of water and carbon exchange

BG0024; EGU2008-A-08456; BG2.11-1FR4P-0024

Magnani, F.; Borghetti, M.; Mencuccini, M.; Raddi, S.; Grace, J.

New and established forests turn N pollution into C stocks

BG0025; EGU2008-A-09250; BG2.11-1FR4P-0025

Verbeeck, H.; Peylin, P.; Bacour, C.; Ciais, P.

Parameter optimisation of the Orchidee model using eddy covariance measurements at European forest sites

BG0026; EGU2008-A-09683; BG2.11-1FR4P-0026

Tomelleri, E.; Migliavacca, M.; Reichstein, M.

Data oriented estimation of european NEE and its uncertainty

BG0027; EGU2008-A-09894; BG2.11-1FR4P-0027

Ahrends, H.E.; Etzold, S.; Rühr, N.K.; Stöckli, R.; Eugster, W.; Wanner, H.; Buchmann, N.

Can phenological data from digital images help the interpretation of carbon flux measurements?

BG0028; EGU2008-A-10491; BG2.11-1FR4P-0028

Marras, S.; Sirca, C.; Spano, D.; Duce, P.; Zara, P.; Arca, A.; Ventura, A

Seasonal and interannual variations in carbon dioxide exchange of a Mediterranean maquis ecosystem

BG0029; EGU2008-A-11956; BG2.11-1FR4P-0029

Wingate, L.; Burlett, R.; Bosc, A.; Cross, A.; Devaux, M.; Grace, J.; **Loustau, D.;** Ogée, J

Measuring carbon and oxygen isotope signals of photosynthesis and respiration: first field results from a chamber system coupled to tunable diode laser spectrometer

BG3.4 Biogeochemistry of coastal seas and continental shelves

Convener: Thomas, H.

Co-Convener(s): Borges, A.

Lecture Room 21

Chairperson: THOMAS, H.

10:30–10:45; EGU2008-A-12024; BG3.4-1FR2O-001

Bange, H.W.

Nitrous Oxide (N₂O) and Methane (CH₄) Emissions from Coastal Areas (solicited)

10:45–11:00; EGU2008-A-08157; BG3.4-1FR2O-002

Jutterström, S.; Williams, W. J.; Anderson, L. G.; Carmack, E. C.

Potential up-welling of inorganic carbon in the Arctic Ocean shelf seas

11:00–11:15; EGU2008-A-08163; BG3.4-1FR2O-003

Omar, A.; Heegaard, E.; Olsen, A.; Johannessen, T.; Thomas, H.

Air-sea CO₂ flux in the North Sea: spatio-temporal variability and uncertainty of the estimates

11:15–11:30; EGU2008-A-08297; BG3.4-1FR2O-004

Thomas, H.; Schiettecatte, L.-S.; Suykens, K.; Koné, Y.J.M.; Bozec, Y.; de Baar, H.J.W.; Borges, A.V.

Seasonal Variability of Total Alkalinity in the North Sea

11:30–11:45; EGU2008-A-01401; BG3.4-1FR2O-005

Borges, A.V.; Delille, B.; Beckers, J.-M.; Grégoire, M.; Lejeune, P.; Schiettecatte, L.-S.; Champenois, W.

First year of results from a mooring over a Posidonia Oceanica seagrass meadow (Corsica, France)

11:45–12:00; EGU2008-A-02381; BG3.4-1FR2O-006

Bouillon, S.; Borges, A. V.; Castaneda-Moya, E.; Diele, K.; Dittmar, T.; Duke, N.C.; Kristensen, E.; Lee, S.Y.; Marchand, C.; Middelburg, J.J.; mangrove team

Mangrove production and carbon sinks: a revision of global budget estimates

12:00 LUNCH BREAK

Chairperson: BORGES, A.V.

13:30–13:45; EGU2008-A-01657; BG3.4-1FR3O-001

Gazeau, F.; Pronker, A.E.; Peene, F.; Peene, J.; Gattuso, J.-P.; Middelburg, J.J.; Heip, C.H.R

Effect of ocean acidification on early development of the blue mussel

13:45–14:00; EGU2008-A-03407; BG3.4-1FR3O-002
Bartlett, R.; Mortimer, R; Spraggs, R; Rhodes, R; Formby, J
Anoxic nitrification: new pathways for nitrogen removal in
dynamic near-shore sediments

14:00–14:15; EGU2008-A-07525; BG3.4-1FR3O-003
Sebilo, M.; Billen, G.; Mayer, B.; Garnier, J.; Mariotti, A.
Assessing nitrification and Denitrification in the Seine Tiver
and Estuary using chemical and Isotopic techniques

14:15–14:30; EGU2008-A-06491; BG3.4-1FR3O-004
Arning, E.T.; Birgel, D.; Lückge, A.; Kudrass, H.R.;
Peckmann, J.
Phosphorites from the upwelling region off Peru - the
inferred role of bacterial activity in mineralization

14:30–14:45; EGU2008-A-08215; BG3.4-1FR3O-005
Dellwig, O.; Leipe, T.; Yakushev, E. V.; Schnetger, B.;
Brumsack, H.-J.; Böttcher, M. E.
Coupling of Mn, Fe, and P cycles during mineral formation
at pelagic redoxclines: Examples from the Baltic Sea and
the Black Sea

14:45–15:00; EGU2008-A-02462; BG3.4-1FR3O-006
Schwab, V.F.; Sachs, J.P.
Alkenone unsaturation ratios in the Chesapeake Bay Estuary,
eastern USA

15:00 END OF SESSION

BG3.4 Biogeochemistry of coastal seas and continental shelves – Posters

Convener: Thomas, H.

Co-Convener(s): Borges, A.

Display Time: Friday, 08:00–19:30

Authors in Attendance: Friday, 15:30–17:00

Poster Area BG

Chairperson: THOMAS, H.

BG0030; EGU2008-A-00310; BG3.4-1FR4P-0030
Kulinski, K.; She, J.; Pempkowiak, J.
Short and medium time dynamics of carbon exchange
between

BG0031; EGU2008-A-01380; BG3.4-1FR4P-0031
Borges, A.V.; Chou, L.; Commarieu, M.-V.; Schiette-
catte, L.-S.; Delille, B.; Gazeau, F.
Variability of the partial pressure of CO₂ in the upper
Scheldt estuary from 2003 to 2007

BG0032; EGU2008-A-01381; BG3.4-1FR4P-0032
Borges, A.V.; Suykens, K.; Commarieu, M.-V.; Schiet-
tecatte, L.-S.; Delille, B.; Astoreca, R.; Rousseau, V.;
Lancelot, C.; Ruddick, K.
Estimating pCO₂ from remote sensing in the Case-II
waters of the Belgian Coastal Zone – First results from the
BELCOLOUR-II project

BG0033; EGU2008-A-01382; BG3.4-1FR4P-0033
Borges, A.V.; Tilbrook, B.; Metzl, N.; Lenton, A.; Delille, B.
Inter-annual variability of the carbon dioxide oceanic sink
south of Tasmania

BG0034; EGU2008-A-09685; BG3.4-1FR4P-0034
Borges, A.V.; Delille, B.; Descy, J.-P.; Darchambeau, F.;
Leporcq, B.; Servais, P.; Lepoint, G.; Bouillon, S.; Abril, G.
Carbon dioxide dynamics in lake Kivu during the dry and
wet seasons

BG0035; EGU2008-A-01402; BG3.4-1FR4P-0035
Koné, Y.J.M; Gourene, G.; Abril, G.; Delille, B.;
Borges, A.V.
Seasonal variability of CO₂ fluxes in the tropical lagoons of
Ivory Coast

BG0036; EGU2008-A-08532; BG3.4-1FR4P-0036
Shadwick, E.; Thomas, H.; Greenan, B.; Prowe, F
Moored Observations at Station HL2 on the Scotian Shelf

BG0037; EGU2008-A-06638; BG3.4-1FR4P-0037
Gypens, N.; Borges, A.V.; Lancelot, C.
A model study of the evolution over the past 50 years of
air-sea CO₂ fluxes in the Belgian coastal zone (Southern
Bight of the North Sea)

BG0038; EGU2008-A-08629; BG3.4-1FR4P-0038
Prowe, F.; Thomas, H.; Paetsch, J.; Kuehn, W.; Bozec, Y.;
Schiettecatte, L.-S.; Borges, A.V.; deBaar, H.J.W
Biological Controls of the CO₂ Air-Sea Flux in the North Sea

BG0039; EGU2008-A-02021; BG3.4-1FR4P-0039
Santana-Casiano, J.M.; González-Dávila, M.; Ucha, I.
Seasonal variability of fCO₂ and O₂ between 5°S and 30°S
in the Angola-Benguela region

BG0040; EGU2008-A-03855; BG3.4-1FR4P-0040
Suykens, K.; Borges, A.V.; Dellile, B.
Surface dissolved inorganic carbon dynamics in the Gulf of
Biscay (June 2006 – May 2007)

BG0041; EGU2008-A-03875; BG3.4-1FR4P-0041
Suykens, K.; Dellile, B.; Borges, A.V.
Benthic dissolved inorganic carbon dynamics in the Gulf of
Biscay (June 2006 – May 2007)

BG0042; EGU2008-A-07789; BG3.4-1FR4P-0042
Ciavatta, S.; Ferrari, G.; Pastres, R.
Modelling the short term dynamic of carbon dioxide in a
coastal lagoon

BG0043; EGU2008-A-08731; BG3.4-1FR4P-0043
Turk, D.; DeGrandpre, M.; Faganeli, J.; Malacic, V.;
McGillis, W.R.
Carbon dioxide variability in the Northern Adriatic
Sea?Carbon dioxide variability in the Northern Adriatic
Sea?Carbon dioxide variability in the Northern Adriatic Sea

BG0044; EGU2008-A-04672; BG3.4-1FR4P-0044
Gattuso, J.-P.; The EUROTROPH Team
Artificial neural network analysis of factors controlling
ecosystem metabolism in coastal marine environments

BG0045; EGU2008-A-10808; BG3.4-1FR4P-0045
Kowalski, N.; Dellwig, O.; Beck, M.; Böttcher, M.E.
Mo dynamics at the sediment/water interface of tidal flats
(NW Germany): An experimental approach

BG0046; EGU2008-A-11227; BG3.4-1FR4P-0046
Lenz, C.; Winde, V.; Dellwig, O.; Schoster, F.; Leipe, T.;
Martinez-Ruiz, F. C.; Schnetger, B.; Böttcher, M. E.
Early diagenetic processes in brackish-marine and limnic
sediments of the Gotland Deep (Baltic Sea)

BG0047; EGU2008-A-12017; BG3.4-1FR4P-0047
Al-Raei, A.M.; Böttcher, M.E.; Segl, M.; Volkenborn, V.
Seasonal impact of lugworms (*Arenicola marina*) on bio-
geochemical processes and carbon isotope geochemistry
of intertidal surface sediments: Results from an in-situ
experiment

IS69 - BG3.6/OS19 Organic (DOM & POM) and inorganic geochemistry and ecosystem function: from soils to oceans (co-organized by BG & OS)

Convener: Uher, G.
Co-Convener(s): Battin, T., Tranvik, L., Kim, J.
Lecture Room 20
Chairperson: BATTIN, T.

15:30–15:45; EGU2008-A-10285; IS69 - BG3.6/OS19-1FR4O-001

Köhler, S.J.; Laudon, H.; Buffam, I.; Seibert, J.; Bishop, K.H.

Reproducing temporal variations in TOC concentration in a forested boreal headwater catchment- the effect of soil TOC, temperature, soil wetness and flow.

15:45–16:00; EGU2008-A-03569; IS69 - BG3.6/OS19-1FR4O-002

Gustafsson, Ö.; van Dongen, B.; Vonk, J.; Elmquist, M.; Semiletov, I.

Molecular and radiocarbon compositional variations of the terrestrial organic matter exported from across the Eurasian Arctic by the five Great Russian Arctic Rivers

16:00–16:15; EGU2008-A-11677; IS69 - BG3.6/OS19-1FR4O-003

Laignel, B.; Costa, S.; Lequien, A.; Massei, N.; Durand, A.; Dupont, J.P.; Le Bot, S.

Current inputs of continental sediment to the English Channel and its beaches: A case study of the cliffs and littoral rivers of the Western Paris Basin.

16:15–16:30; EGU2008-A-01845; IS69 - BG3.6/OS19-1FR4O-004

Wu, J.;
Sources and transport of iron to the coastal waters of the northern gulf of alaska

16:30–16:45; EGU2008-A-10669; IS69 - BG3.6/OS19-1FR4O-005

Hansell, D.A.; Carlson, C.A.; Repeta, D.J.; Schlitzer, R.

The role of DOC in the export of carbon to the deep ocean

16:45–17:00; EGU2008-A-10327; IS69 - BG3.6/OS19-1FR4O-006

Schmidt, F.; Koch, B.P.; Elvert, M.; Hinrichs, K.-U.

Molecular variation in dissolved organic matter in sedimentary pore waters at continental shelf systems

17:00 END OF SESSION

IS69 - BG3.6/OS19 Organic (DOM & POM) and inorganic geochemistry and ecosystem function: from soils to oceans (co-organized by BG & OS) – Posters

Convener: Uher, G.
Co-Convener(s): Battin, T., Tranvik, L., Kim, J.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 13:30–15:00
Poster Area BG
Chairperson: BATTIN, T.

BG0048; EGU2008-A-00338; IS69 - BG3.6/OS19-1FR3P-0048

Kulinski, K.; Pempkowiak, J.
Factors affecting vertical distribution of the Dissolved Organic Carbon in the southern Baltic Sea

BG0049; EGU2008-A-02735; IS69 - BG3.6/OS19-1FR3P-0049

Sánchez-García, L.; Gustafsson, Ö.; Cato, I.
Accounting of Black Carbon in continental shelf sediments around Sweden

BG0050; EGU2008-A-03462; IS69 - BG3.6/OS19-1FR3P-0050

Shirokova, L.S.; **Pokrovsky, O.S.**
DOC speciation in boreal rivers and lakes and its link with microbial biomass,

BG0051; EGU2008-A-06208; IS69 - BG3.6/OS19-1FR3P-0051

Tzortziou, M.; Neale, P.; Megonigal, P.; Osburn, C.; Maie, N.; Jaffe, R.

Characteristics and dynamics of dissolved organic matter exported from tidal marsh-estuarine systems

BG0052; EGU2008-A-07516; IS69 - BG3.6/OS19-1FR3P-0052

Mladenov, N.; Pulido-Villena, E.; Morales-Baquero, R.; Ortega-Retuerta, E.; Sommaruga, R.; Reche, I.

Spatial and temporal drivers of dissolved organic matter in high alpine lakes of Sierra Nevada, Spain

BG0053; EGU2008-A-08342; IS69 - BG3.6/OS19-1FR3P-0053

Mil-Homens, M.; Branco, V.; Vale, C.; Boer, W.; Alt-Epping, U.; Abrantes, F.; Vicente, M.

Record of anthropogenic metal fluxes in the Tagus prodelta (Portugal)

BG0054; EGU2008-A-09732; IS69 - BG3.6/OS19-1FR3P-0054

Sánchez-García, L.; de Andrés, J.R.; Martín-Rubí, J.A.; Louchouart, P.

Evaluation of the diagenetic state of marine sediments from the Gulf of Cádiz (SW-Spain) by biomarker study of humic acids.

BG0055; EGU2008-A-10275; IS69 - BG3.6/OS19-1FR3P-0055

Köhler, S.J.; Buffam, I.; Laudon, H.; Bishop, K.H.
Intra- and interannual variability of total organic carbon concentration and flux in two contrasting boreal landscape elements during 1993 to 2001.

BG0056; EGU2008-A-11773; IS69 - BG3.6/OS19-1FR3P-0056

Schlarbaum, T.; Mara, P.; Bahlmann, E.; Emeis, K.
Nitrogen isotope investigations in the Eastern Mediterranean Sea

BG4.1 Biogeochemical feedbacks on global climate change (co-listed in OS)

Convener: Friend, A.
Co-Convener(s): Betts, R., Poulter, B., Lenton, T.
Lecture Room 21
Chairperson: N.N.

15:30–15:45; EGU2008-A-12298; BG4.1-1FR4O-001

Prigent, C.; Papa, F.; Rossow, B.; Matthews, E.
Global wetland dynamic derived from multi-satellite estimates: a 12-year record for hydrological studies and methane emission modelling (solicited)

15:45–16:00; EGU2008-A-06271; BG4.1-1FR4O-002

Petrescu, A.M.R.; van Beek, L.P.H.; van Huissteden, J.; Dolman, A.J.

Modelling CH₄ emissions from arctic wetlands: from a regional to a global scale

16:00–16:15; EGU2008-A-00706; BG4.1-1FR4O-003

Pacifico, F.; Sitch, S.; Jones, C.; Harrison, S.; Sanderson, M.
Interactions between natural hydrocarbon emissions, ozone and climate: towards a fully coupled dynamic earth system model

16:15–16:30; EGU2008-A-02320; BG4.1-1FR4O-004
Keenan, T; Gracia, C; Sabate, S
Mesophyll conductance controls over ecophysiological responses to drought in 6 Mediterranean forest ecosystems – data analysis and modelling

16:30–16:45; EGU2008-A-06267; BG4.1-1FR4O-005
Poulter, B; Heyder, U; Cramer, W
Modelling the sensitivity of seasonal gross primary productivity to water and light limitations along a tropical forest moisture gradient

16:45–17:00; EGU2008-A-06373; BG4.1-1FR4O-006
Zaehle, S; Friend, AD; Friedlingstein, P; Schulz, M
Modelling ecosystem nitrogen dynamics to simulate historical and future terrestrial greenhouse gas budgets

17:00 END OF SESSION

BG4.1 Biogeochemical feedbacks on global climate change (co-listed in OS) – Posters

Convener: Friend, A.
Co-Convener(s): Betts, R., Poulter, B., Lenton, T.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 13:30–15:00
Poster Area BG
Chairperson: N.N.

BG0057; EGU2008-A-07827; BG4.1-1FR3P-0057
Friend, A.D.; GREENCYCLES Project Members
Biogenic feedbacks on the atmospheric concentrations of greenhouse gases: overview of the GREENCYCLES network

BG0058; EGU2008-A-06938; BG4.1-1FR3P-0058
Lourantou, A.; Lavric, J. V.; Schaefer, H.; Köhler, P.; Barnola, J.-M.; Michel, E.; Paillard, D.; Raynaud, D.; Chappellaz, J.
Constraints on the causes of CO₂ rise during deglaciations: atmospheric stable carbon isotope ratio of CO₂ from Antarctic ice cores

BG0059; EGU2008-A-07938; BG4.1-1FR3P-0059
Jerry Tjiputra, JT; Christoph Heinze, CH; Karen Assmann, KA; Ingo Bethke, IB; Christophe Sturm, CS
Analysis of land and ocean carbon cycle feedback to future climate change using an earth system modeling approach

BG0060; EGU2008-A-09045; BG4.1-1FR3P-0060
van der Merwe, H; Friend, A.D.
Quantifying the Effect of Biogeochemical Feedbacks on Global Climate Change

BG0061; EGU2008-A-00235; BG4.1-1FR3P-0061
Kasikowski, T; Poulter, B; Betts, RA; Boucher, O; Venevsky, S; Golding, N
Optimisation and validation of fire model coupled with Hadley Centre General Circulation Model

BG0062; EGU2008-A-02566; BG4.1-1FR3P-0062
Le Page, Y.; Venevsky, S.; Pereira, J.M.C; van der Werf, G.
Spatio-temporal representation of biomass burning in a global fire model. Comparison to satellite data and assessment of the fire-driving assumptions.

BG0063; EGU2008-A-08772; BG4.1-1FR3P-0063
Shannon, S. R.; Lunt, D. J.
Modeling seasonal and interannual changes in mineral dust concentrations using a dynamic global vegetation model

BG0064; EGU2008-A-04247; BG4.1-1FR3P-0064
Keenan, T; Niinemets, U; Gracia, C; Noe, S; Penuelas, J; Sabate, S
European BVOC emissions: A model comparison, and future emission trends from European forests.

BG0065; EGU2008-A-00151; BG4.1-1FR3P-0065
Telszewski, M.; Chazottes, A.; Schuster, U.; Moulin, C.; Watson, A.J.; Bakker, D.C.E.
Near-real time maps of the air to sea CO₂ flux in the North Atlantic

BG0066; EGU2008-A-07929; BG4.1-1FR3P-0066
Gumpenberger, M.
Effects on carbon cycle and vegetation dynamics from woodfuel extraction using a dynamic global vegetation model (LPJmL)

BG0067; EGU2008-A-10003; BG4.1-1FR3P-0067
Sicardi, S
Detecting future changes in ocean circulation from atmospheric oxygen

BG0068; EGU2008-A-06420; BG4.1-1FR3P-0068
García, R.; Keenan, T.; Zaehle, S.; Friend, A.; Gracia, C.; Sabaté, S.
Ecophysiological responses to drought in Mediterranean forest ecosystems: data analysis and the evaluation of model predictions in drought prone environments

BG0069; EGU2008-A-04371; BG4.1-1FR3P-0069
van Huissteden, J.; Hendriks, D.M.D; Petrescu, A.M.R; Rebel, K.T.; Berrittella, C.
Sensitivity analysis of a wetland methane emission process model based on temperate and arctic wetland sites.

BG0070; EGU2008-A-07931; BG4.1-1FR3P-0070
Mikkelsen, TN; Climaite Team
CLIMAITE – a three factor climate change ecosystem manipulation experiment

BG0071; EGU2008-A-01150; BG4.1-1FR3P-0071
Wohlfahrt, G.; Hammerle, A.; Haslwanter, A.; Bahn, M.; Tappeiner, U.; Cernusca, A.
Diffuse vs. direct radiation effects on the ecosystem CO₂ exchange of a mountain grassland: a combined theoretical and experimental study

BG6.4 Biogeochemical interactions in chemosynthetic deep-sea ecosystems: methods, tools and strategies

Convener: Le Bris, N.
Co-Convener(s): Duperron, S., German, C., Bach, W.
Lecture Room 21
Chairperson: N.N.

8:30–8:45; EGU2008-A-12001; BG6.4-1FR1O-001
Bright, M.; Gollner, S.; Le Bris, N.; Riemer, B.; Zekely, J.
Meiovent – hydrothermal vent meiobenthos along a vent flux gradient from the 9°50'N East Pacific Rise region (solicited)

8:45–9:00; EGU2008-A-01515; BG6.4-1FR1O-002
Struck, J. M.; Ramette, A.; Cambon-Bonavita, M.-A.; Zbinden, M.; Dubilier, N.
Epibiotic gamma- and epsilonproteobacteria on the hydrothermal vent shrimp Rimicaris exoculata from the Mid-Atlantic Ridge.

9:00–9:15; EGU2008-A-12137; BG6.4-1FR1O-003
Cunha, M.; Hilario, A.; Rodrigues, C. F.; Moura, C. F.; Genio, L.
The Gulf of Cadiz – an extensive seepage area in the European margin with a vast potential for experimental approaches (solicited)

9:15–9:30; EGU2008-A-12221; BG6.4-1FR1O-004
Van Gaever, S.; Moodley, L.; Pasotti, F.; Willems, A.; Vanreusel, A.
Meiofauna communities associated with cold seeps: understanding their function, adaptation and origin

9:30–9:45; EGU2008-A-04361; BG6.4-1FR1O-005
Laurent, m.c.L.; Gros, o.G.; Brulport, j.p.B; Gaill, f.G.; Le bris, n.L
Sunken wood habitat for thiotrophic symbiosis in mangrove swamps

9:45–10:00; EGU2008-A-08620; BG6.4-1FR1O-006
Connelly, D.; Lilley, M; LeBris, N
Sensor technology for observatories at chemosynthetic environments – reality versus hope! (solicited)

10:00 END OF SESSION

BG6.4 Biogeochemical interactions in chemosynthetic deep-sea ecosystems: methods, tools and strategies – Posters

Convener: Le Bris, N.
Co-Convener(s): Duperron, S., German, C., Bach, W.
Display Time: Friday, 08:00–19:30
Authors in Attendance: Friday, 10:30–12:00
Poster Area BG
Chairperson: N.N.

BG0072; EGU2008-A-05569; BG6.4-1FR2P-0072
Jonckheere, I.G.C
Ecosystem Functioning and Biodiversity in the Deep Sea: The ESF EuroDEEP Programme

BG0073; EGU2008-A-04256; BG6.4-1FR2P-0073
Grünke, S.; Ramette, A.; Boetius, A.
Diversity of mat-forming giant sulfide-oxidizing bacteria in chemosynthetic ecosystems along Europe's continental margins

BG0074; EGU2008-A-12222; BG6.4-1FR2P-0074
Hilario, A.; Rodrigues, C.; Cunha, M. R.
Siboglinidae from the Gulf of Cadiz - an update

BG0075; EGU2008-A-12302; BG6.4-1FR2P-0075
Govenar, B.; Fisher, C. R.; Childress, J. J.; Macko, S. A.; Shank, T. M.
Exploring the role of resource partitioning as a mechanism of maintaining species diversity at hydrothermal vents with stable isotope analysis and molecular identification of gut contents

BG0076; EGU2008-A-11999; BG6.4-1FR2P-0076
Bayon, G.; **Duperron, S.;** Pierre, C.; Boetius, A.
High-resolution trace element profiles in a cold seep vestimentiferan tube

BG0077; EGU2008-A-06600; BG6.4-1FR2P-0077
Duperron, S.; Lorion, J; Samadi, S; Gros, O; Gaill, F
Symbioses between deep-sea mussels (Mytilidae: Bathymodiolinae) and chemosynthetic bacteria: diversity, function and evolution

BG0078; EGU2008-A-09210; BG6.4-1FR2P-0078
Halary, S.; Riou, V; Gaill, F; Boudier, T; Duperron, S
3D FISH for the quantification of methane- and sulphur-oxidising endosymbionts in bacteriocytes of the hydrothermal vent mussel *Bathymodiolus azoricus*

BG0079; EGU2008-A-06507; BG6.4-1FR2P-0079
Riou, V.; Halary, S.; Colaço, A.; Bouillon, S.; Duperron, S.; Bettencourt, R.; Santos, R.S.; Dehairs, F.
Chemotrophic carbon fixation and transfer in the dual endosymbiotic mytilid *Bathymodiolus azoricus* from the Mid-Atlantic Ridge

BG0080; EGU2008-A-11995; BG6.4-1FR2P-0080
Schmidt, C.; Corbari, L.; Compère, P.; Gaill, F.; Le Bris, N.
Biotic and abiotic controls on iron oxide deposition in the gill chamber of the symbiotic vent shrimp *Rimicaris exoculata*

BG0081; EGU2008-A-12370; BG6.4-1FR2P-0081
Verna, C.; Dahlgren, T.; Dubilier, N.
Phylogeny and diversity of symbionts from the whale falls worm *Osedax mucofloris*

BG0082; EGU2008-A-10097; BG6.4-1FR2P-0082
Gros, O.; Université des Antilles et de la Guyane - UMR 7138
Plasticity mechanisms and monitoring of the bacterial population within gill filaments of the shallow water lucinid *Codakia orbiculata*, (Montagu, 1808) after an environmental stress.

BG0083; EGU2008-A-04373; BG6.4-1FR2P-0083
I.c. Maurin, I.c.M.; d. Himmel, d.H; j.l. Mansot, j.l.M; o. Gros, o.G
Characterization by Raman microspectrometry of the extracellular bacterial interactions in marine nematodes (Desmodoridae, Stilbonematidae) from *Thalassia testudinum* environment in Guadeloupe (f.w.i)

BG0084; EGU2008-A-04349; BG6.4-1FR2P-0084
I.c. Maurin, I.c.M.; d. Himmel, d.H; j.l. Mansot, j.l.M; m.c.z. Laurent, m.c.L; o. Gros, o.G
preliminary assumption of sulphur-oxidizing bacterial symbiosis by raman microspectrometry: an application on mangrove swamp meiofauna of guadeloupe (f.w.i.)

BG0085; EGU2008-A-09061; BG6.4-1FR2P-0085
Bienhold, C.; Wenzhöfer, F.; Le Bris, N.; Ramette, A.; Boetius, A.
Wood colonization experiments in the Eastern Mediterranean deep sea

BG0086; EGU2008-A-11997; BG6.4-1FR2P-0086
Pailleret, M.; Saedlou, N.; Privé-Gill, C.; Gaill, F.; Zbinden, M.
Natural and experimental sunken wood: analysis of substrates and associated fauna

BG0087; EGU2008-A-02749; BG6.4-1FR2P-0087
Boulart, C.; Mowlem, M.C.; Connelly, D.P.; Dutasta, J-P.; German, C.R.
A new in-situ methane sensor for the study of hydrothermal plumes based on Surface Plasmon Resonance (SPR)

BG0088; EGU2008-A-11476; BG6.4-1FR2P-0088
Le Bris, N.; Brulport, J.-P.; Laurent, M.; Lacombe, M.; Garcon, V.; Gros, O.; Comtat, M.; Gaill, F.
Autonomous potentiometric sensor for in situ sulfide monitoring in marine sulfidic media
