

EGU General Assembly 2011
Programme Group Programme
IG – Isotopes in Geosciences: Instrumentation and Applications

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Monday, 04 April

HS2.3 – Observational hydrology: Recent development in isotope and other tracer methods (co-listed) – Orals

Convener: Christine Stumpp | Co-Conveners: Markus Weiler

Room: 38

Chairperson: Christine Stumpp, Markus Weiler

- 10:30–10:45 EGU2011-5301
Brian McGlynn and Timothy Covino
 Tracer additions for quantifying stream nitrogen uptake kinetics from ambient to saturation: The physical, biological, and spatio-temporal dynamics of nutrient retention
- 10:45–11:00 EGU2011-11495
Roman Teisserenc, Désirée El Azzi, Issam Moussa, Frédéric Brunet, Luc Lambs, Maritxu Guiresse, and Jean-Luc Probst
 Elemental and isotopic composition of River water during a flood event in agricultural watershed: Insight into pathways of water and sources of terrestrial derived matter.
- 11:00–11:15 EGU2011-6173
Michael Rode, Uwe Kiwel, Steffen Zacharias, Stephan Weise, and Rajesh Shrestha
 New online water quality monitoring techniques for improved hydrological and water quality modelling
- 11:15–11:30 EGU2011-11172
Jay Frentress, Núria Martínez-Carreras, Laurent Pfister, and Jeff McDonnell
 Some Like it Hot: Combining infrared imagery and classic isotopic and geochemical tracers to differentiate sources of streamflow in a small headwater stream (Luxembourg, Europe).
- 11:30–11:45 EGU2011-3056
Ingo Heidbuechel and Peter Troch
 Determination of the Catchment Master Transit Time Distribution With Stable Water Isotopes
- 11:45–12:00 EGU2011-13447
Christoph Külls, Robin Weber, Ofer Dahan, Julian Klaus, and Markus Weiler
 Fast measurement of stable isotope profiles in the unsaturated zone - from equilibrium to flow

HS2.3 – Observational hydrology: Recent development in isotope and other tracer methods (co-listed) – Posters

Convener: Christine Stumpp | Co-Conveners: Markus Weiler

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Christine Stumpp, Markus Weiler

- A277 EGU2011-2338
Yu-Shao Lai and Hsueh-yu Lu
 Rare Earth Elements as Hydrologic Tracers in water from Tatun Volcanoes, Taiwan
- A278 EGU2011-5956
Yu-Ching Liu, Chen-Feng You, Kuo-Fang Huang, Ruo-Mei Wang, Chuan-Hsiung Chung, and Hou-Chun Liu
 Distribution of Boron Isotopes in a Mountainous River Catchment, Southern Taiwan
- A279 EGU2011-5941
Tian-Yue Kuo, Chen-Feng You, Kuo-Fang Huang, Ruo-Mei Wang, Chuan-Hsiung Chung, and Hou-Chun Liu
 Source and re-distribution of zinc isotopes in river catchments, Southern Taiwan
- A280 EGU2011-248
Harald Hofmann and Ian Cartwright
 Detection of spatially variable groundwater inflow in rivers with geochemical tracers: Using major ion chemistry and Radon ^{222}Rn as possible tracer: An example from the Avon and Mitchell rivers, southeast Australia.
- A281 EGU2011-1538
Uwe Morgenstern, Micheal K Stewart, and Roland Stenger
 Dating of Streamwater Using Tritium in a Post Nuclear Bomb Pulse World: Continuous Variation of Mean Transit Time With Streamflow
- A282 EGU2011-9812
Benny Selle, Marc Schwientek, Holger Lange, and Gunnar Lischeid
 Stationary travel times under stationary conditions - tracer experiments in a small headwater catchment at Gårdsjön, Sweden
- A283 EGU2011-5420
Markus Hrachowitz, Huub H.G. Savenije, Thom A. Bogaard, Chris Soulsby, and Doerthe Tetzlaff
 Which information can tracers give on catchment internal processes when used with conceptual models?
- A284 EGU2011-480
Christian Birkel, Chris Soulsby, Doerthe Tetzlaff, Sarah Dunn, and Luigi Spezia
 After the flood: high-frequency sampling reveals the influence of antecedent conditions and diurnal cycles on stream isotope dynamics

- A285 EGU2011-12255
Núria Martínez-Carreras, Jay Frentress, Jean François Iffly, Jeffery McDonnell, Dasa Hlúbiková, Luc Ector, Stefan Uhlenbrook, Lucien Hoffmann, and Laurent Pfister
 Using diatoms for determining the hydrological connectivity between upland, riparian and aquatic zones: application to the Weierbach catchment (Luxembourg)
- A286 EGU2011-12354
Thibaut Blondel, Christophe Emblanch, Yves Dudal, Brigitte Pépin-Donat, Christian Lombard, Jérôme Poulenard, Yves Perrette, Stéphane Gaffet, and Yves Travi
 Spatial and temporal hydrogeological tracing methods from Dissolved Organic Matter (DOM) for karstic hydrosystems. Joint use of fluorescence and Electronic Paramagnetic Resonance (EPR) signals.
- A287 EGU2011-4832
Philipp Stadler, Albrecht Leis, Hermann Stadler, and Hermann Häusler
 The use of environmental isotopes for event monitoring at an overthrust karst aquifer in the Dinarides, north-western Croatia.
- A288 EGU2011-7868
Alberto Gobbi, Daniele Penna, Nicola Mantese, and Marco Borga
 Analysis of catchment response to rainfall and snowmelt by means of isotopic, geochemical and hydrometric data
- A289 EGU2011-7382
Gerhard Markart, Gerhard Bieber, Alexander Roemer, Anna Ita, Birgit Jochum, Klaus Klebinder, Bernhard Kohl, Bernadette Sotier, Monika Strassser, and Klaus Suntinger
 Assessment of bandwidths of shallow interflow velocities in alpine catchments
- A290 EGU2011-10434
Koen Beerten and Dirk Mallants
 Testing the use of unsaturated zones as archives of past infiltration: application to the Campine area, Northern Belgium
- A291 EGU2011-1700
Matthias H. Mueller and Christine Alewell
 Investigating land use effects on soil hydrology in alpine ecosystems by stable isotopes
- A292 EGU2011-9071
Christine Stumpp, Willibald Stichler, Matthias Kandolf, and Jirka Simunek
 Investigating water flow and solute transport heterogeneities in cultivated soils using water isotopes
- A293 EGU2011-13539
Katharina Gimbel, Christoph Külls, and Markus Weiler
 The role of plants in site and catchment isotope response

IG1/BG1.12/SSP2.3 – Stable Isotopes in Geosciences - Open Session, Including Blocks of Special Attention (co-organized) – Orals

Convener: Pier De Groot | Co-Conveners: Jan Smit, Ana-Voica Bojar, Erik Kerstel, Mihaela Melinte-Dobrinescu

Room: 41

Chairperson: Ana-Voica Bojar and Erik Kerstel

- 13:30–13:45 EGU2011-7257
Hauke Vollstaedt, Anton Eisenhauer, André Krabbenhöft, Volker Liebetrau, Florian Böhm, Juraj Farkas, Adam Tomasovych, and Ján Veizer
 The Paleozoic $\delta^{88}\text{Sr}$ record of marine carbonates - Implications to ocean carbonate chemistry and mass extinction events
- 13:45–14:00 EGU2011-9560
Jessica Whiteside, Paul Olsen, and Morgan Schaller
 Millennial- to Milankovitch-scale physiognomic and ecological floral changes associated with the end-Triassic extinction, carbon isotopic anomaly, and eruption of the Central Atlantic Magmatic Province (CAMP)
- 14:00–14:15 EGU2011-6088
Martino Giorgioni, Helmut Weissert, Stefano M. Bernasconi, Peter A. Hochuli, Rodolfo Coccioni, and Christina E. Keller
 Orbital control on carbon cycle and oceanography in the mid-Cretaceous greenhouse time
- 14:15–14:30 EGU2011-10983
Mihaela Melinte-Dobrinescu, Marcos A. Lamolda, Enrique Bernárdez, and Kunio Kaiho
 The Cenomanian-Turonian boundary event in the Tethys realm: insights from geochemical and calcareous nannofossil evidences
- 14:30–14:45 EGU2011-4173
Gernot Friedrichs, Nils Andersen, Meike Becker, and Arne Körtzinger
 CRDS-Based Underway Monitoring of Surface Water $\delta^{13}\text{C}(\text{CO}_2)$ During Two Atlantic Transects: Intercomparison and Gas Matrix Effects

14:45–15:00 EGU2011-9979

David Balslev-Clausen, Minik T. Rosing, and Nabil Saad

Carbon Isotopic composition of rocks measured by optical spectroscopy

IG1/BG1.12/SSP2.3 – Stable Isotopes in Geosciences - Open Session, Including Blocks of Special Attention (co-organized) – Posters

Convener: Pier De Groot | Co-Conveners: Jan Smit, Ana-Voica Bojar, Erik Kerstel, Mihaela Melinte-Dobrinescu

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Jan Smit and Mihaela Melinte-Dobrinescu

A468 EGU2011-12520

Harry Rowe, Rolando Castilleja, Timothy "Jak" Kearns, David Hull, Stephen Ruppel, and Robert Loucks
Preliminary Chemostratigraphic and Stable Isotopic Records from Aptian-Albian and Cenomanian-Turonian Sequences of South Texas

A469 EGU2011-1714

Alexander Lukeneder

New isotope data from the Lower Cretaceous Puez key-section in the Dolomites (Southern Alps; N-Italy)

A470 EGU2011-6185

Martino Giorgioni, Helmut Weissert, Stefano M. Bernasconi, Peter A. Hochuli, Rodolfo Coccioni, Therese I. Garcia, Christina E. Keller, and Maria Rose Petrizzo

Long- and short-term paleoceanographic changes in the Western Tethys and the North Atlantic during the mid-Cretaceous greenhouse time

A471 EGU2011-9680

Thomas Steuber

Strontium-isotope stratigraphy of Tethyan Late Cretaceous carbonate platforms: Numerical ages constrain the evolution of major carbonate producers

A472 EGU2011-3692

Ana-Voica Bojar, Stanislaw Halas, Hans-Peter Bojar, Dan Grigorescu, and Stefan Vasile

Depositional age and palaeoclimatic signal, Upper Cretaceous continental deposits, Haeg basin, South Carpathians: isotopic and lithostratigraphic evidences

A473 EGU2011-10935

Ana-Voica Bojar and Mihaela Carmen Melinte-Dobrinescu

The Cretaceous-Tertiary boundary in the East Carpathians, Romania: geochemical, mineralogical and nannoplankton evidence

A474 EGU2011-5576

Michael Wagreich, Johann Egger, Veronika Koukal, and Mohammed Omar

The Paleocene/Eocene boundary in a high-frequency turbiditic setting (Gosau Group, Austria)

A475 EGU2011-5697

Sanem Açıkalın, ? Ömer Yılmaz, Jan Smit, Faruk Ocakolu, Eliana Fornaciari, Hubert Vonhof, and Sevinç Özkan Altın

Isotopic and Paleontological Investigation of the K-Pg Boundary Section from the Central Sakarya Region (NW Turkey)

A476 EGU2011-1220

Konstantin Horkel, Thomas Unterweissacher, and Fritz Ebner

Can C-isotope fractionation of cryptocrystalline magnesite be controlled by temperature ?

A477 EGU2011-6760

Thomas Unterweissacher and Fritz Ebner

Correlation of stable isotope thermometry and "classical" geothermometers applied on selected ore mineralizations of the Eastern Alps

A478 EGU2011-7573

Stephan Klemme, Horst Marschall, Dorrit Jacob, Stefan Prowatke, and Thomas Ludwig

Some comments on the partitioning of trace elements and the fractionation of boron isotopes between mica and tourmaline

A479 EGU2011-7686

Franziska Aemisegger, Harald Sodemann, Stephan Pfahl, Patrick Sturm, and Heini Wernli

Investigating high-frequency variations in stable isotope composition of atmospheric water vapour

A480 EGU2011-8077

Marzia Michelini, Franco Cucchi, Onelio Flora, Barbara Stenni, Francesco Treu, and Luca Zini

Isotopic composition of precipitation of Friuli-Venezia Giulia (Northeastern Italy)

A481 EGU2011-6782

Janek Landsberg, Daniele Romanini, Elisabeth Iasaksson, Kim Holmen, Harro Meijer, and **Erik Kerstel**

Continuous On-Line Water Vapor Isotope Measurements In Antarctica

- A482 EGU2011-12742
Nabil Saad, Doug Kuramoto, Herb Tobias, Bruce Richman, Tom Brenna, and Richard Zare
 Unique Laser Spectroscopic Approach for High-Precision Compound-Specific Isotope Analysis of $^{13}\text{C}/^{12}\text{C}$ and D/H of Combustion Products
- A483 EGU2011-13002
 Shaun Barker, Gregory Dipple, Feng Dong, and **Douglas Baer**
 Use of laser spectroscopy to measure the $^{13}\text{C}/^{12}\text{C}$ and $^{18}\text{O}/^{16}\text{O}$ compositions of carbonate minerals

IG4/GMPV37 – Isotopic analytical methods, experimental approach, and $^{40}\text{Ar}/^{39}\text{Ar}$ dating in geosciences (co-organized) – Orals

Convener: Olivier Rouxel | Co-Conveners: Emmanuel Ponzevera, Fred Jourdan, Chrystèle Verati, Sylvain Gallet

Room: 41

Chairperson: Fred Jourdan / Olivier Rouxel

- 15:30–15:45 EGU2011-2349
Fei Wang
 $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology on North China craton: respond to the lithospheric thinning ?
- 15:45–16:00 EGU2011-7524
Clare J. Warren, Felix Hanke, and Simon P. Kelley
 Re-evaluating the closure temperature concept in metamorphic rocks: when does $^{40}\text{Ar}/^{39}\text{Ar}$ dating constrain exhumation?
- 16:00–16:15 EGU2011-11841
Dan N. Barfod, Darren F. Mark, and Ross C. Dymock
 Laser step-heating system for dating of young volcanic rocks by the ^{40}Ar - ^{39}Ar method
- 16:15–16:30 EGU2011-6890
Bleuenn Gueguen, Olivier Rouxel, Emmanuel Ponzevera, Jeffry Sorensen, Brandy Toner, Andrey Bekker, and Yves Fouquet
 Nickel isotope variations in natural systems and implications for their use as a geochemical tracer
- 16:30–16:45 EGU2011-7124
Stefan Weyer, Carolina Montoya Pino, Janine Noordmann, Greg Brennecke, Gwyn Gordon, Jens Fiebig, Bas van de Schootbrugge, Laura Wasylenki, and Ariel Anbar
 Application of multiple isotope proxies to reconstruct the paleoredox evolution of the oceans and oceanic basins
- 16:45–17:00 EGU2011-13630
Laure Sangely, Jane Poths, Olivier Bildstein, Firmino Fernandes, Axel Schwanhaeusser, and Takahiko Kitao
 Uranium isotopic analysis in micrometer-size particles using multi-collector Secondary Ion Mass Spectrometry (SIMS)

IG4/GMPV37 – Isotopic analytical methods, experimental approach, and $^{40}\text{Ar}/^{39}\text{Ar}$ dating in geosciences (co-organized) – Posters

Convener: Olivier Rouxel | Co-Conveners: Emmanuel Ponzevera, Fred Jourdan, Chrystèle Verati, Sylvain Gallet

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Emmanuel Ponzevera / Christele Verati

- A484 EGU2011-9006
Mauro Cesar Geraldés, Carlos Eduardo Miranda Mota, Fred Jourdan, Marcelo Santos Salomão, Natasha Stanton, and Cosme Neto
 $^{40}\text{Ar}/^{39}\text{Ar}$ age (64 Ma) of magnetic pole inversion recorded in the Morro de São João alkaline intrusion, Rio de Janeiro, Brazil
- A485 EGU2011-4254
Marnie Forster, Gordon Lister, Lloyd White, and Talat Ahmad
 Analysis of an apparent age spectrum from a pebble within the Indus Formation: a record of exhumation and inversion at the margin of a Himalayan metamorphic core complex
- A486 EGU2011-10216
Jan Wijbrans, Huaning Qiu, Rongguo Hu, and Fraukje Brouwer
 $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology by stepwise crushing
- A487 EGU2011-12926
Simon P. Kelley, Ethan F. Baxter, and Patricia L. Clay
 What are the implications of two diffusive pathways for natural argon in K-feldspar ?
- A488 EGU2011-2849
Fred Jourdan and Uwe Reimold
 The problem of ^{37}Ar & ^{39}Ar recoil redistribution in dating Ca-rich groundmass-like samples

- A489 EGU2011-13233
Rongguo Hu, Jan Wijbrans, Fraukje Brouwer, and Huaning Qiu
Thermal history of Yukahe and Xitieshan UHP belts, North Qaidam, western China.
- A490 EGU2011-3564
Chieh-Yu Wu and Ching-Hua Lo
Evolution of excess argon during shearing event: a case study in the Day Nui Con Voi Metamorphic Complex, Vietnam
- A491 EGU2011-576
Ho-Sun Lee, Young-Sun Song, and Kye-Hun Park
Zircon U-Pb geochronology of Triassic granite gneiss from the central Yeongnam massif, South Korea and its tectonic implications.
- A492 EGU2011-2431
Klaus Jochum, Ulrike Weis, Brigitte Stoll, Dmitry Kuzmin, Dorrit Jacob, Andreas Stracke, Karin Birbaum, Daniel Frick, Detlef Günther, and Jacinta Enzweiler
New reference values for NIST SRM 610-617 glasses following ISO guidelines
- A493 EGU2011-4587
Sérolène Saulnier, Claire Rollion-Bard, Nathalie Vigier, and Marc Chaussidon
Mg isotope fractionation during calcite precipitation: an experimental study.
- A494 EGU2011-5419
Denis Scholz, Joachim Krause, Klaus Peter Jochum, Yvonne Kocot, Jan Tolzmann, and Meinrat Andreae
Determination of U-isotope composition of silicate and carbonate reference materials for in-situ LA-ICPMS analysis by high precision MC-ICPMS
- A495 EGU2011-7533
Qichao Yang, Klaus Jochum, Brigitte Stoll, Ulrike Weis, Dmitry Kuzmin, Michael Wiedenbeck, and Heike Traub
BAM-S005 Type A and B: New silicate reference glasses for microanalysis
- A496 EGU2011-12576
Thomas Meisel and Chris W. Dale
Hydrofluoric acid is essential for accurate Re-Os isotopic analysis
- A497 EGU2011-13282
Anat Bernstein, Orfan Shouakar-Stash, Karin Ebert, Christine Laskov, Daniel Hunkeler, Simon Jeannotat, Kaori Sakaguchi-Söder, Stefan Cretnik, Ramon Aravena, and **Martin Elsner**
Compound-Specific Chlorine Isotope Analysis: A Method Comparison Study
- A498 EGU2011-13977
Olivier Rouxel, Raphaëlle Escoube, Huawen Qi, Stefan Lalonde, and Emmanuel Ponzevera
Germanium isotopic variations in seafloor hydrothermal systems and sedimentary rocks

SSP1.3 – Palaeoclimate records from speleothems: analytical techniques, proxies, and application (co-listed) – Orals

Convener: Dirk Hoffmann | Co-Conveners: Denis Scholz

Room: 41

Chairperson: Dirk Hoffmann

- 10:30–10:45 EGU2011-14044
Christoph Spötl, Ronny Boch, Marc Luetscher, and Yuri Dublyansky
Progress and challenges of speleothem research in alpine caves
- 10:45–11:00 EGU2011-9469
Hubert Vonhof
Recent advances in fluid inclusion isotope analysis of speleothem calcite
- 11:00–11:15 EGU2011-8183
James Baldini
Using a high-resolution cave drip water dataset to clarify the link between trace element concentrations in stalagmite calcite and climate
- 11:15–11:30 EGU2011-6193
Michael Rogerson, Dirk Hoffmann, Christoph Spötl, Derek Vance, Anne Osborne, Gina Moseley, Marc Luetscher, and Nuri Fello
Enhanced humidity in coastal Libya during MIS 3
- 11:30–11:45 EGU2011-4124
Anton Vaks, Oxana Gutareva, Sebastian Breitenbach, Erdenedalai Avirmed, Alexander Osinzev, Andrew Mason, and Gideon Henderson
Siberian and Mongolian paleoclimate: New data from speleothems
- 11:45–12:00 EGU2011-1426
Philip van Beynen, **Derek Ford**, and Henry Schwarcz
Annual laminae as measured using fluorescence in historic stalagmites from Baradla Cave, Aggtelek National Park, Hungary.

SSP1.3 – Palaeoclimate records from speleothems: analytical techniques, proxies, and application (co-listed) –

Posters

Convener: Dirk Hoffmann | Co-Conveners: Denis Scholz

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Denis Scholz

- A505 EGU2011-433
Vanessa Johnston, Andrea Borsato, and Christoph Spötl
 Interglacial speleothems from Trentino, Italy: Preliminary dating and stable isotope results.
- A506 EGU2011-864
Isabelle John, William D McCoy, Slobodan Markovi?, and Wilfried Endlicher
 Late-Quaternary Speleothem Records from the Balkan Peninsula - Potential, Objectives and First Results
- A507 EGU2011-3055
Yuri Dublyansky, Alexander Klimchouk, Elisaveta Timokhina, and Christoph Spötl
 Isotopic indications of water-rock interaction in the hypogene Tavrskaya cave, Crimea, Ukraine
- A508 EGU2011-7027
Sylvia Riechelmann, Dieter Buhl, Dana F.C. Riechelmann, Christoph Spötl, Andrea Schröder-Ritzrau, Detlev K. Richter, and Adrian Immenhauser
 Mg-isotope fractionation in a karst system: Field experiments at Bunker Cave (Germany)
- A509 EGU2011-3905
Cristina Veiga-Pires, Bassam Ghaleb, Jean-François Hélie, Delminda Moura, Joaquim Luis, and Claude Hillaire-Marcel
 A first Last Glacial Maximum to Younger Dryas stalagmite record from southern Portugal
- A510 EGU2011-7111
Heather Stoll and the Asturias speleothem Team
 Integrating modern monitoring, cave mapping, and seasonal resolution trace element records in recent speleothems to interpret speleothem climate records from the last millennium to the penultimate glacial cycle in Northwest Spain
- A511 EGU2011-11750
Alexander Baker, James Baldini, and Dave Matthey
 Modelling stalagmite growth rate and oxygen isotope composition
- A512 EGU2011-11772
Harry Rowe, Bruce Dahlin, Hai Cheng, Eugene Perry, Guadalupe Velazquez, and Gregory Springer
 Stalagmites from the Northwest Yucatan Peninsula, Mexico: Progress and Problems with Resolving the Paleoenvironmental Record of the Last Millennium
- A513 EGU2011-13658
Gyöngyvér Szanyi, Szabolcs Leél-?ssy, and Gergely Surányi
 Uranium-series ages from the Pal-voelgyi Cave, Budapest, Hungary

Tuesday, 05 April

IG2 – Non-mass dependent isotope fractionation and related isotope anomalies – Orals

Convener: Jan Kaiser | Co-Conveners: Matthew Johnson, Joel Savarino

Room: 41

Chairperson: Jan Kaiser

- 10:30–10:45 EGU2011-1385
William Vicars, Sourendra Bhattacharya, Joseph Erbland, and Joël Savarino
 Measurement of the oxygen isotopic anomaly of tropospheric ozone using a nitrite-coated filter
- 10:45–11:00 EGU2011-5269
Sasadhar Mahata, Mao-Chang Liang, and Chung-Ho Wang
 Determination of triple oxygen isotope composition of tropospheric CO₂
- 11:00–11:15 EGU2011-6215
Balázs Horváth, Magdalena Hofmann, Sören Hinrichsen, and Andreas Pack
 Triple oxygen isotope composition of carbon dioxide from various anthropogenic sources and in urban air
- 11:15–11:30 EGU2011-9766
Renato Winkler, Amaelle Landais, Frédéric Prié, Barbara Stenni, Andrew Moy, Tas Van Ommen, Elise Fourré, Philippe Jean-Baptiste, Jean-Jacques Beley, and Jean Jouzel
 Temporal and spatial 17O-excess variations reflect changes in the hydrological cycle except in remote central east Antarctica
- 11:30–11:45 EGU2011-5398
Sebastian Danielache, Shohei Hattori, Matthew Johnson, Yuichiro Ueno, and Naohiro Yoshida
 Ultraviolet Spectroscopy of 32S, 33S, 34S and 36S Sulfur Dioxide: Absorption Cross Sections at 190-220 nm and the isotopic fractionations in the photodissociation reaction.
- 11:45–12:00 EGU2011-13570
James Lyons
 Modeling MIF during CO photolysis using line-by-line spectra: Implications for the early solar system

IG2 – Non-mass dependent isotope fractionation and related isotope anomalies – Posters

Convener: Jan Kaiser | Co-Conveners: Matthew Johnson, Joel Savarino

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Joël Savarino

- A466 EGU2011-600
Carl Meusinger, Joël Savarino, and Matthew Johnson
 Photolysis of Nitrate in Greenland Snow
- A467 EGU2011-2423
Tesfaye Berhanu, Joël Savarino, and Souendra Bhattacharya
 Isotopic anomaly transfer during the NO₂ + O₃ → NO₃ + O₂ reaction
- A468 EGU2011-3616
 Rémy Jost, Sourendra Bhattacharya, and **Joel Savarino**
 Experimental determination of photo-dissociative isotopic fractionation of nitrate
- A469 EGU2011-5358
Shohei Hattori, Sebastian O. Danielache, Matthew S. Johnson, Henrik Kjaergaard, and Naohiro Yoshida
 Ultraviolet absorption cross sections of isotopically substituted carbonyl sulfide species: OC32S, OC33S, OC34S, and O13CS
- A470 EGU2011-6161
Magdalena Hofmann, Balázs Horváth, Sören Hinrichsen, and Andreas Pack
 Temperature dependence of the triple oxygen isotope equilibrium fractionation between carbon dioxide and water and its implication on the triple oxygen isotope signature of tropospheric carbon dioxide
- A471 EGU2011-8818
Sebastian Danielache, Shohei Hattori, Matthew Johnson, Yuichiro Ueno, and Naohiro Yoshida
 Ultraviolet Spectroscopy of 32S, 33S, 34S and 36S Sulphur Dioxide: Absorption Cross Sections in the 250-330 nm and the isotopic fractionations of the SO₂* reaction.
- A472 EGU2011-9243
Osamu Abe and Jan Kaiser
 Isotopic composition of atmospheric oxygen
- A473 EGU2011-9407
Dorota Mrozek and Thomas Röckmann
 Determination of Δ17O in stratospheric CO₂ using oxygen isotope exchange with CeO₂

- A474 EGU2011-13195
Douglas Blackie, Glenn Stark, James R Lyons, Juliet C Pickering, Peter L Smith, and Anne P Thorne
 Laboratory Measurements of High Resolution Photoabsorption Cross-Sections of Isotopologues of SO₂
- A475 EGU2011-13712
Roslyn Forecast, Johan A. Schmidt, Henrik Hartman, Hampus Nilsson, Sven Hultdt, and Matthew S. Johnson
 Absorption cross section measurements of CO₂ isotopologues ¹³CO₂ and C¹⁸O₂ in the wavelength range 150-186 nm
- A476 EGU2011-13820
Laura Campisi and Jan Kaiser
 Nitrate isotope anomaly as tracer of biogeochemical nitrogen cycling
- A477 EGU2011-13890
Shyam Ranjan and Markus Leuenberger
 Testing of a continuous technique for triple water isotope determination
- A478 EGU2011-13998
Marion Früchtl and Thomas Röckmann
 Laboratory measurements of the anomalous isotopic composition of ozone
- A479 EGU2011-14000
Corentin Reutenauer and Thomas Blunier
 Characterization of the selectivity of a hollow fiber perovskite membrane: development of a new extraction and measurement system for triple isotopic composition of oxygen
- A480 EGU2011-14118
Denise Mahler, Carl Meusinger, Sebastian Danielache, Yuichiro Ueno, Remy Jost, and Matthew S. Johnson
 Absorption Cross Sections of Sulfur Dioxide Isotopologues and the Dual Beam Spectrometer
- A481 EGU2011-14119
 Johan A. Schmidt, **Matthew S. Johnson**, and Sebastian Danielache
 Atmospheric Oxidation of Carbonyl Sulfide and Associated Isotope Effect

IG3/AS4.15 – Stable Isotopes in Atmospheric Research (co-organized) – Orals

Convener: Ralf Koppmann | Co-Conveners: Astrid Kiendler-Scharr, Thomas Röckmann

Room: 41

Chairperson: Astrid Kiendler-Scharr

- 08:30–08:45 EGU2011-14097
Ingeborg Levin, Cordelia Veidt, Christian Poß, Renate Heinz, Bruce H. Vaughn, James W.C. White, Gordon Brailsford, Tony Bromley, Dave Lowe, Rebecca Fisher, and David Lowry
 Long-term observations of stable isotopes in atmospheric methane - how robust are the reported trends?
- 08:45–09:00 EGU2011-13781
Celia Sapart, Patricia Martinerie, Thomas Röckmann and the NEEM firn air collaborators Team
 Understanding the CH₄ and N₂O budget over the last 50 years with stable isotope measurement of firn air
- 09:00–09:15 EGU2011-6917
Ashley Jones, Kaley A. Walker, Makoto Suzuki, Yasko Kasai, Masato Shiotani, Chris Boone, Peter Bernath, Gloria Manney, and Xing Shuo Zhai
 An intercomparison study of isotopic ozone profiles from the ACE-FTS and JEM-SMILES instruments.
- 09:15–09:30 EGU2011-9679
Joachim Mohn, Béla Tuzson, Pascal Wunderlin, Jan Reent Köster, Albert Manninen, and Lukas Emmenegger
 Laser spectroscopic analysis of ambient N₂O isotopomers for source identification
- 09:30–09:45 EGU2011-14098
Jörg Steinwagner, Thomas Röckmann, and Gabriele P. Stiller
 Using HDO-HHO correlations to examine stratospheric chemistry and transport processes
- 09:45–10:00 EGU2011-679
Rahul Peethambaran and Prosenjit Ghosh
 Pattern in isotopic ratio of Indian Summer Monsoon Rainfall (ISMR) 2010 capturing the origin of moisture source; a case study from Southern India

IG3/AS4.15 – Stable Isotopes in Atmospheric Research (co-organized) – Posters

Convener: Ralf Koppmann | Co-Conveners: Astrid Kiendler-Scharr, Thomas Röckmann

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Ralf Koppmann

- A482 EGU2011-6916
Stefan G. Huber, Markus Greule, and Frank Keppler
 Stable hydrogen-isotope analysis of methyl chloride emitted from leaves using continuous flow gas chromatography-isotope ratio mass spectrometry
- A483 EGU2011-5121
Jan Kaiser, Johannes Laube, Martin Martin, and James Lockhart
 Chlorine isotope fractionation during photolysis of difluorodichloromethane (CFC-12)
- A484 EGU2011-7750
Alina Jasek, Miroslaw Zimnoch, Zbigniew Gorczyca, and Kazimierz Rozanski
 Seasonal variability of soil CO₂ flux and its stable isotope composition in an urban area: case study from Krakow, southern Poland
- A485 EGU2011-8841
Elisa Sosa Trujillo, Juan Carlos Guerra García, and María Teresa Arencibia Pérez
 Isotopic Composition of Rainwater in Subtropical Region, Tenerife, Canary Islands
- A486 EGU2011-8715
Frank Jäger, Olaf Gluschke, and Rainer Doll
 FTIR- and NDIR-Spectroscopy measurements on environmental air. How accurate are ¹³CO₂ isotope ratio and trace gas measurements with an outdoor instrument ?
- A487 EGU2011-8504
Sergey Gromov, Patrick Jöckel, Rolf Sander, and Carl Brenninkmeijer
 Global stable isotope composition of CO: comprehensive modelling with the ECHAM/MESSy Atmospheric Chemistry (EMAC) GCM
- A488 EGU2011-13856
Anneke Batenburg, Elena Popa, Alex Vermeulen, Pim van den Bulk, Piet Jongejan, and Thomas Röckmann
 Measurements of atmospheric molecular hydrogen and its isotopic composition at the Cabauw tall tower in the Netherlands
- A489 EGU2011-13857
Sylvia Walter, Stephan Laukenmann, Alfons Stams, and Thomas Röckmann
 The isotopic signature of biologically produced Hydrogen and its impact to the atmosphere
- A490 EGU2011-13938
Supun Pathirana and Thomas Röckmann
 A Novel Analytical System for Studying the Stable Isotopes of Carbon Monoxide using CF-IRMS
- A491 EGU2011-9976
Marc Krebsbach, Ralf Koppmann, Peter Knieling, Christian Linke, Marcel vom Scheidt, and Holger Spahn
 First Measurements of Stable Carbon Isotope Ratios of VOC in the UT/LMS aboard HALO
- A492 EGU2011-11256
Holger Spahn, Marc Krebsbach, Christian Linke, Robert Wegener, and Ralf Koppmann
 Stable Carbon Isotope Ratios of Methanol in the Atmosphere
- A493 EGU2011-4189
Axel Horst, Henry Holmstrand, Per Andersson, August Andersson, Daniel Carrizo, Brett Thornton, Asher Wishkerman, Frank Keppler, and Örjan Gustafsson
 Compound specific bromine isotope analysis of methyl bromide: method development and initial applications toward plant emissions and the Arctic troposphere
- A494 EGU2011-10453
Andrius Garbaras, Ruta Bariseviciute, Jonas Matijosius, Saugirdas Pukalskas, Andrius Suchanka, and Vidmantas Remeikis
¹³C values of size-segregated aerosol particles emitted by the internal combustion engine
- A495 EGU2011-10802
Nicholas Deutscher, Stephen Parkes, Camille Risi, David Griffith, Christian Frankenberg, Justus Notholt, and Nicholas Jones
 Intercomparing Isotopic Water Vapour Measurements to determine spatial and temporal representativity
- A496 EGU2011-13331
Matt Sweeney, Chris Rella, Eric Crosson, Gregor Hsiao, Joe Galewski, and David Noone
 Real-time Stable Isotope Analysis of Atmospheric Water Vapor

IG13/BG2.15/SSS6.2 – Isotope techniques for understanding wetlands and agricultural catchments (co-organized) – Orals

Convener: Philippe Negrel | Co-Conveners: Thomas Hein, Mari Ito, Randall Hunt, Marisol Manzano, Roland Bol, Guido Wiesenberger, Delphine Derrien

Room: 41

Chairperson: Philippe Négrel; Guido Wiesenberger

13:30–13:45 EGU2011-552

Christine Mukwaya

Identification of sources of water recharging a Lacustrine wetland; Lake Kyoga

- 13:45–14:00 EGU2011-879
Emilia Bocanegra, Daniel Martínez, Asunción Romanelli, and Mauricio Quiroz Londoño
 Isotope techniques and flow modelling for the assessment of groundwater-wetland interactions in the Pampa Plain, Argentina. "La Salada"
- 14:00–14:15 EGU2011-4845
Emmanuelle Petelet-Giraud and Philippe Negrel
 Surface Water - Groundwater Interactions in Wetlands: Sr Isotope Constraints
- 14:15–14:30 EGU2011-6898
Marisol Manzano, Leticia Rodríguez, Javier Heredia, Luís S. Vives, Juan Nittman, M^a Emília Zabala, Pradeep Agarwal, and Luís Araguás
 Hydrochemical and isotopic assessment of the Iberá hydrogeological system in NE Argentina
- 14:30–14:45 EGU2011-7782
Nina Welti, Elisabeth Bondar-Kunze, Matthias Mair, Wolfgang Wanek, Patricia Bonin, Gilles Pinay, and Thomas Hein
 Reconnection of Danube Floodplains: Use of stable isotopes to determine the effects on nitrogen cycling
- 14:45–15:00 EGU2011-8768
Martin Šanda, Michal Dohnal, and Milena Císlerová
 Hydrological functioning of the mountainous peatlands - oxygen isotopes study
- Chairperson: Delphine Derrien; Philippe Négrel
- 15:30–15:45 EGU2011-9267
Babasola Ajiboye, Therese McBeath, Jason Kirby, Samuel Stacey, Fien Degryse, and Michael McLaughlin
 The use of stable isotopes to quantify macro- and micronutrient uptake from compound fertilizers
- 15:45–16:00 EGU2011-11501
Jan Reent Köster, Reinhard Well, Albert Manninen, Roland Bol, Klaus Dittert, Lukas Emmenegger, Béla Tuzson, Laura Cárdenas, Karl Hermann Mühling, and Joachim Mohn
 Isotopomer analysis of soil derived N₂O - comparative measurements using QCLAS and IRMS techniques
- 16:00–16:15 EGU2011-12552
Randall Hunt, Michael Fienen, and John Walker
 The Value of Natural Tracers for Parameter Estimation in a Creek-Wetland Complex
- 16:15–16:30 EGU2011-12555
Isabel Muñoz, María Bascones, Roger Puig, Neus Otero, and Albert Soler
 Dual isotope approach for tracing nitrate pollution in a vulnerable zone in La Alcarria (Madrid, Spain)
- 16:30–16:45 EGU2011-6045
Eric Crosson, David Balslev-Clausen, and John Dore
 A new analyzer to measure the abundance of ¹⁴N¹⁵N¹⁶O and ¹⁵N¹⁴N¹⁶O relative to ¹⁴N¹⁴N¹⁶O to help elucidate microbial N₂O dynamics in terrestrial ecosystems.
- 16:45–17:00 EGU2011-6789
Horacio Higuera, Marisol Manzano, Emílio Custodio, Iker Juárez, Roger Puig, and Ramón Aravena
 Isotopic assessment of the impact of agriculture on the hydrology of the aquifer and wetlands at the Doñana Ramsar site, SW Spain

IG13/BG2.15/SSS6.2 – Isotope techniques for understanding wetlands and agricultural catchments (co-organized) –

Posters

Convener: Philippe Negrel | Co-Conveners: Thomas Hein, Mari Ito, Randall Hunt, Marisol Manzano, Roland Bol, Guido Wiesenberg, Delphine Derrien

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Marisol Manzano, guido.wiesenberg

- A497 EGU2011-3725
Pierre-Joseph Hatton, Samuel Bodé, Delphine Derrien, Nicolas Angeli, Louisette Gelhaye, Bernd Zeller, and Pascal Boeckx
 The role of microorganisms in the incorporation of carbon into mineral-organic associations
- A498 EGU2011-3786
Philippe Negrel, Martin Šanda, Romain Millot, and Alena Kulasova
 Detecting flow processes in peatlands using Li isotopes
- A499 EGU2011-3886
 Agnès Brenot, **Philippe Negrel**, Romain Millot, and Clotilde Bertin
 Stable (O, H) and strontium isotope tracing of the Narces de la Sauvetat peatland (Massif Central, France) water fluxes

- A500 EGU2011-4868
Emmanuelle Petelet-Giraud and Philippe Negrel
Multi-isotopes systematics to constrain surface water-groundwater interactions in an alluvial plain: the Loire River case
- A501 EGU2011-6080
Silke Hafner, Sebastian Unteregelsbacher, Xingliang Xu, Xiaogang Li, Georg Guggenberger, Georg Mieke, and **Yakov Kuzyakov**
Effect of grazing on C partitioning in Tibetan montane pasture revealed by ¹³CO₂ pulse labeling
- A502 EGU2011-10020
Miryam Martinez and Iñaki Antiguada
Understanding the influence of land use and geology on hydrochemistry and hydrodynamic of Salburua wetland (Isotope techniques).
- A503 EGU2011-10646
Cristina Pérez Bielsa and Luis Javier Lambán Jimenez
Estaña Lakes and Estopiñán aquifer hydrogeological study advances (Huesca, España).
- A504 EGU2011-13299
Mari Ito, Philippe Negrel, Thomas Hein, Randall Hunt, Marisol Manzano and the Participants of CRP on hydrological processes in wetlands Team
IAEA Coordinated Research Project investigates hydrological processes in various wetlands in the world
- A505 EGU2011-10912
Michaela Dippold, **Yakov Kuzyakov**, and Mikhail Biryukov
Short-term transformation of alanine in soil assessed by position-specific labeling
- A506 EGU2011-14079
Guido Wiesenberger, Maxim Dorodnikov, Yakov Kuzyakov, and Andreas Fangmeier
Turnover and stabilization of organic carbon and plant derived alkanes in soil density fractions
- A507 EGU2011-14018
Agnès Brenot and **Emmanuelle Petelet-Giraud**
Groundwater contribution to riverine wetlands in a chalk area: geochemical and isotopic evidences.
- A508 EGU2011-12848
Janine Kettering, Sina Berger, Bernd Huwe, Ralf Kiese, Yakov Kuzyakov, and Marianne Ruidisch
Nitrate leaching in intensive dryland agriculture under monsoon climate: a suction lysimeter study
- A509 EGU2011-14023
Laurence Gourcy, Agnès Brenot, and **Emmanuelle Petelet-Giraud**
Isotopic and geochemical tools for characterizing surface water-groundwater relationships in la Bassee floodplain area (Seine River Basin, France)
- A510 EGU2011-3797
Philippe Negrel, Romain Millot, Agnès Brenot, and Clotilde Bertin
Lithium isotopes: a new tracer of groundwater circulation in a peat land
- A511 EGU2011-13596
John Walker, Randall Hunt, Seann McClure, Christopher Lowry, and Mary Anderson
Characterizing a Northern Temperate fen using multiple tracers, Allequash Creek, Northern Wisconsin, USA
- A512 EGU2011-13123
Gregor Hsiao, Lee Heng, and Dave Williams
New Experimental Approaches to Measuring Plant-Extracted Waters

BG1.2/IG17 – Application of stable isotopes in biogeosciences (co-sponsored by EAG) (co-organized) – Orals

Convener: Michael E. Böttcher | Co-Conveners: Steven Bouillon, Enno Schefuß, Gerd Gleixner, Albert Benthien, Martin Werner

Room: 23

Chairperson: Enno Schefuß, Michael E. Böttcher

- 08:30–08:45 EGU2011-7480
Gustavo Saiz, Iain Goodrick, Christopher Wurster, Paul Nelson, Jonathan Wynn, and Michael Bird
Hydrogen Pyrolysis as a new tool to assess the abundance and isotopic composition of Pyrogenic Carbon
- 08:45–09:00 EGU2011-6531
Nikolai Pedentchouk, Kirill Peskov, and Tracy Lawson
The effect of light intensity on the ¹³C/¹²C and D/H compositions of leaf wax n-alkanes in Arabidopsis thaliana: Implications for palaeoclimatic studies
- 09:00–09:15 EGU2011-2569
Dirk Sachse and Ansgar Kahmen
'Biological noise' and (paleo)hydrological information in leaf wax lipid D/H ratios - insights from transect studies and greenhouse experiments

- 09:15–09:30 EGU2011-7644
Jerome Kaiser, Helge. W. Arz, Frank Lamy, Rolf Kilian, Andrea Vieth, and Heinz Wilkes
 Holocene humidity changes in southernmost Chile as implied by hydrogen isotope ratios of higher plant leaf waxes
- 09:30–09:45 EGU2011-420
Josia Jacob and Prosenjit Ghosh
 $\delta^{13}\text{C}$ in the benthic bivalve shells as indicators of sedimentary organic carbon accumulation - A case study from the Western Continental Shelf of India
- 09:45–10:00 EGU2011-6081
Patricia Grasse, Claudia Ehlert, Evgeniya Ryabenko, and Martin Frank
 Silicon isotopes as a tracer for Silicate Utilization in the Peruvian Upwelling

COFFEE BREAK

Chairperson: Michael E. Böttcher

- 10:30–10:45 EGU2011-14108
Julia Gebert, Cindy Streblow, and Eva-Maria Pfeiffer
 Impact of gas transport on fractionation of carbon stable isotopes related to the microbial oxidation of methane in soils
- 10:45–11:00 EGU2011-8187
Ulrich Wortmann and Boris Chernyavsky
 The significance of isotope specific diffusion coefficients in reaction-transport models describing microbial sulfur isotope fractionation in porous sediments
- 11:00–11:15 EGU2011-2168
Alexey Kamysnyy, Aubrey Zerkle, Zahra Mansaray, Irena Ciglene?ki, Elvira Bura-Naki?, James Farquhar, and Timothy Ferdelman
 Biogeochemical sulfur cycling in the water column of a shallow stratified sea-water lake: Speciation and quadruple sulfur isotope composition
- 11:15–11:30 EGU2011-2605
Bart Veuger, Dick van Oevelen, and Jack J. Middelburg
 Long-term fate of microbial nitrogen, carbon, hydrolysable amino acids, fatty acids, and carbohydrates in sediment
- 11:30–11:45 EGU2011-7769
Timothy Knowles, David Chadwick, Roland Bol, and Richard Evershed
 Organic N cycling revealed through ^{15}N , ^{13}C -stable isotope probing of the soil amino acid metabolome
- 11:45–12:00 EGU2011-12045
Birgit Adam, Niculina Musat, Helle Ploug, Cristina L. Moraru, Tomas Vagner, Gaute Lavik, Lubos Polerecky, and Marcel M.M. Kuypers
 A single cell nanoSIMS view on the transfer of fixed nitrogen to bacteria associated with filamentous N-fixing cyanobacteria in the Baltic Sea

BG1.2/IG17 – Application of stable isotopes in biogeosciences (co-sponsored by EAG) (co-organized) – Posters

Convener: Michael E. Böttcher | Co-Conveners: Steven Bouillon, Enno Schefuß, Gerd Gleixner, Albert Benthien, Martin Werner

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Michael E. Böttcher, Gerd Gleixner, Enno Schefuß

- BG1 EGU2011-6863
Martin Werner, Petra M. Langebroek, and Gerrit Lohmann
 High-resolution water isotope modelling on a global scale
- BG2 EGU2011-4277
Enno Schefuß, Alexander Knohl, Ansgar Kahmen, and Dirk Sachse
 Testing leaf-wax lipids in aerosols as eco-hydrological monitors
- BG3 EGU2011-4876
Robert Field, Dylan Jones, and Derek Brown
 The effects of post-condensation exchange on the isotopic composition of water in the atmosphere
- BG4 EGU2011-9146
André Paul, Stefan Mulitza, Trond Dokken, Thorsten Kiefer, Claire Waelbroeck, and Mara Weinelt
 Can we use $\delta^{18}\text{O}$ and temperature reconstructions to confidently estimate paleo-density?

- BG5 EGU2011-9570
Maureen Conte and John C Weber
Latitudinal and temporal patterns in terrestrial photosynthetic discrimination assessed by the carbon isotopic composition of plant leaf wax aerosols
- BG6 EGU2011-12504
Michael Zech, Bruno Glaser, Dieter Juchelka, Karsten Kalbitz, Christoph Mayr, Mario Tuthorn, and Roland Werner
Development of a novel tool for paleoclimate research based on compound-specific $\delta^{18}\text{O}$ analyses of (hemi-)cellulose-derived monosaccharides
- BG7 EGU2011-11699
Michael Zech, Nikolai Pedentchouk, Björn Buggle, Katharina Leiber, Karsten Kalbitz, Slobodan Markovic, and Bruno Glaser
Effect of leaf litter degradation and seasonality on D/H isotope ratios of n-alkane biomarkers
- BG8 EGU2011-5711
Grzegorz Skrzypek, Andrzej Wisniewski, and Pauline Grierson
Reconstruction of paleotemperature for a Palaeolithic site - evaluation of uncertainties in calculation based on phosphates' stable oxygen isotope composition
- BG9 EGU2011-966
Cristina Puscas, Zelalem Bedaso, Cristian Roman, Iosif Ferencz, and Ciprian Stremtan
Seasonal Variations in C and O Stable Isotopes in Domesticated and Wild Mammalian Tooth Enamel from the Outskirts of the Roman Empire
- BG10 EGU2011-3146
Stefan Ziegler, Dorrit Jacob, and Markus Boner
Isoscapes: a panacea to determine the provenance of illegally traded ivory?
- BG11 EGU2011-3798
Ana Colaço, Joel Bried, Eva Giacomello, Paolo Lombardi, Ana Martins, Filipe Porteiro, Ricardo Serrão Santos, Mónica Silva, Fernando Tempera, and Gui Menezes
Trophodynamic studies of the CONDOR seamount (Azores , Portugal, North Atlantic)
- BG12 EGU2011-12721
Karol Kuliński, Monika Kłoda, Wojciech Walkusz, and Joanna Legeżyńska
How does winter conditions change shallow benthic food webs in high Arctic - stable isotopes approach.
- BG13 EGU2011-11551
Priscillia Semaoune, Mathieu Sebilo, Joëlle Templier, and Sylvie Derenne
Variation of nitrogen isotopic composition of Maize supplied with ammonium or nitrate
- BG14 EGU2011-3956
June Chao, Bernhard Mayer, and Cathy Ryan
Isotopic apportionment of nitrate sources in the Bow River, Alberta, Canada
- BG15 EGU2011-7897
Aurélien Gicquel, **André-jean Francez**, Thomas Delhay, Gérard Gruau, Vincent Hallaire, and Françoise Binet
Understanding the fate and linkage of N and S in earthworm engineered peat soil using nanoSIMS
- BG16 EGU2011-6643
Aubrey Zerkle, Jennifer Macalady, Daniel Jones, and James Farquhar
S isotope investigation of sulfur cycling in Frasassi caves: A case study of chemotrophic sulfide oxidation
- BG17 EGU2011-7231
Nguyen Manh Thang, Michael Formolo, Sabine Flury, Bo Barker Joergensen, and Timothy Ferdelman
Biogeochemistry of sulfur in Gdansk Bay sediments (Baltic Sea)
- BG18 EGU2011-8757
Susann Vogler, Olaf Dellwig, Peter Escher, Ulrich Struck, Stephan M. Weise, Beata Szymczycha, Lech Kotwicki, Carl-Magnus Mörrh, Michael E. Böttcher, and Michael Schlüter
A multi-isotope (C, O, S, H) and trace metal study in coastal permeable sands affected by Submarine Groundwater Discharge
- BG19 EGU2011-4964
Michael E. Böttcher, Peter Escher, Nicole Kowalski, Olaf Dellwig, Andrea Bauer, Joanna J. Waniek, Alexander Stark, and Zhen Xia
Stable carbon isotopes in DIC as indicators for biogeochemical carbon cycling in the Beibu Gulf, South China Sea
- BG20 EGU2011-8118
Mirjam Studer, Samuel Abiven, Rolf T. W. Siegwolf, and Michael W. I. Schmidt
Multiple-Isotope labelling (^{13}C , ^{18}O , ^2H) in a Controlled Environment (MICE) as a new tool for studying the allocation of organic molecules within the plant-soil system?
- BG21 EGU2011-12786
Thibault Lambert, Anne-Catherine Pierson-Wickmann, and Gérard Gruau
Carbon isotopes as tracers of dissolved organic carbon sources and water pathways in headwater catchments

- BG22 EGU2011-2550
Nils Prolingheuer, Harry Vereecken, and Jens-Arne Subke
A new chamber method for the simultaneous determination of $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ in soil derived CO_2
- BG23 EGU2011-5357
Zachary Kayler, Claudia Keitel, Kirstin Jansen, and **Arthur Gessler**
Can we use isotopes to capture the speed of link between photosynthesis and soil respiration?
- BG24 EGU2011-8088
Bernard Longdoz, Caroline Plain, Florian Parent, Martin Maier, Stéphanie Goffin, and Daniel Epron
Input of $^{12}\text{CO}_2$ and $^{13}\text{CO}_2$ soil concentration measurements to understand trends in soil carbon production and emission.
- BG25 EGU2011-3112
Juan Pedro Ferrio, Alicia Pou, Igor Florez-Sarasa, Arthur Gessler, Jaume Flexas, and Miquel Ribas-Carbó
Linking oxygen isotope enrichment in leaf water with hydraulic conductivity and mesophyll conductance for CO_2 in grapevine
- BG26 EGU2011-8468
Albin Hammerle, Patrick Sturm, Lydia Gentsch, Matthias Barthel, and Knohl Alexander
 ^{18}O isotope fluxes in water vapor and carbon dioxide: measurements, modeling, and potential application
- BG27 EGU2011-7825
Florian Parent, Caroline Plain, Daniel Epron, and Bernard Longdoz
New methodology to measure continuously the $\delta^{13}\text{C}$ of soil CO_2 efflux and concentration at different depths by laser spectrometry
- BG28 EGU2011-9375
Markus Schmidt, Kadmiel Maseyk, Céline Lett, Philippe Biron, Patricia Richard, Thierry Bariac, and Ulli Seibt
Analysis of hydrogen and oxygen stable isotope ratios of ecosystem-derived water samples using infrared laser spectroscopy

GMPV2/IG20 – Magmas, Melts, and Magma Mixing: from lab to nature (including 2010 Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Orals

Convener: Kevin Klimm | Co-Conveners: Cristina De Campos, Max Wilke, Diego Perugini

Room: 20

Chairperson: Kevin Klimm

- 08:30–08:45 EGU2011-6543
Corrado Cimarelli, Antonio Costa, Sebastian Mueller, and Heidy M. Mader
Rheology of magmas with bimodal crystal size and shape distributions: insights from analogue experiments
- 08:45–09:00 EGU2011-3220
Mattia Pistone, Luca Caricchi, Peter Ulmer, Eric Reusser, Federica Marone, and Luigi Burlini
Rheology of Three-Phase Magmas
- 09:00–09:15 EGU2011-3899
Rob English, Rhodri Williams, Tom Dobbie, David Heyes, and **Nick Petford**
New experimental approaches on the rheology of magma slurries
- 09:15–09:30 EGU2011-1669
Bettina Scheu, Fabian Serr, and Donald B. Dingwell
Phreatic and Hydrothermal Explosions - a Lab Approach
- 09:30–09:45 EGU2011-5427
Kelly Russell, Jim Nicholls, and Daniele Giordano
A Model for the Calorimetric Glass Transition Temperature: Applications to Natural Systems
- 09:45–10:00 EGU2011-12490
Roman Botcharnikov, Robert Linnen, Francois Holtz, and Max Wilke
Contrasting effects of S and Cl on the gold enrichment of magmas

COFFEE BREAK

Chairperson: Max Wilke

- 10:30–11:00 EGU2011-1404
Wim Malfait, Xianyu Xue, Rene Verel, Paola Ardia, and Carmen Sanchez-Valle
The speciation of hydrous aluminosilicate glasses and melts: a view from NMR, infrared and Raman spectroscopy.

11:00–12:00 EGU2011-52

Mark S. Ghiorso

Thermodynamic modeling of phase equilibria in magmatic systems: Progress and future directions (2010 Robert Wilhelm Bunsen Medal Lecture)

LUNCH BREAK

Chairperson: Cristina de Campos

13:30–13:45 EGU2011-2348

Marlina Elburg, Ingrid Smet, Elie De Pelsmaeker, and Tom Andersen

Contrasting forms of magma mixing on Methana and Santorini, Aegean Arc, Greece

13:45–14:15 EGU2011-7155

Diego Perugini, Cristina De Campos, Werner Ertel-Ingrisch, Donald Bruce Dingwell, and Giampiero Poli
Unraveling the Complexity of Magma Mixing Processes and its Petrologic Implications: an Experimental and Numerical Approach

14:15–14:30 EGU2011-12629

Slaby Ewa, ?migielski Micha?, ?migielski Tomasz, Domonik Andrzej, Simon Klaus, and Kronz Andreas
Crystal geochemical heterogeneities produced by mixing processes - probabilistic model of accordance between distributions of different elements

14:30–14:45 EGU2011-1789

Christophe Hemond, Myriam Janin, Bramley Murton, Evelyn Füre, David Hilton, and Jérôme Dymont
Central Indian ridge versus Reunion hotspot : Past and present interactions

14:45–15:00 EGU2011-12560

Joachim Krause, Valbone Memeti, and Scott R. Paterson

10 Ma of recycling and mixing of magmas from batholith to single mineral scales in the Tuolumne batholith, Sierra Nevada, USA

GMPV2/IG20 – Magmas, Melts, and Magma Mixing: from lab to nature (including 2010 Robert Wilhelm Bunsen Medal Lecture) (co-organized) – Posters

Convener: Kevin Klimm | Co-Conveners: Cristina De Campos, Max Wilke, Diego Perugini

Halls X/Y | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Diego Perugini

XY392 EGU2011-1013

Vahid Ahadnejad and Ayyob Moradi

Mixing/mingling as the main evolutionary processes of Malayer plutonic rocks, Sanandaj-Sirjan zone, west Iran.

XY393 EGU2011-2898

Diego Perugini, Maurizio Petrelli, and Diego Perugini

Transition to chaos and implications for time-scales of magma hybridization during mixing processes in magma chamber

XY394 EGU2011-3933

Néstor Vegas, Javier Rodríguez, José Julián Esteban, Martin Feely, José María Tubía, and Julia Cuevas
The sphene-centred ocellar texture: a powerful tool for understanding mingling processes.

XY395 EGU2011-6511

Daniele Morgavi, Diego Perugini, Cristina De Campos, Yan Lavallée, Lisa Morgan, and Donald Bruce Dingwell

The role of magma mixing between rhyolitic and basaltic magmas in the Bruneau-Jarbridge eruptive center, Snake River Plain (USA): an experimental study

XY396 EGU2011-9117

Pavel Pokatashkin and Andrey Karakin

Modeling of compaction in volcanic cameras

XY397 EGU2011-9610

Sergey Kostrovitsky, Maya Kopylova, Kostya Egorov, Fuyuan Wu, Jing Sun, Dmitriy Yakovlev, and Tanya Kalashnikova

The origin of so-called "exceptionally fresh" kimberlite of the Udachnaya-East pipe

XY398 EGU2011-11080

Daniel Weidendorfer, Hannes B. Mattsson, and Peter Ulmer

Magma mixing and hybridization processes in partially crystallized magma chambers: the Austurhorn intrusion (SE Iceland)

- XY399 EGU2011-11533
Cristina P. De Campos, Diego Perugini, Maurizio Petrelli, Stephan Kolzenburg, Alexander Dorfman, and Donald B. Dingwell
 Mixing Experiments with Natural Shoshonitic and Trachytic Melts: A comparative Study Under Contrasting Rheological and Fluid Dynamic Conditions
- XY400 EGU2011-11732
Cristina P. De Campos, Anders Wikström, Sebastian Lenz, Robert Heintz, Jennifer von-Maltzahn, Constantin Prins, Shiva Mohajer-Ashjaee, Stefanie Buggele, Bettina Muschallik, and Elisabeth Wagner
 Granites and Associated Basic Rocks in the Stavsjö Area, Sweden: a Historical Magma Mixing Province Revisited
- XY401 EGU2011-12617
Yusuf Kagan Kadioglu and Kiymet Deniz
 A new approach in the interpretation of nature of Migmatitization and their Sources: Western Anatolia Turkey
- XY402 EGU2011-13284
 Marisa Giuffrida, **Marco Viccaro**, and Eugenio Nicotra
 Magma ascent, storage and recharge at Avachinsky volcano (Kamchatka, Russia): the 1991 effusive eruption
- XY403 EGU2011-12192
Rosanne Heistek, Yan Lavallée, Cristina De Campos, Kai-Uwe Hess, Klaus Heide, and Donald B. Dingwell
 Large-scale obsidian emplacement at Obsidian Cliff, Yellowstone (USA)
- XY404 EGU2011-7752
Jackie Kendrick, Elisabetta Mariani, Yan Lavallée, and Donald Dingwell
 Rheology and microstructure of experimentally deformed andesites from Volcan de Colima, Mexico: an EBSD study
- XY405 EGU2011-11346
Marcin Dabrowski
 Effective non-linear viscosity of a crystal-bearing melt
- XY406 EGU2011-6726
Volker Haigis and Sandro Jahn
 Trace element partitioning between silicate melts: thermodynamics from atomistic simulation
- XY407 EGU2011-1853
Sigurdur Jakobsson
 Controlling oxygen fugacity in piston cylinders
- XY408 EGU2011-9530
Jonathan Hanson, Fabian Goldstein, Yan Lavallée, Ulrich Kueppers, Jonathan M. Castro, and Donald B. Dingwell
 Experimental insight into the Explosive-Effusive eruption transition at Tungurahua volcano, Ecuador

Wednesday, 06 April

IG5/BG1.11/CL4.13/GMPV40/SSP4.5 – Stable isotopes as tool in (paleo-)climate studies (co-organized) – Orals

Convener: Rolf Siegwolf | Co-Conveners: Martin Werner, Attila Demény, Mathieu Daéron, Erik Kerstel, Danny McCarroll, Alain Veron, Claude Hillaire-Marcel, Martin Frank

Room: 41

Chairperson: Attila Demény & Martin Werner

08:30–08:45 EGU2011-672

Per-Olov Persson, Per S. Andersson, Don Porcelli, and Igor Semiletov

The influence of Lena River water inflow and shelf sediment-sea water exchange for the Nd isotopic composition in the Laptev Sea and Arctic Ocean.

08:45–09:00 EGU2011-2577

Claude Hillaire-Marcel, Christelle Not, Bassam Ghaleb, and Anne de Vernal

Setting chronostratigraphies in low sedimentation rate sequences from the Arctic Ocean: isotopic approaches with focus on U-series

09:00–09:15 EGU2011-3514

Claudia Teschner, **Martin Frank**, and Brian Alexander Haley

Plio-Pleistocene evolution of water mass exchange and erosional input in the Fram Strait

09:15–09:30 EGU2011-4654

Christine Hatté, Caroline Gauthier, Denis-Didier Rousseau, Pierre Antoine, Markus Fuchs, Slobodan Markovic, Olivier Moine, and Adriana Sima

Geochemical evidence of a specific atmospheric circulation on Balkan during last glaciation

09:30–09:45 EGU2011-5742

Claudia Ehlert, Patricia Grasse, and Martin Frank

Changes in silicate utilization and upwelling intensity off Peru since the LGM - insights from silicon isotopes

09:45–10:00 EGU2011-8042

Thomas Launois, Philippe Peylin, Valérie Daux, Valérie Masson-Delmotte, Thomas Eglin, Valentin Bellassen, and Camille Risi

Interannual variations in tree-rings' width and isotopic signatures (^{18}O and ^{13}C) combined to optimize ORCHIDEE land surface model

COFFEE BREAK

Chairperson: Rolf Siegwolf & Mathieu Daeron

10:30–10:45 EGU2011-2564

Arthur Gessler, Brandes Elke, Offermann Christine, and Ferrio Juan Pedro

The long way down - How tightly are carbon and oxygen isotope signals in the tree ring coupled to canopy physiological processes?

10:45–11:00 EGU2011-3086

Juan Pedro Ferrio, David Carulla, Jesús Julio Camarero, Mónica Aguilera, and Jordi Voltas

Retrospective approach to dieback in *Pinus sylvestris* through the analysis of carbon and oxygen stable isotope composition in tree ring cellulose

11:00–11:15 EGU2011-8596

Dr. Dimitrios Sarris, Dr. Rolf Siegwolf, and Prof. Christian Körner

Stable C and O isotope signals of drought in Mediterranean pines

11:15–11:30 EGU2011-2291

Shikma Zaarur, Hagit P. Affek, and Moti Stein

Clumped isotopes thermometry in *Melanopsis* shells and its paleoclimate implications

11:30–11:45 EGU2011-4734

Anna-Lena Grauel, Thomas W. Schmid, Stefano M. Bernasconi, and Gert J. De Lange

Calibration and application of clumped isotopes of *G. ruber* for high-resolution climate reconstructions of the last 2500 years from the Gulf of Taranto, Mediterranean Sea

11:45–12:00 EGU2011-663

Prasanna Kannan and Prosenjit Ghosh

Revisiting calibration of CO_2 based Clumped isotope thermometry - equilibration approach.

IG5/BG1.11/CL4.13/GMPV40/SSP4.5 – Stable isotopes as tool in (paleo-)climate studies (co-organized) – Posters

Convener: Rolf Siegwolf | Co-Conveners: Martin Werner, Attila Demény, Mathieu Daéron, Erik Kerstel, Danny McCarroll,

Alain Veron, Claude Hillaire-Marcel, Martin Frank

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Erik Kerstel & Kerstyn Treydte

- A446 EGU2011-13555
Rolf Siegwolf
Stable isotopes, the link between tree physiology tree ring width data as climate proxies
- A447 EGU2011-1313
Hans Oerter, Frank Wilhelms, Margarete Hansson, Per Holmlund, Susanne Ingvander, Torbjörn Karlin, and Shuji Fujita
Stable isotope content and snow accumulation between 1957/58 and 2007/08 along the ice divide from Kohnen-Station towards Dome Fuji, East Antarctica
- A448 EGU2011-5169
Thejna Tharammal, André Paul, Ute Merkel, and David Noone
Influence of LGM boundary conditions on the global water isotope distribution in an atmospheric general circulation model
- A449 EGU2011-5430
Attila Demény, Gabriella Schöll-Barna, Zoltán Siklósy, Gábor Serlegi, Pál Sümegi, and Mária Bondár
A warming-cooling cycle between 3.8 and 3.2 ky BP: correlations of speleothem and bivalve compositions with ice core records
- A450 EGU2011-5856
David Morris and Stephen Macko
Estimation of marine, sea ice and terrestrial contributions to the Western Arctic carbon cycle using Bayesian mixing models and GC-IRMS
- A451 EGU2011-6354
Andres Diez-Herrero, Juan Antonio Ballesteros, Jose Maria Bodoque, and Virginia Ruiz-Villanueva
Can tree-ring isotopes be used for improving the flood frequency analysis?
- A452 EGU2011-6400
Joseph Erbland, Joël Savarino, Samuel Morin, and Markus M. Frey
Empirical sensitivity of $\delta^{15}\text{N}$ in nitrate to current snow accumulation rates in Antarctica : implications for the interpretation of the deep Vostok ice core
- A453 EGU2011-6928
Grzegorz Skrzypek, Zbynek Engel, Tomas Chuman, and Ludek Sefrna
Stable carbon isotope composition of Distichia peat: calibration of a new paleotemperature proxy for high altitudes in the Andes
- A454 EGU2011-7398
Mathieu Daëron, Franck Bassinot, Eva Moreno, Benjamin Passey, Gülay Isgüder, Hélène Rebaubier, and Dominique Blamart
Clumped-isotope studies of foraminifer records: inter-species differences, analytical bias and precision limits
- A455 EGU2011-8353
Christian Horn, Anton Eisenhauer, and Dirk Nürnberg
Employing $\delta^{44}\text{Ca}$ ratios in foraminifera to simultaneously track sea surface regional temperatures (SST) and salinities (SSS) variations across Termination I
- A456 EGU2011-8934
Rein Vaikmäe
The ice-core stable isotope records from small Arctic ice caps as proxies of climatic and environmental changes
- A457 EGU2011-9809
Matthias Saurer, Anne Kress, Olga Sidorova, and **Rolf Siegwolf**
On the precipitation signal in stable isotope ratios of tree-rings
- A458 EGU2011-11690
Bastian Ullrich, **Kerstyn Treydte**, Sonia Simard, Sonja Boda, Matthias Saurer, Rolf Siegwolf, Patrick Fonti, and Arthur Gessler
Oxygen isotope pathway from the soil to the tree-ring at alpine sites in Switzerland
- A459 EGU2011-12240
Tamás Mikes, Ilaria Mazzini, Andreas Mulch, Marianna Kováčová, Peter Joniak, Natalia Hudáková, and **Bora Rojay**
Paleoenvironmental significance of the Serravallian-Tortonian TuÅŸlu section, Çankiri Basin, Central Anatolia
- A460 EGU2011-13544
Arnoud Boom and Tina Godfrey
Isotope records from Neotropical trees and stem rosettes
- A461 EGU2011-13897
Ashish Sarkar
8.2 Ka climatic cooling event deciphered from equatorial Arabian Sea

- A462 EGU2011-2003
Christelle Not and Claude Hillaire-Marcel
Marine evidence from Lomonosov Ridge for an Arctic trigger event of the Younger Dryas
- A463 EGU2011-2709
Peter Hülse and Samuel J. Bentley
A 210Pb sediment budget and granulometric proxy record of discharge variations for a sub-Arctic deltaic system: the Great Whale River in Hudson Bay, Canada
- A464 EGU2011-2954
Nathalie Fagel, Jonathan Gueibe, Nadine Mattielli, Christelle Not, and Claude Hillaire-Marcel
Sedimentary provenances over glacial/interglacial stages in central Arctic constrained by mineralogy and radiogenic tracers
- A465 EGU2011-3321
Chunming Shi, Valérie Daux, Valérie Masson-Delmotte, Camille Risi, Jing Gao, Xiaochun Wang, and Qi-Bin Zhang
Climatic interpretation of tree ring stable isotopes in the southeast Tibetan Plateau: links with regional cloud cover
- A466 EGU2011-3415
Valérie Daux, Jean-Louis Edouard, Valérie Masson-Delmotte, Georg Hoffmann, and Olivier Mestre
Can climate variations be inferred from tree-ring parameters and stable isotopes from *Larix decidua*: budmoth outbreaks, juvenile effects and divergence problem.
- A467 EGU2011-4999
Francois Paquay and Greg Ravizza
Variations in the osmium isotopes record during the Azolla phase (IODP Expedition 302)
- A468 EGU2011-9047
Mikhail Vasiliev, Keita Yamada, and Naohiro Yoshida
Evaluation of clumped-isotopes of land snail's shells as a paleo-environmental indicator
- A469 EGU2011-9435
Lisa Wingate, Raphaël Dulhoste, Didier Bert, Barbara Köstner, Thomas Grünwald, Johannes Franke, and Jérôme Ogée
Intra-annual variations in the density and stable isotope composition of Norway spruce tree rings at the Tharandt FLUXNET site
- A470 EGU2011-12646
Robert Sherrell, Hélène Planquette, Marie Séguret, Sharon Stammerjohn, and Per Andersson
Continental sources of Fe and Nd isotopes to the Antarctic shelf systems of the Amundsen Sea and Western Antarctic Peninsula
- A471 EGU2011-13030
Gerald Dickens, Francesca Sangiorgi, Kristen St John, Catherine Stickley, Martin Jakobsson, Appy Sluijs, Henk Brinkhuis, and Jan Backman
Re-Os Isotope Data Highlights Existing Problems With Interpretations of the Middle Lithological Units in Cores from the Central Arctic Ocean
- A472 EGU2011-13339
Zou Zou Kuzyk, Charles Gobeil, Miguel Goni, and Robie Macdonald
Distributions and Inventories of Pb-210 and Cs-137 in Sediments along the North American Arctic Margin
- A473 EGU2011-1782
Lilia Sanchez-Vargas, Alberto Sanchez, Sergio Aguiñiga Garcia, and Eduardo Balart
Stable oxygen isotopes in Benthic Foraminifera Recent of the Northeast Pacific

SSP1.4/IG22 – Can carbon isotopes solve global carbon cycle conundrums? (including Jean Baptiste Lamarck Medal Lecture) (sponsored by IAS) (co-organized) – Orals

Convener: Bas van de Schootbrugge | Co-Conveners: Jonathan Payne, Katja Meyer, Aviv Bachan-Dovrat, Darren Gröcke, João Trabucho Alexandre

Room: 41

Chairperson: Katja Meyer

- 15:30–16:15 EGU2011-14172
Malcolm B. Hart
Micropalaeontological Response to Cretaceous Oceanic Anoxic Events (Jean Baptiste Lamarck Medal Lecture)
- 16:15–16:30 EGU2011-1212
Adam Maloof, Susannah M. Porter, John L. Moore, Jahan Ramezani, Samuel A. Bowring, Frank O. Dudas, John A. Higgins, David A. Fike, and Michael P. Eddy
The earliest Cambrian record of animals and ocean geochemical change

- 16:30–16:45 EGU2011-1851
Jean Guex, Blair Schoene, Annachiara Bartolini, Jorge Spangenberg, Urs Schaltegger, Luis O'Dogherty, David Taylor, Viorel Atudorei, and **Hugo Bucher**
Geochronological constraints on the post-extinction recovery of the ammonoids and on the carbon isotope cycle during the Early Jurassic
- 16:45–17:00 EGU2011-5300
Aviv Bachan, Bas van de Schootbrugge, Jens Fiebig, and Jonathan Payne
The end-Triassic mass extinction: new isotope constraints from Italy
- 17:00–17:15 EGU2011-345
Alberto Trecalli, Jorge Spangenberg, Thierry Adatte, Karl B. Föllmi, and Mariano Parente
The response of the Apenninic Carbonate Platform (southern Italy) to the Early Toarcian oceanic anoxic event
- 17:15–17:30 EGU2011-12608
Peter Swart, **Martin Kennedy**, and Amanda Oehlert
When are Global Changes in the Carbon Isotopic Composition Not Indicative of Global Processes Involving the Global Carbon Cycle?

SSP1.4/IG22 – Can carbon isotopes solve global carbon cycle conundrums? (including Jean Baptiste Lamarck Medal Lecture) (sponsored by IAS) (co-organized) – Posters

Convener: Bas van de Schootbrugge | Co-Conveners: Jonathan Payne, Katja Meyer, Aviv Bachan-Dovrat, Darren Gröcke, João Trabucho Alexandre

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Bas van de Schootbrugge

- A474 EGU2011-359
Nadezhda Alfimova
Carbon isotope signature in carbonate zone of Palaeoproterozoic weathering profile (C.Karelia, Fennoscandinavian shield)
- A475 EGU2011-1696
Jean Guex, Annachiara Bartolini, Jorge Spangenberg, Blair Schoene, Viorel Atudorei, and Urs Schaltegger
The age of the major $\delta^{13}\text{C}_{\text{org}}$ and $\delta^{34}\text{S}$ Hettangian excursions at Kennecott Point (Queen Charlotte Islands, Canada)
- A476 EGU2011-1750
Annette E. Götz
Eustatic control of conodont migration and phytoplankton distribution patterns in the Anisian of the Peri-Tethys Basin
- A477 EGU2011-2545
Hassan M. Khozyem, Thierry Adatte, Jorge E. Spangenberg, Gerta Keller, and Karl Foellmi
Geochemical and mineralogical evidences for intensive weathering during the PETM
- A478 EGU2011-11936
Chloé Morales, Ariane Kujau, Ulrich Heimhofer, Joerg Mutterlose, Jorge E. Spangenberg, Thierry Adatte, Stephane Westermann, Izabela Ploch, and Karl B. Foellmi
Environmental and climatic change during the Valanginian event: Case study of the Wawal section, Polish Basin
- A479 EGU2011-7218
Brahimsamba Bomou, Thierry Adatte, Jorge Spangenberg, Gerta Keller, and Karl Föllmi
Expression of the Coniacian-Santonian Oceanic Anoxic Event (OAE3) in two potential GSSP sections : Olazagutia, (Spain) and Ten Mile Creek - Arbor Park, (USA)
- A480 EGU2011-11894
Guillaume Suan, Wolfgang Oschmann, Jens Fiebig, and Bas van de Schootbrugge
New astronomical timescale for the Toarcian carbon isotope excursions from Dotternhausen, SW Germany
- A481 EGU2011-454
Baptiste Suchéras-Marx, Abel Guihou, Fabienne Giraud, Emanuela Mattioli, Christophe Lécuyer, and Bernard Pittet
The Middle Jurassic Watznaueria (coccolith-type algae) diversification impact on carbon cycle and bulk carbonate composition
- A482 EGU2011-3110
Ian Jarvis, Darren Gröcke, Hugh Jenkyns, John Lignum, Kate Olde, Martin Pearce, and Bruce Tocher
OAE2 from Tethys to the Boreal Sea: linking marine productivity and climate change
- A483 EGU2011-4938
Sofie Lindström, Bas van de Schootbrugge, Karen Dybkjær, Gunver Krarup Pedersen, Jens Fiebig, and Lars Henrik Nielsen
Carbon cycling at the Triassic-Jurassic boundary in the Danish Basin

- A484 EGU2011-9220
Katja Meyer, Meiyi Yu, and Jonathan Payne
 Paired organic and inorganic carbon isotope evidence for a coupled Early Triassic carbon cycle
- A485 EGU2011-5715
Ariane Kujau, Ulrich Heimhofer, Christian Ostertag-Henning, Benjamin Gréselle, Thierry Adatte, Jörg Mutterlose, Chloé Morales, and Izabela Ploch
 The role of the terrestrial realm during the Valanginian Carbon Isotope Excursion - Indications from palynological and organic-geochemical investigations (Vocontian Basin, SE France; Carpathian seaway, Central Poland)

SSP2.1 – Progress towards the next geological timescale: Earthtime-EU and GTSnext (sponsored by IAS) (co-listed)

– Orals

Convener: Klaudia Kuiper | Co-Conveners: Heiko Pälike, Jacques Laskar, Leah Morgan, Joe Hiess

Room: 41

Chairperson: Joe Hiess, Leah Morgan, Klaudia Kuiper

- 13:30–13:45 EGU2011-353
Sietske J. Batenburg, Mario Sprovieri, Andrew S. Gale, Frederik J. Hilgen, Silja Hüsing, Diederik Liebrand, Fabrizio Lirer, Xabier Orue-Etxebarria, Nicola Pelosi, and Jan Smit
 A Cyclostratigraphic Framework for the Maastrichtian at Zumaia (Basque country, Northern Spain)
- 13:45–14:00 EGU2011-295
Christian Zeeden, Frits Hilgen, Lucas Lourens, Thomas Westerhold, and Ursula Röhl
 Revised stratigraphy and tuning of the equatorial Atlantic Ceara Rise: Challenges and applications of astronomical time scales in the Miocene
- 14:00–14:15 EGU2011-3442
Jörn-Frederik Wotzlaw and Urs Schaltegger
 High-precision zircon U-Pb geochronology of astronomically tuned ash beds from the Mediterranean Miocene
- 14:15–14:30 EGU2011-11158
Diana Sahy, Anne Fischer, Dennis O. Terry Jr., Daniel J. Condon, and Klaudia Kuiper
 Integrating marine and terrestrial records from the late Eocene - early Oligocene of North America and Italy
- 14:30–14:45 EGU2011-11066
Anne U. Fischer, Diana Sahy, Klaudia F. Kuiper, Mohammad Sahragard Sohi, Jan R. Wijbrans, Frits J. Hilgen, Daniel J. Condon, and Willem Langenberg
 Integrated high resolution chronology of lower Paleocene continental successions in Canada
- 14:45–15:00 EGU2011-12188
Darren Mark and Leah Morgan
 Testing the accuracy of recent revisions to the age of Fish Canyon sanidine and the K-Ar decay constants using high-precision U-Pb and Ar/Ar ages for the Manicouagan impact event

SSP2.1 – Progress towards the next geological timescale: Earthtime-EU and GTSnext (sponsored by IAS) (co-listed)

– Posters

Convener: Klaudia Kuiper | Co-Conveners: Heiko Pälike, Jacques Laskar, Leah Morgan, Joe Hiess

Hall A | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: Joe Hiess, Leah Morgan, Klaudia Kuiper

- A486 EGU2011-11277
Michael Wagreich and Johann Hohenegger
 Dating the gone Badenian stratotype (Middle Miocene, Paratethys, Vienna Basin, Austria)
- A487 EGU2011-230
Diederik Liebrand, Lucas J. Lourens, David A. Hodell, Bas de Boer, Roderik van de Wal, Heiko Pälike, and Samantha J. Gibbs
 Dynamics of ~100-kyr glacial cycles during the early Miocene
- A488 EGU2011-2236
Katarzyna K. Sliwinska, Kaare Ulleberg, Claus Beyer, Erik Thomsen, Niels Abrahamsen, Thomas Brünings-Hansen, and Claus Heilmann-Clausen
 Chronostratigraphy of the Rupelian-mid Chattian deposits from the Danish land area
- A489 EGU2011-10378
Tiffany Rivera, Michael Storey, Christian Zeeden, Klaudia Kuiper, and Frederik Hilgen
 Support for the Astronomically Calibrated 40Ar/39Ar Age of Fish Canyon Sanidine: Evidence from the Quaternary

A490 EGU2011-12667

Joe Hiess, Daniel J. Condon, Stephen R. Noble, Noah McLean, Samuel A. Bowring, and James M. Mattinson
Evaluating $^{238}\text{U}/^{235}\text{U}$ in U-bearing accessory minerals: implications for U-Pb geochronology

A491 EGU2011-10711

Leah Morgan, Klaudia Kuiper, Darren Mark, Onno Postma, Igor Villa, and Jan Wijbrans
First-principles calibration of $^{40}\text{Ar}/^{39}\text{Ar}$ mineral standards and complete extraction of $^{40}\text{Ar}^*$ from sanidine

Thursday, 07 April

BG6.1 – Marine and Terrestrial proxies: development and reconstructions. (co-listed) – Orals

Convener: Lennart de Nooijer | Co-Conveners: Kai G. Schulz, Daniela Schmidt, Gert-Jan Reichart, Oliver Heiri, Darren Gröcke, André F. Lotter, Michel Magny, Stuart Robinson, Jung-Hyun Kim

Room: 24

Chairperson: n.n.

08:30–08:45 EGU2011-9793

Andreas Koutsodendris, Achim Brauer, Heiko Pälike, Jörg Pross, Ulrich C. Müller, and André F. Lotter
Sub-decadal- to decadal-scale climate variability during the Holsteinian interglacial (MIS 11) evidenced in varves from northern Germany

08:45–09:00 EGU2011-8191

Frauke Schmidt, **Heinz Wilkes**, Iris Kristen, and Hedi Oberhänsli
Environmental and biogeochemical changes in Lake Tswaing, South Africa, during the last 84 ka BP

09:00–09:15 EGU2011-1256

Joonas Virtasalo and Aarno Kotilainen
Holocene benthic responses to saline water inflows to the Baltic Sea - INFLOW project

09:15–09:30 EGU2011-1441

Yvonne Hermanns and Harald Biester
Controlling factors of mercury accumulation in lake sediments during the past 17,000 years - A case study from Southern Patagonia

09:30–09:45 EGU2011-3052

Stefan Krause, Volker Liebetrau, Judith A. McKenzie, and Tina Treude
Dolomite-type-ordered carbonate nucleation in biofilm of a marine sulfate-reducing bacterium: the role of extracellular polymeric substances

09:45–10:00 EGU2011-6277

André Krabbenhöft, Anton Eisenhauer, Jacek Raddatz, Volker Liebetrau, Jan Fietzke, Florian Böhm, Thomas Felis, and Stephanie Reynaud
Stable Strontium ($\delta^{88/86}\text{Sr}$) Isotope Fractionation in Scleractinian Corals

COFFEE BREAK

Chairperson: n.n.

10:30–10:45 EGU2011-8964

Luke Mackinder, Glen Wheeler, Declan Schroeder, Ulf Riebesell, and Colin Brownlee
Biom mineralisation and Gene Expression in *Emiliana huxleyi*

10:45–11:00 EGU2011-4649

Luc Beaufort, Thibault de Garidel-Thoron, Yves Gally, and Nicolas Barbarin
Intradecadal changes of coccolith calcification during the last 1000 years obtained with a new method of thickness measurements

11:00–11:15 EGU2011-6587

Heather Stoll, Gerald Langer, Nobumichi Shimizu, and Kinuyo Kanamaru
B/Ca ratios in coccoliths and relationship to calcification vesicle pH and dissolved inorganic carbon

11:15–11:30 EGU2011-6642

Takashi Toyofuku, Hidetaka Nomaki, Masashi Tsuchiya, and Hiroshi Kitazato
Foraminiferal cellular pH control under high-CO₂ condition in the laboratory

11:30–11:45 EGU2011-8750

Caroline Cleroux, Peter deMenocal, Kristen L. Gore, David Madigan, Jennifer Arbuszewski, and Brad Linsley
Reconstructing the upper water column structure along 35°N–20°S in the Atlantic: a tool to reconstruct past thermocline circulation.

11:45–12:00 EGU2011-3464

Carne Hugué, Jung-Hyun Kim, Stefan Schouten, and Toni Rosell-Melé
Constraints on the application of the TEX₈₆ temperature proxy in the Mediterranean

BG6.1 – Marine and Terrestrial proxies: development and reconstructions. (co-listed) – Posters

Convener: Lennart de Nooijer | Co-Conveners: Kai G. Schulz, Daniela Schmidt, Gert-Jan Reichart, Oliver Heiri, Darren Gröcke, André F. Lotter, Michel Magny, Stuart Robinson, Jung-Hyun Kim

Poster Area BG | Display Time 08:00–19:30

Author in Attendance: 17:30–19:00

Chairperson: n.n.

- BG37 EGU2011-286
Angela A. Bruch, Steffen Scharrer, and Ivan G. Gabrielyan
Early Pleistocene climate and environmental change in Armenia - reconstructing temporal corridors of early human expansions
- BG38 EGU2011-516
Evgeniya Gonyk
Paleoenvironmental reconstructions of the n8 coal bed of the Lviv-Volyn basin by palynological data (Western Ukraine)
- BG39 EGU2011-643
Thibaut Caley, Jung-Hyun Kim, Bruno Malaizé, Jacques Giraudeau, Thomas Laepple, Nicolas Caillon, Karine Charlier, Hélène Rebaubier, Linda Rossignol, and Isla Castañeda
Comparison of four independent paleotemperature records over the last 800 ka in the South-West Indian Ocean: similarities and differences
- BG40 EGU2011-2067
Wenwen Chen, Gesine Mollenhauer, Torsten Bickert, and Mahyar Mohtadi
Using organic geochemistry proxies to reconstruct sea surface temperature in the eastern Indian Ocean
- BG41 EGU2011-2636
Irina Bundelewa, Liudmila Shirokova, Pascale Benezeth, Oleg Pokrovsky, and Elena Kompantseva
Experimental modelling of calcium carbonate precipitation during anoxygenic phototrophic bacteria *Rhodovulum* sp. activity
- BG42 EGU2011-2976
Sylvie Derenne, Arnaud Huguet, Céline Fosse, and Fatima Laggoun-Défarge
Effects of in situ artificially increased temperature on the distribution of branched GDGTs in a French peat bog
- BG43 EGU2011-5572
Karoline Kabel, Matthias Moros, Florian Adolphi, Marianne Baas, Christian Porsche, and Jaap S. Sinninghe Damsté
Application of TEX86-paleothermometry in the Baltic Sea: Temperature reconstruction of the past 1000 years
- BG44 EGU2011-6000
Emiliya Kirilova, Oliver Heiri, Siim Veski, and André F. Lotter
Summer temperature shifts during the Late Glacial in Northeastern Europe
- BG45 EGU2011-7216
Liisa Nevalainen and Tomi P. Luoto
Past evolutionary responses of Chydoridae (Cladocera) under oxygen depletion in an Austrian Alpine lake
- BG46 EGU2011-7443
Tomi Luoto and Liisa Nevalainen
Fossil invertebrates reveal major ecological turnovers during the recent centuries in a high altitude lake in the Austrian Alps
- BG47 EGU2011-7827
Noa Fruchter, Anton Eisenhauer, Jonathan Erez, Florian Boehm, and Jan Fietzke
Laboratory experiments on elemental and isotopic fractionation in coral aragonite precipitation
- BG48 EGU2011-8098
Lennart Bach, Christine Bauke, Sebastian Meier, Luke Mackinder, Ulf Riebesell, and Kai Georg Schulz
The influence of pH and dissolved inorganic carbon on coccolith size and morphology of *Emiliania huxleyi*
- BG49 EGU2011-8631
Michał Sowiński, Izabela Zawiska, Agnieszka M. Noryśkiewicz, Karina Apolinarska, and Monika Lutyńska
Macrophyte vegetation development in paleolake Czechowskie (northern Poland), during the late-glacial and early-Holocene
- BG50 EGU2011-8696
Gerald Langer, Lennart De Nooijer, Gernot Nehrke, Tomas Vagner, Nina Keul, Antje Funcke, Marcel Kuypers, and Jelle Bijma
Mg and Sr banding in the shell of the benthic foraminifer *Ammonia tepida* revealed by NanoSIMS
- BG51 EGU2011-8752
Trine Holm, Al Werner, Anne Hormes, Gerhard Kuhn, Matthias Forwick, Roland Psenner, and Karin A. Koinig
Holocene environmental changes in an Arctic lake
- BG52 EGU2011-10452
Lennart de Nooijer, Antje Funcke, Jelle Bijma, and Gert-Jan Reichert
How do foraminifera discriminate against magnesium and how does this affect their calcite chemistry?
- BG53 EGU2011-10548
Michelle Johnson, Manuel Gloor, and Jon Lloyd
Evaluating modelled soil profile evolution with observations from a basalt chronosequence in Queensland, Australia.

- BG54 EGU2011-11041
Mathias Trachsel, Atle Nesje, Jostein Bakke, Bjørn C. Kvisvik, and Pål R. Nielsen
 Inferring organic content of sediments by means of scanning reflectance spectroscopy (380-730 nm); a case study from proglacial lakes in Norway
- BG55 EGU2011-11531
Jian Ren, Rainer Gersonde, Oliver Esper, and Constance Sancetta
 Diatom distribution in North Pacific surface sediments and application for paleoceanographic reconstruction
- BG56 EGU2011-11965
Živil? Žigait?, Alberto Pérez-Huerta, Michael M. Joachimski, and Oliver Lehnert
 The 18O/16O ratio in vertebrate biogenic apatite as a proxy to Palaeozoic seawater temperatures
- BG57 EGU2011-11971
Karoliina Koho, Mariette Wolthers, Ed Hathorne, and Gert-Jan Reichart
 Trace metal content of benthic foraminifera: field study and modelling approach
- BG58 EGU2011-12127
 Willem O. van der Knaap, **Mariusz Lamentowicz** and the Mauntschas/Millennium Team
 Multi-proxy, high-resolution record of peatland development and its drivers during the last millennium from the subalpine Swiss Alps

SC2/IG16 – [Short Course] Laser-based Isotope Ratio Analyzers: From the User Perspective (co-organized) – Orals

Convener: Erik Kerstel | Co-Conveners: Peter Werle

Room: 25

Chairperson: n.n.

14:30–15:00

Chairperson: n.n.

15:30–17:00

Chairperson: n.n.

17:30–19:00

BG1.3/IG18 – Application of non-traditional stable isotopes in biogeosciences (co-sponsored by THERMO) (co-organized) – Orals

Convener: Thomas Prohaska | Co-Conveners: Andreas Zitek, Jane Evans, Dr Takafume Hirata, Dr Laura Robinson, Dr Frank Vanhaecke

Room: 23

Chairperson: Thomas Prohaska

13:30–13:45 EGU2011-12976

Thomas Tütken, Robert A. Eagle, Alexander Heuser, Daniel Herwartz, and Stephen J. G. Galer
 Non-traditional isotope analysis of fossil bones and teeth - Preservation of biogenic compositions or diagenetic alteration?

13:45–14:00 EGU2011-1121

Jane Evans and Janet Montgomery
 Spatial variations in biosphere 87Sr/86Sr in Britain and the implications for human migration studies.

14:00–14:15 EGU2011-1144

Sergei Boulyga and Stephan Richter
 Calcium Isotope Analysis by Mass Spectrometry

14:15–14:30 EGU2011-11451

Grit Steinhofel, Jörn Breuer, Friedhelm von Blanckenburg, Ingo Horn, Danuta Kaczorek, and Michael Sommer
 Silicon isotope signatures in soils determined by UV femtosecond laser ablation

14:30–14:45 EGU2011-3963

Masako Hori, Chen-Feng You, Chuan-Hsiung Chung, Kuo-Fang Huang, and Tsuyoshi Ishikawa
 Lithium isotopes in terrestrial carbonates as a proxy of naturally occurring arsenic

14:45–15:00 EGU2011-967

Zichen Xue, Mark Rehkamper, Tina Van de Flierdt, Patricia Grasse, and Martin Frank
 Cadmium Isotope Variations in the Peruvian Oxygen Minimum Zone - New Constraints on Micronutrient Cycling

Friday, 08 April

CL1.6 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic (co-listed) – Orals

Convener: Fabio Florindo | Co-Conveners: Michele Rebesco, Henk Brinkhuis, Matthias Forwick, Jan Sverre Laberg, David Harwood, Angelo Camerlenghi, Berit Oline Hjelstuen

Room: 16

Chairperson: n.n.

13:30–13:45 EGU2011-12962

David Harwood, Fabio Florindo, Richard Levy, Franco Talarico, and SMS Project Science Team
Early and Middle Miocene Antarctic Ice Sheet Behavior: results from the ANDRILL SMS Project

13:45–14:00 EGU2011-10814

Peter Bijl, James Bendle, Jörg Pross, Stefan Schouten, Ursula Röhl, Catherine E Stickley, Matthew Olney, Lisa Tauxe, Henk Brinkhuis, Carlota Escutia and the Expedition 318 scientists Team
Integrated stratigraphy of the Eocene Wilkes Land Margin, Antarctica; preliminary results from IODP Expedition 318: dinoflagellate cyst and TEX86 results

14:00–14:15 EGU2011-8825

James Bendle, Peter Bijl, Lineth Contreras, Jörg Pross, Stefan Schouten, Ursula Röhl, Mark Pagani, Robert DeConto, Steven Bohaty, Henk Brinkhuis and the Expedition 318 Scientists Team
Extremely warm early Eocene marine and terrestrial temperatures on the Antarctic margin: implications for the persistent data-model mismatch problem in Greenhouse climate intervals

14:15–14:30 EGU2011-10495

Paolo Stocchi, Rob DeConto, Carlota Escutia, Henk Brinkhuis, Dave Pollard, Bert L.L.A. Vermeersen, Alexander J.P. Houben, Peter K. Bijl and the Expedition 318 Scientists Team
The onset of Cenozoic Antarctic glaciation: understanding relative sea-level changes - model and field data comparison

14:30–14:45 EGU2011-10532

Alastair Graham, James Smith, Robert Larter, Karsten Gohl, Claus-Dieter Hillenbrand, and Gerhard Kuhn
Palaeo-ice streams in the Amundsen Sea sector of the West Antarctic Ice Sheet during the last glacial period: flow dynamics, retreat histories, and geological controls

14:45–15:00 EGU2011-10093

H. Christian Hass, Gerhard Kuhn, Gabriela V. Tosonotto, Nina Wittenberg, and Anne-Cathrin Wölfl
Recent and subrecent climate-controlled sedimentation in Potter Cove and Maxwell Bay, King George Island, Antarctica

Chairperson: n.n.

15:30–15:45 EGU2011-12977

Ross Powell and Timothy Hodson
Rapid Retreat of the Glacier Bay Ice Stream from the Last Glacial Maximum of the Cordilleran Ice Sheet, SE Alaska

15:45–16:00 EGU2011-7746

Frank Niessen, Tanja Dufek, Anne Hegewald, Rüdiger Stein, Jens Matthiessen, and Wilfried Jokat
Pleistocene Ice sheets and Ice Shelves on the Chukchi Borderland, Mendeleev Ridge and East Siberian Continental Slope (Arctic Ocean)

16:00–16:15 EGU2011-6596

Monica Winsborrow, Chris D Clark, and Chris R Stokes
Exploring controls on ice stream location

16:15–16:30 EGU2011-1046

Heidi Kjennbakken, Hans Petter Sejrup, and Hafliði Hafliðason
Mid- to late Holocene oxygen isotopes from Voldafjorden, western Norway

16:30–16:45 EGU2011-4291

Audrey Dallimore, Randolph J. Enkin, Kristen Cooke, and Murray B. Hay
Reconstruction of palaeo-environments of the northeastern Pacific Ocean during the Late Holocene based on multi-proxy analyses of marine sediments preserved in the coastal fjords of British Columbia, Canada.

16:45–17:00 EGU2011-13180

Witold Szczuciński
Modern and Little Ice Age sediment accumulation rates in fjords of Svalbard

CL1.6 – Polar continental margins and fjords - glacial and climatic evolution in the Cenozoic (co-listed) – Posters

Convener: Fabio Florindo | Co-Conveners: Michele Rebesco, Henk Brinkhuis, Matthias Forwick, Jan Sverre Laberg, David Harwood, Angelo Camerlenghi, Berit Oline Hjelstuen

Hall XL | Display Time 08:00–17:00

Author in Attendance: 08:30–10:00

Chairperson: n.n.

- XL1 EGU2011-5489
Berit Oline Hjelstuen, Heidi Kjennbakken, Vegard Bleikli, Remi Anthoni Ersland, Sigurd Kvilhaug, and Christine Euler
Sedimentary processes within fjord systems - evidence from Fensfjorden, western Norway
- XL2 EGU2011-4596
Daniel Winkelmann, Wilfried Jokat, Laura Jensen, and Hans-Werner Schenke
Dynamic Ice on the Continental Shelf of NE-Greenland - The Submarine Morphological Record
- XL3 EGU2011-997
Jan Sverre Laberg
Submarine glacial debris flows - a review
- XL4 EGU2011-1095
Evgenia Bazhenova, Ruediger Stein, and Christoph Vogt
Provenance discrimination in late Quaternary sediments from the Amerasian Basin (Arctic Ocean) constrained by mineralogical record
- XL5 EGU2011-2686
Elisabeth Kahlmeyer and Samuel J. Bentley
Dispersal of fluvial sediment in two sub-arctic fjords on the Labrador Coast: Nachvak Fjord and Saglek Fjord, Canada
- XL6 EGU2011-4211
Matthias Forwick and Tore O. Vorren
A Late Weichselian and Holocene stratigraphy for Spitsbergen fjords
- XL7 EGU2011-4461
Vladimir Ivanov, Andrew Dale, and Mark Inall
A high-resolution baroclinic model of Loch Linnhe
- XL8 EGU2011-11445
Maarten Prins, Simon Troelstra, Kay Beets, Noortje Dijkstra, Michel Boos, Karlijn Beers, Daniel Rits, Rik Tjallingii, Dorthe Klitgaard-Kristensen, and Nalan Koç
Environmental change in the European Arctic inferred from fjord sediments: a sediment-provenance study of glacio-marine sediments in Kongsfjorden, Svalbard
- XL9 EGU2011-4525
Mayte Pedrosa, Karin Andreassen, Monica Winsborrow, and Angelo Camerlenghi
Seafloor geomorphology of the Storfjorden Trough outer continental shelf
- XL10 EGU2011-4698
Fiona Hibbert, William Austin, and Robert Gatliff
Correction of Coring Artefacts ('over-sampling'): An example using paired piston and gravity cores from the Rockall Trough, N. Atlantic
- XL11 EGU2011-7787
Juanita Sekkingstad, Ulysses Ninnemann, and Helga Kleiven
Late Holocene Hydrographic variability in the Antarctic Circumpolar Current
- XL12 EGU2011-8053
Tom Rippeth, James Scourse, and Katsuto Uehara
Impact of sea-level rise over the last deglacial transition on the strength of the continental shelf CO₂ Pump
- XL13 EGU2011-9964
Marga Garcia, Julian Dowdeswell, and Martin Jakobsson
Recent glacially influenced sedimentary processes on the East Greenland continental margin and deep basin
- XL14 EGU2011-11397
Kelly Hogan, Julian Dowdeswell, Colm Ó Cofaigh, Justin Dix, and Carol Cotterill
Sediment stratigraphy records the deglacial history of Jakobshavn Isbræ, West Greenland
- XL15 EGU2011-1248
Wolfram Geissler, Wilfried Jokat, and Harald Brekke
The Yermak Plateau in the Arctic Ocean in the light of reflection seismic data - implication for its tectonic and sedimentary evolution
- XL16 EGU2011-3679
Hedinn Valdimarsson and Steingrímur Jónsson
Hydrography and dynamics of Icelandic fjords
- XL17 EGU2011-6648
Maria Włodarska-Kowalczyk and Jan Marcin Włosowski
Biodiversity and community structure of soft-bottom macrozoobenthos in Arctic glacial fiords (west Spitsbergen)

- XL18 EGU2011-1636
Lineth Contreras, Jörg Pross, James Bendle, Stefan Schouten, Peter Bijl, Ursula Röhl, Lisa Tauxe, Catherine Stickley, Steven Bohaty, Henk Brinkhuis and the IODP Expedition 318 Science Party Team
 Early Eocene Antarctic terrestrial ecosystem dynamics; a view from the Wilkes Land margin
- XL19 EGU2011-12573
Alexander J.P. Houben and the The IODP Expedition 318 Scientific Party Team
 Oligocene environmental changes on the Wilkes Land margin in response to a developing East Antarctic ice sheet.
- XL20 EGU2011-9199
Francesca Sangiorgi, Henk Brinkhuis, Stefan Schouten, James Bendle, Carlota Escutia, Adam Klaus, Fabio Florindo, David Harwood, Veronica Willmott, Gert-Jan Reichert and the Expedition 318 Scientists Team
 Miocene environmental changes along the Wilkes Land margin, Antarctica (IODP 318): preliminary results
- XL21 EGU2011-12401
Jhon J Gonzalez, Carlota Escutia, Henk Brinkhuis, Adam Klaus and the Expedition 318 Scientists Team
 Linking IODP Expedition 318 Sites to Seismic Profiles: Implications for Depositional Paleoenvironments
- XL22 EGU2011-9102
Tina van de Flierdt, Francisco J. Jimenez-Espejo, Carlota Escutia, Henk Brinkhuis, Adam Klaus, and Expedition 318 Scientists
 Bulk sediment geochemistry as a tool in palaeoclimate studies; preliminary results from shipboard analyses of IODP Expedition 318
- XL23 EGU2011-2905
Stefan Hoffmann, Hilmar von Eynatten, and Gerhard Kuhn
 Geochemical record of the ANDRILL AND-2A drillcore: Miocene sediment provenance and continental weathering in the McMurdo Sound, Ross Sea, Antarctica
- XL24 EGU2011-5290
Stephen Pekar, Marvin Speece, Gary Wilson, David Sunwall, and Kirsty Tinto
 The Offshore New Harbor (ONH) Seismic Expedition: Revealing the Stratigraphic History in the Southern McMurdo Sound Region, Ross Sea, Antarctica from the Greenhouse to Icehouse Worlds
- XL25 EGU2011-7645
Allyson Tessin, Ulysses Ninnemann, and Helga Flesche Kleiven
 Centennial scale variability in Scotia Sea surface and bottom water properties during the Late Holocene
- XL26 EGU2011-6505
Cecilie Finsnes, Ulysses Ninnemann, and Helga F. Kleiven
 Links between the Antarctic Circumpolar Current, intermediate ocean ventilation, and deglacial CO₂ changes
- XL27 EGU2011-1103
Gabriele Uenzelmann-Neben and Karsten Gohl
 Amundsen Sea sediment drifts: Archives of modifications in oceanographic and climatic conditions
- XL28 EGU2011-6495
Karsten Gohl, Gabriele Uenzelmann-Neben, Estella Weigelt, Ansa Lindeque, Thomas Kalberg, Gerhard Kuhn, Claus-Dieter Hillenbrand, and Robert D. Larter
 Sedimentary and glacial processes of the Amundsen Sea Embayment, West Antarctica

HS8.2.3 – Characterizing contaminant fate in the subsurface using physical, chemical, microbial and isotopic tools (co-listed) – Orals

Convenor: Martin Elsner | Co-Conveners: Esther Bloem, Christine Stumpp, Michael Radke, Poul L. Bjerg

Room: 34

Chairperson: Martin Elsner, Michael Radke, Christine Stumpp, Esther Bloem, Poul Bjerg

- 15:30–15:45 EGU2011-1572
Elisabetta Ballarini, Sebastian Bauer, Robert Bauer, Christian Griebler, and Christof Beyer
 Modelling of biodegradation and isotope fractionation of petroleum hydrocarbon plumes in 2D bench-scale tank experiments
- 15:45–16:00 EGU2011-2512
Patrick Höhener and Xianjing Yu
 Stable Carbon and Hydrogen Isotope Fractionation of Dissolved Organic Groundwater Pollutants by Equilibrium Sorption
- 16:00–16:15 EGU2011-5979
Sebastian Huntscha, Diana M. Rodriguez Velosa, and Juliane Hollender
 A multi-method approach to understand the fate of organic micropollutants during riverbank filtration
- 16:15–16:30 EGU2011-7834
Julie Chambon, Ida Damgaard, Mette M. Broholm, Daniel Hunkeler, Philip J. Binning, and Poul L. Bjerg
 Combining numerical modeling and isotope data to assess reductive dechlorination and diffusion in clay tills

16:30–16:45 EGU2011-9473

Rachel Dearden, Michael Rivett, and Gary Wealhall

Relevance of a decades-old TCE DNAPL source zone architecture to its effective remediation

16:45–17:00 EGU2011-10005

Alexandre Boisson, Olivier Bour, Tanguy Le Borgne, and Luc Aquilina

Assessing nitrate consumption, nitrous oxide and nitrite production during denitrification using push-pull tests in heterogeneous aquifers

HS8.2.3 – Characterizing contaminant fate in the subsurface using physical, chemical, microbial and isotopic tools (co-listed) – Posters

Convener: Martin Elsner | Co-Conveners: Esther Bloem, Christine Stumpp, Michael Radke, Poul L. Bjerg

Hall A | Display Time 08:00–17:00

Author in Attendance: 13:30–15:00

Chairperson: Martin Elsner, Michael Radke, Christine Stumpp, Esther Bloem, Poul Bjerg

A261 EGU2011-246

Soledad Castaneda, Raymond Sugang, Norman Mendoza, Rosalina Almoneda, and Carlos Primo David
Environmental isotopes and major hydrochemistry for tracing leachate contamination from a municipal landfill in Metro Manila, Philippines

A262 EGU2011-1597

Irina Galitskaya and Gleb Batrak

The study of physicochemical characteristics of the rocks and assessment of groundwater contamination in the storage sites of mining industries waste products

A263 EGU2011-1988

Mathias J. M. Römkens

Seepage and Seepage Gradients in an Homogeneous, Isotropic Aquifer with Drains as a Function of Soil Properties and Flow Region Geometry

A264 EGU2011-3470

Sandro Rinaldi, Sihem Louati, Marie Bergeron, Pierre Yves Galibert, Hocine Bendjoudi, and Ghislain de Marsily

Localization of pollution sources of chlorinated solvents on an alluvial aquifer: coupling hydrogeological modeling and geophysics survey

A265 EGU2011-6699

Jonathan Smith and David Lerner

A framework for assessing the contaminant sorption and retardation potential of aquifers

A266 EGU2011-6717

Jae-Ha Yang and Kang-Kun Lee

Source identification and allocation of multiple chlorinated contaminants using the seasonal impacts of rainfall events in an industrial complex, Wonju, Korea

A267 EGU2011-6748

Jonathan Smith, Claire Perks, and Steven Thornton

A framework for assessing the contaminant attenuation potential of aquifers by iron and manganese-reduction

A268 EGU2011-7223

Dirk Mallants, **Koen Beerten**, Isabelle Wemaere, Matej Gedeon, Bart Rogiers, and Serge Labat

Integration of major ion chemistry and stable isotope data with hydrogeological modelling to infer groundwater pathways

A269 EGU2011-8462

Michael Radke and **Michael Maier**

How representative are dissipation kinetics determined by sediment-water tests? A case study with pharmaceuticals

A270 EGU2011-8595

Mike Spence, Gerard Spinnler, Cristin Bruce, and Dieter Stupp

Comparison of commercially available ¹³C methods for demonstration of enhanced in-situ biodegradation of plume hydrocarbons following oxygen injection

A271 EGU2011-8972

Tiangoua Kone, Fabrice Golfier, Constantin Oltean, Eric Lefevre, and Michel Bues

Experimental study of coupling between bacterial growth and solute transport in biofilm coated porous media

A272 EGU2011-12277

Caroline Gauchotte, Simon Davis, Gwen O'Sullivan, and Robert M. Kalin

Site-Specific Stable Carbon Isotope Study of the Oxidation of Methyl tert-Butyl Ether by Potassium Permanganate using an Advanced On-line Position Specific Stable Isotope Analysis System.

A273 EGU2011-12545

Charline Wiegert, Christoph Aeppli, Henry Holmstrand, Tim Knowles, and Örjan Gustafsson
Compound-Specific Chlorine Isotope Analyses as an Assessment Tool for Contaminated Sites

- A274 EGU2011-13375
Sandra Reinnicke, Allan Simonsen, Sebastian R. Sørensen, Jens Aamand, and **Martin Elsner**
Measurements of Pesticide-Specific Natural Isotope Fractionation: A New Approach to Assessing the Fate of Pesticides in the Environment
- A275 EGU2011-13508
Waleed Saeed, Orfan Shouakar-Stash, Jim Barker, Neil Thomson, and Rick McGregor
The effectiveness of persulfate in the remediation of petroleum contaminants in saline environment at elevated groundwater temperature

IG6/GMPV38 – Forensic and Archaeological Provenancing with Light and Heavy Isoscapes (co-organized) – Orals

Convener: Jurian Hoogewerff | Co-Conveners: Wolfram Meier-Augenstein

Room: 41

Chairperson: J Hoogewerff & W Meier-Augenstein

- 08:30–08:45 EGU2011-7775
Knut Endre Sjøstad, Siri Simonsen, and Tom Andersen
Analysis of forensic glass samples and isotope ratio determination
- 08:45–09:00 EGU2011-11876
Anne-France Maurer, Corina Knipper, Stephen J.G. Galer, Michael Brauns, Daniel Peters, and Bernd R. Schöne
Mapping Bio-available Strontium Isotopic Compositions in Past Migrations: A Comparison of Modern and Archaeological Sampling Materials
- 09:00–09:15 EGU2011-4058
Jurian Hoogewerff, Aaron Clayton, Henriette Ueckermann, Robert Posey, Hilary Bathgate, Clemens Reimann, and Wolfram Meier-Augenstein
Hydrogen, Oxygen and Strontium isoscapes for provenancing in Europe
- 09:15–09:30 EGU2011-3168
Robert Posey, Henriette Ueckerman, Jurian Hoogewerff, Khudooma Al Na'imi, and Tal Simmons
Development and validation of a spatial prediction 'Isoscape' model for the forensic geographical provenancing of human remains in the Middle East.
- 09:30–09:45 EGU2011-13137
Christine Lehn, Susanne Rummel, Christian Dekant, Stefan Hölzl, and Andreas Rossmann
Geographical Origin Determination of Unidentified Corpses by Stable Isotope Techniques - Isotope Ratios of H, C, N and S in Different Body Tissues
- 09:45–10:00 EGU2011-1450
Wolfram Meier-Augenstein, Jurate Landwehr, and Helen Kemp
A New Approach to Calculating the Non-exchangeable 2H Isotopic Composition of Hair and the Procedural Fractionation Factor by Treating the Molar Exchange Fraction as a Process Related Variable.

IG6/GMPV38 – Forensic and Archaeological Provenancing with Light and Heavy Isoscapes (co-organized) – Posters

Convener: Jurian Hoogewerff | Co-Conveners: Wolfram Meier-Augenstein

Hall A | Display Time 08:00–17:00

Author in Attendance: 10:30–12:00

Chairperson: W Meier-Augenstein & J Hoogewerff

- A397 EGU2011-70
Anastasia Holobinko, Wolfram Meier-Augenstein, Helen Kemp, Tracy Prowse, and Henry Schwarcz
2H Stable Isotope Analysis of Human Tooth Dentine: A Pilot Study
- A398 EGU2011-1452
Wolfram Meier-Augenstein, Helen F Kemp, and Susie Fawley
Detection of Counterfeit Scotch Whisky by 2H and 18O Stable Isotope Analysis to Determine Provenance.
- A399 EGU2011-13695
Wolfram Meier-Augenstein, Helen F Kemp, Ian Brewster, and Geoff Ronayne
Stable Isotope Profiles from a Lock of Hair Provide Information of Illegal People Trafficking Route used by a Vietnamese Organised Crime Group
- A400 EGU2011-13804
Steve Mudge, Paul de Leo, Wolfram Meier-Augenstein, and Charles Eadsforth
Forensic identification of the anthropogenic contribution of fatty alcohols to the environment by stable isotope analysis
- A401 EGU2011-10943
Stephanie J. Pietsch and Thomas Tütken
Wild cats forensics: Multi-isotope fingerprinting as a tool to trace the geographic origin of North American felids

- A402 EGU2011-6592
Hilary Bathgate, Andrew Lovett, Jonathan Clarke, Henriette Ueckermann, and Jurian Hoogewerff
The use of $^{87}\text{Sr}/^{86}\text{Sr}$ ratios, Trace Elements and Biological Profiling for Forensic Provenancing of Soils
- A403 EGU2011-13776
Catherine Hoggett, Henriette Ueckermann, Hilary Bathgate, Robert Posey, and Jurian Hoogewerff
Strontium Isotopes and Trace Elements in Horse Hair; Feasibility for Provenancing
- A404 EGU2011-361
Yvette Eley, Nikolai Pedentchouk, Jurian Hoogewerff, Lorna Dawson, and Alexandra Guedes
Molecular and isotopic composition of organic compounds from higher plants: a useful tool for forensic provenancing?
- A405 EGU2011-3419
Wolfram Kloppmann, Philippe Bromblet, Lise Leroux, Anthony Cooper, Noel Worley, and Catherine Guerrot
Origin of European alabaster artworks assessed through isotope fingerprinting (S, O, Sr).
- A406 EGU2011-8677
Mike Seed and Robin Sutka
Benefits of Purge and Trap Technology for Multielemental Stable Isotopic Analysis
- A407 EGU2011-10706
Hilmar Foerstel and Markus Boner
Examples of the application of stable isotopes of light elements for provenancing
- A408 EGU2011-13689
Mirjam Scheeres, Maya Hauschild, Martin Schönfelder, Christopher F.E. Pare, Wolfgang Siebel, and Kurt W. Alt
Isotopic evidence for local and non-local individuals buried at the Iron Age cemetery M?nsingen-Rain, Switzerland

SC1/IG15 – [Short Course] Interactive workshop on stable isotope analytical systematics (co-organized) – Orals

Convener: Pier De Groot

Room: 2

Chairperson: n.n.

13:30–15:00

Chairperson: n.n.

15:30–17:00

BG1.3/IG18 – Application of non-traditional stable isotopes in biogeosciences (co-sponsored by THERMO) (co-organized) – Posters

Convener: Thomas Prohaska | Co-Conveners: Andreas Zitek, Jane Evans, Dr Takafume Hirata, Dr Laura Robinson, Dr Frank Vanhaecke

Poster Area BG | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Andreas Zitek

- BG1 EGU2011-5881
Chen-Feng You, Hou-Chun Liu, Kuo-Fang Huang, Chuan-Hsiung Chung, and Jingfeng Wu
Strontium isotopic ($^{87}\text{Sr}/^{86}\text{Sr}$, $^{87}\text{Sr}/^{86}\text{Sr}^*$ and $^{288}\text{Sr}/^{86}\text{Sr}$) variations in North Pacific
- BG2 EGU2011-8535
Mariano Mercurio, Eleonora Grilli, Elio Coppola, Maurizio de Gennaro, Vincenzo Morra, Thomas Prohaska, Andrea Buondonno, and Alessio Langella
A geofingerprint of the parent material-soil-wine chain in a high quality terroir. A first approach on Piediroso vineyards, Campi Flegrei, southern Italy
- BG3 EGU2011-13771
Carla Rodrigues, Rodrigo Maia, Marion Brunner, Marta Pimpão, Loren Gautz, Thomas Prohaska, and Cristina Máguas
Isotopes as tracers of the main environmental factors that contribute to the specificity of the green coffee bean
- BG4 EGU2011-10573
Thomas Prohaska, Monika Horsky, Marion Brunner, Torsten Berger, Peter Hietz, Carla Rodrigues, and Cristina Máguas
The use of the isotope systems of alkaline earth elements (Mg, Ca, Sr) to determine plant origin and their potential to study plant metabolism and environmental fluxes
- BG5 EGU2011-8776
Katherina Sailer, Andreas Zitek, Herwig Waidbacher, Johanna Irrgeher, and Thomas Prohaska
The potential of microchemical information in fish hard parts to study origin and migration in the Austrian Danube catchment

- BG6 EGU2011-1209
Benjamin Walther, Tim Dempster, Mike Letnic, and Malcolm McCulloch
Strontium isotopes and trace elements in fish otoliths reveal individually variable movement patterns in diadromous fish.
- BG7 EGU2011-1345
Andreas Zitek, Johanna Irrgeher, Albert Jagsch, Manfred Kletzl, Thomas Weismann, and Thomas Prohaska
Transgenerational marking of a freshwater fish species, *Salmo trutta* f.f. L., using an enriched ^{84}Sr spike solution
- BG8 EGU2011-3966
Dai jie and Qu jianguo
Lead Isotope Ratios Analysis in Corals by High Resolution ICP-MS
- BG9 EGU2011-10285
Johanna Irrgeher, Dominique Kreutz, Sarah Theiner, Maria Teschler-Nicola, and Thomas Prohaska
Post-depositional elemental and isotopic modification of archaeological bone and tooth samples: analytical cognition tools and solution strategies
- BG10 EGU2011-11167
Sarah Theiner, Johanna Irrgeher, Veronika Holzer, Erich Pucher, Maria Teschler-Nicola, and Thomas Prohaska
The use of strontium isotope ratio measurements by MC-ICP-MS for the reconstruction of animal migration on the example of the Celtic excavation site Roseldorf in Lower Austria
- BG11 EGU2011-6621
Stefanie Kappel, **Sergei Boulyga**, Stefan Bürger, and Thomas Prohaska
Application of mass spectrometric techniques for the determination of $n(\text{U-235})/n(\text{U-238})$ isotope ratios in depleted to low enriched U material
- BG12 EGU2011-7973
Monika Sturm, Stephan Richter, Yetunde Aregbe, Roger Wellum, Timotheos Altitzoglou, Andre Verbruggen, Klaus Mayer, and Thomas Prohaska
Feasibility study for the preparation of plutonium reference materials for nuclear age dating
- BG13 EGU2011-3436
Dmitry Malinovskiy and Frank Vanhaecke
Mercury isotope fractionation during abiotic transmethylation reactions
- BG14 EGU2011-4982
Michael E. Böttcher, Nadja Neubert, Katja von Allmen, Elias Samankassou, Olaf Dellwig, and Thomas F. Nägler
Barium isotope fractionation during formation of anhydrous barium carbonate (witherite): Influence of experimental conditions

HS8.2.4/IG21 – Groundwater Dating: Applications and current problems (co-organized) – Orals

Convener: Martin Kralik | Co-Conveners: George Darling, Uwe Morgenstern, Juergen Sueltenfuss

Room: 39

Chairperson: Martin Kralik, George Darling

- 13:30–13:45 EGU2011-2005
Ate Visser, Hans Peter Broers, Roland Purtschert, and Jürgen Sültenfuß
Groundwater travel time distributions of a drinking water well field characterized by ^{85}Kr , $^3\text{H}/^3\text{He}$ and ^{39}Ar
- 13:45–14:00 EGU2011-3389
Dan Lapworth, Alan MacDonald, George Darling, and Daren Goody
Using residence time tracers to understand groundwater processes in shallow basement and sedimentary aquifers in Africa, new possibilities and potential limitations
- 14:00–14:15 EGU2011-10343
Eline Malcuit, Philippe Negrel, Christophe Innocent, Emmanuelle Petelet-Giraud, and Pierre Durst
Dating tools applied to mineralized Eocene groundwater, for a sustainable management of the Entre-deux-Mers drinking water, Aquitaine Basin, South western France.
- 14:15–14:30 EGU2011-9050
Stephanie Zimmermann and Ronald Kozel
The use of groundwater dating for the characterisation of Swiss groundwater monitoring sites
- 14:30–14:45 EGU2011-12517
Martin Kralik, Franko Humer, George Darling, Jürgen Sültenfuß, and Johannes Grath
Dating of young groundwater in nine porous aquifers in Alpine Basins by ^{18}O , ^3H , $^3\text{H}/^3\text{He}$, CFC and SF_6
- 14:45–15:00 EGU2011-1537
Uwe Morgenstern and Christopher J Daughney
Groundwater age for identification of impacts of land-use intensification and natural hydrochemical evolution on groundwater quality

HS8.2.4/IG21 – Groundwater Dating: Applications and current problems (co-organized) – Posters

Convener: Martin Kralik | Co-Conveners: George Darling, Uwe Morgenstern, Juergen Sueltenfuss

Hall A | Display Time 08:00–17:00

Author in Attendance: 15:30–17:00

Chairperson: Uwe Morgenstern, Juergen Sueltenfuss

- A276 EGU2011-1211
Pei-Ying Lin and Louis Loung-Yie Tsai
 Evaluation of groundwater recharge at a well field near Chien-Shih area, Shinchu, Taiwan: combined pumping test and isotopic studies
- A277 EGU2011-4069
Hsin-Fu Yeh, Cheng-Haw Lee, and Kuo-Chin Hsu
 Integrated Approach for Assessing the Characteristic of Groundwater Recharge in Basin Scale
- A278 EGU2011-6551
Elena Pérez and Africa de la Hera
 Isotopical characterization of the hydrodynamic functioning of Ruidera lakes (Spain)
- A279 EGU2011-10416
Maria Rosa Duque and Isabel Malico
 Topography , aquifer depth and temperature anomalies
- A280 EGU2011-14087
Martin Kralik, Franko Humer, Wolfgang Papesch, and Roland Tesch
 Heterogeneous mean transfer-times in an Alpine dolomite-karst massif, Austria: ^{18}O , ^3H , $^3\text{H}/^3\text{He}$, CFC, SF_6 , chloride and dye tracer - investigations
- A281 EGU2011-2007
Ate Visser, Mike Singleton, and Brad Esser
 Towards a mobile Membrane Inlet Mass Spectrometry (MIMS) system for the detection of atmospheric noble gases in groundwater
- A282 EGU2011-2009
Hans Peter Broers and Ate Visser
 Water quality prognosis of a production well field based on monitoring data and groundwater dating
- A283 EGU2011-9786
Thierry Labasque, Luc Aquilina, and Vergnaud Virginie
 intercomparison test of groundwater dating methods: proposition for an international test in French Brittany (France)
- A284 EGU2011-3506
Wolfram Kloppmann, Rajaa Mouloudi, Laurence Gourcy, Susanne Schomburgk, Stephan Urban, Thomas Kärcher, and Wolfgang Müller
 Groundwater dating and geochemical conditions in an artesian, siliciclastic transboundary aquifer, under pristine conditions and after one decade of exploitation using radiocarbon, tritium, SF_6 , CFCs.
- A285 EGU2011-9815
Luc Aquilina, Labasque Thierry, Fourré Elise, Jean-Baptiste Philippe, Le Gal La Salle Corinne, Michelot Jean-Luc, Sumonucci Caroline, Van Meir Nathalie, Bugai Dimitri, and Lancelot Joël
 Groundwater dating in the Chernobyl aquifer

