



Program Booklet 10th Swiss Geoscience Meeting

Bern, 16th – 17th November 2012



Mountains – Up and Down

sc | nat 

Swiss Academy of Sciences
Akademie der Naturwissenschaften
Accademia di scienze naturali
Académie des sciences naturelles

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**UNIVERSITÄT
BERN**

Large picture: View of the Aletsch Glacier from Bettmerhorn (Picture: Pierre Dèzes, SCNAT)
Small picture: An Aebi Terratrac TT 205 working in steep terrain (Picture: Aebi, Burgdorf).

Welcome to Bern and to the 10th Swiss Geoscience Meeting 2012

Dear Geoscientists

We cordially welcome you to the 10th Swiss Geoscience Meeting hosted by the Institute of Geography and the Institute of Geological Sciences at University of Bern. The SGM is co-organized by our Institutes, the Swiss Academy of Sciences and the University of Bern.

This year we proudly celebrate the 10th edition of the Swiss Geoscience Meeting. Since the first SGM in Basel in 2003 the Meeting has substantially developed. The number of Symposia has grown to as many as 19 and their focus has evolved from rather earth science-centered topics to a large variety of topics, truly representative of the great diversity in geosciences. This year, the nearly 700 registered participants will have the opportunity to listen to 200 oral presentations and look at 180 posters. This unique discussion platform offers notably young Geoscientists the opportunity to present and discuss their research results with a broad audience.

The fact that Geology and Geography departments from all Swiss universities, from the Federal Institutes of Technology and from the Universities of Applied Sciences take turns in the organizing of the yearly SGM brings the institutes and their members closer together. Not only in this respect is the SGM the most significant product of the "Platform Geosciences" of the Swiss Academy of Sciences (SCNAT).

The principal theme of the Bern Meeting is "Mountains - up and down". Four distinguished key speakers will discuss this theme in the Fridays plenary session from different point of views: Celâl Şengör from Istanbul Technical University will start with a presentation on relief-building processes on rocky planets, Eric Brun from the French National Centre for Meteorological Research (Météo-France/CNRS) will discuss the influence of changing climate conditions on snowpack characteristics and on the underlying soil in mountain regions, Olav Slaymaker from the University of British Columbia will focus on mountain environment changes in the Anthropocene epoch. The symposium will conclude with a presentation by Paul Messerli, from the University of Bern, who will focus on the evolution of the cultural perception of the Alps and their significance for society through time.

On behalf of the local organizing committee, we would like to express our sincere thanks to Pierre Dèzes (SCNAT). His continuous and outstanding commitment to the Swiss Geoscience Meetings has guaranteed the long-term success of this event and made it possible that we can meet again this year in Bern. The Program Committee together with the symposia conveners are responsible for the high scientific quality of this meeting – thank you all for your commitment. We also thank the University of Bern and its technical staff for hosting this large Meeting, as well as the SCNAT for its substantial financial support. Our gratitude also goes to the members of the Local Organizing Committee for their great job in managing the logistics. A warm thank you to all the many student helpers, the administrators and the canteen collaborators who are helping us making this meeting a success. And, last but not least, we would like to thank all the participants contributing to an exciting and stimulating meeting!

For the organizing committee,

Bruno Schädler and Hans-Rudolf Egli

Local committee

Stefan Brönnimann
Pierre Dèzes
Céline Dizerens
Hans-Rudolf Egli (Co-President SGM Bern 2012)
Margreth Keiler
Klaus Mezger
Thomas Pettke
Bruno Schädler (Co-President SGM Bern 2012)
Rolf Weingartner
Wolfgang Wilcke
Stefan Wunderle

Exhibitors (see also back page)

Birs HydroMet GmbH
CHGEOL
GLUB/GB
SCNAT / Platform Geosciences
SGG/SGS
SGTK
swisstopo
Tetraedre SARL

Registration and information

Registration is in the Hauptgebäude (HG) main entrance, see plan on page 4.
Fr: 12:30 - 18:30h
Sa: 8:00 - 17:00h

Saturday lunch bags

Bags are delivered at the main entrance of the Hauptgebäude (HG) starting at 12:00h

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10th Swiss Geoscience Meeting, Bern 2012

**Friday 16th and Saturday 17th November 2012:
Hauptgebäude (HG) and ExWi, University of Bern**

The 10th edition of the Swiss Geoscience Meeting will focus on the latest advances in research in geosciences. It will be held 16th and 17th November 2012 in Bern.

The Institute of Geography and the Institute of Geological Sciences of the University of Bern, as well as the Platform Geosciences of the Swiss Academy of Sciences (SCNAT) cordially invite you to participate in the 10th Swiss Geoscience Meeting to be held on 16th and 17th November 2012 in Bern.

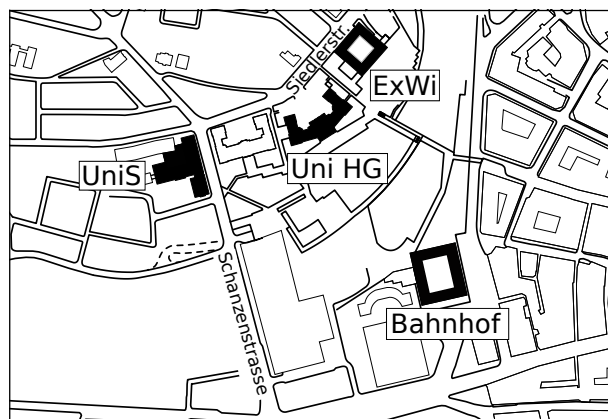
On Friday 16th, keynote presentations will focus on this year's theme «Mountains – Up and Down». Celâl Şengör from Istanbul Technical University will start with a presentation on relief-building processes on rocky planets, Eric Brun from the French National Centre for Meteorological Research (Météo-France/CNRS) will discuss the influence of changing climate conditions on snowpack characteristics and on the underlying soil in mountain regions, Olav Slaymaker from the University of British Columbia will focus on mountain environment changes in the Anthropocene epoch. The symposium will conclude with a presentation by Paul Messerli, from the University of Bern, who will focus on the evolution of the cultural perception of the Alps and their significance for society through time.

On Saturday 17th, a series of scientific symposia will cover the diverse spectrum of current research in geoscience, encompassing the lithosphere, the hydrosphere, the cryosphere, the biosphere, the atmosphere and the anthroposphere.

The SGM also provides the ideal environment to foster informal contacts and discussion among scientists, in particular during the Swiss Geoscience Party on Friday evening but also at the poster sessions in the main hall of the venue on Saturday. Time is reserved for two poster sessions, at which the authors will be present for active discussion and feedback.

Looking forward to seeing you in Bern!

The SGM 2012 Organizing Committee.



Location map:

Train arrivals: Go down to passage underground, then towards tracks 12/13 and see three glass elevators. Go to the 4th floor. You are now in the park "Grosse Schanze" directly in front of the main building (Uni HG) that is behind you.

Or use platform entrance / exit (die Welle) in the west of the main railway station. Cross the Schanzenstrasse and go up the stairs to your right, which lead to the "Grosse Schanze" in front of the main building.

By car: Go to Bahnhof Parking and take the elevator as with train arrivals.

10th Swiss Geoscience Meeting, Bern 2012

Mountains – Up and Down

Plenary Session, Friday November 16th

Room 210

University of Bern, Hauptgebäude (HG), Grosse Schanze,

Aula

	Chair: Klaus Mezger	
13:30 - 14:00	Welcome Address by the Vice-Rector of University of Bern Welcome Address by the President of the Swiss Academy of Sciences	Doris Wastl-Walter Thierry Courvoisier
14:00 - 14:45	Comparative tectonics of the rocky planets: old methods and forgotten hypotheses in creating new viewpoints	Celâl Şengör, Istanbul Technical University
14:45 - 15:30	Snow and climate interactions in a changing climate	Eric Brun, Météo-France/ CNRM/CNRS Joint SNC-IUGG & SNC-IUGS Union Lecture
15:30 - 16:15	Coffee break	
	Chair: Rolf Weingartner	
16:15 - 17:00	Mountain Environment Changes in the Anthropocene Epoch	Olav Slaymaker, University of British Columbia
17:00 - 17:45	The Alps = where mountains rise	Paul Messerli, University of Bern
	Chair: Pierre Dèzes	
17:45 - 18:25	• Communications Platform Geosciences • Presentation SGM 2013 in Lausanne • Festival Erlebnis Geologie 2013 • Paul Niggli Medal • Swiss Geological Society Award • CHGEOL Award	Bruno Schädler Karl Föllmi Matthias Damo Christoph Heinrich Neil Mancktelow Mikael Hänni
ab 18:30 - 22:00	Swiss Geoscience Party (food, drinks and rejoicing) at UniS For registered participants only	
Poster	"Die Berner Geographie und die Welt in den letzten 250 Jahren" 40-Meter Poster zum Jubiläum 125 Jahre Geographisches Institut der Universität Bern, 1886-2011 (Stefan Brönnimann, Alexander Hermann)	

Symposium Sessions, Saturday November 17th

Hauptgebäude (HG) and ExWi, University of Bern

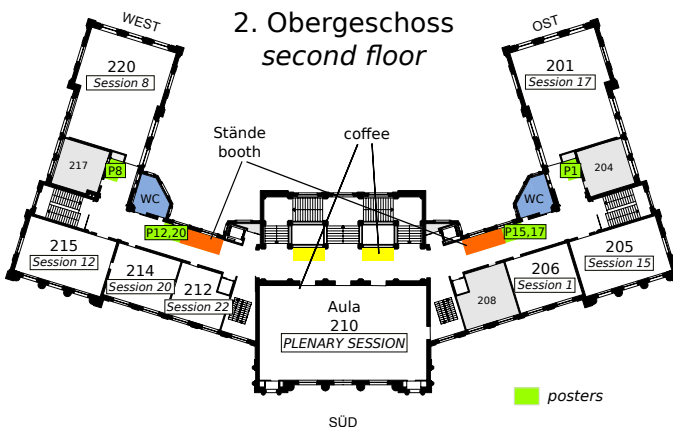
1. Educational research on Geoscience teaching and learning
2. Structural Geology, Tectonics and Geodynamics
3. Mineralogy, Petrology, Geochemistry
4. Tracing magmatic systems from the petrological, geochemical and isotopic perspective
(merged with symposium 3)
5. Low-Temperature Isotope Geochemistry
(merged with symposium 3)
6. Geophysics and Rockphysics
7. Stratigraphy in Switzerland - from field to application
8. Palaeontology – in memoriam of Jean-Pierre Berger
9. Quaternary environments: landscapes, climate, ecosystems, human activity during the past 2.6 million years
10. Geomorphology
11. Cryospheric Sciences
12. Advances in applied hydrology and limnology.
13. Limnogeology and the interdisciplinary study of lacustrine sediments: Crystallizing F.-A. Forel vision.
14. Environmental Biogeosciences
15. Biogeochemical cycles in a changing environment
16. Seasons and phenology in mountain regions
(merged with symposium 17)
17. Alpine Meteorology
18. Greenhouse Gases: Linkages between biosphere and climate
(merged with symposium 15)
19. Geoscience and Geoinformation - From data acquisition to modelling and visualisation
20. Earth System Science related Earth Observation
21. Landscape and its meanings for society
22. Symposium in human geography

Rooms

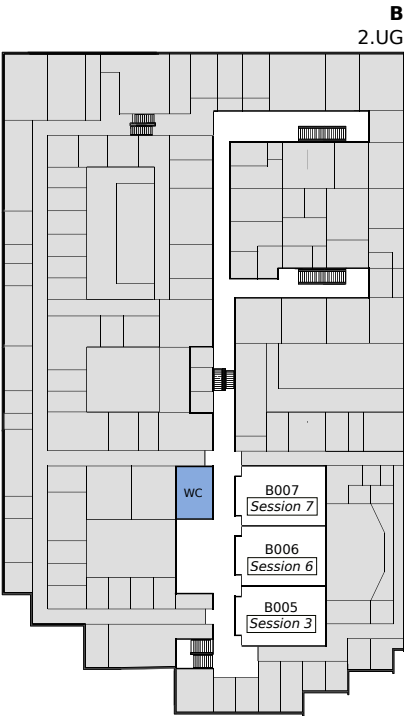
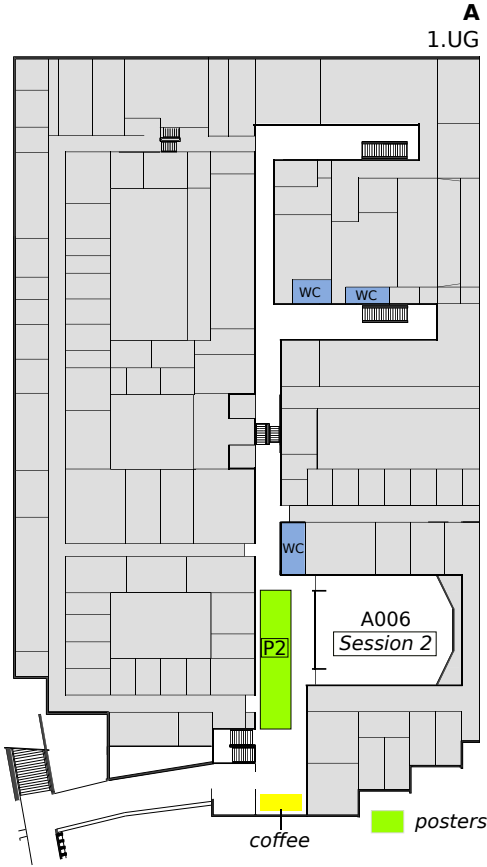
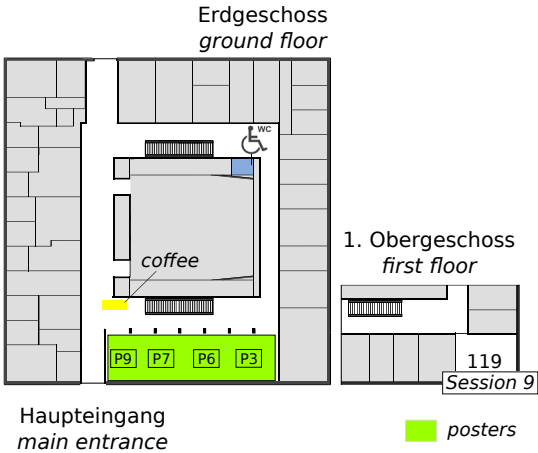
Room	Session	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00
HG 206	1 Educational research on Geoscience teaching and learning										
ExWi A006	2 Structural Geology, Tectonics and Geodynamics										
ExWi B005	3 Mineralogy, Petrology, Geochemistry					S S	S				
ExWi B006	6 Geophysics and Rockphysics										
ExWi B007	7 Stratigraphy in Switzerland - from field to application							S S S			
HG 220	8 Palaeontology – in memoriam of Jean-Pierre Berger										
ExWi 119	9 Quaternary environments: landscapes, climate, ecosystems, human activity during the past 2.6 million years										A A
HG 114	10 Geomorphology					S S					
HG 120	11 Cryospheric Sciences										
HG 215	12 Advances in applied hydrology and limnology					S	S A A		A		
HG 106	13 Limnogeology and the interdisciplinary study of lacustrine sediments:										
HG 101	Crystalizing F.-A. Forel vision.										
HG 205	14 Environmental Biogeosciences										
HG 205	15 Biogeochemical cycles in a changing environment										
HG 201	17 Alpine Meteorology							S S S		A	
HG 105	19 Geoscience and Geoinformation - From data acquisition to modelling and visualisation										
HG 214	20 Earth System Science related Earth Observation										
HG 115	21 Landscape and its meanings for society										
HG 212	22 Symposium in human geography										

 Talks
  Posters
  Awards
  S
  Session Meeting

8



Map of lecture rooms in ExWi:



Session Programm Saturday

Symposium Sessions, Saturday November 17th

Session 1: Educational research on Geoscience teaching and learning

**Room
HG 206**

Conveners: Sibylle Reinfried, Armin Rempfler and Marco Adamina

		Chair: Sibylle Reinfried
08:30-08:50	Rempfler A.	Systems thinking – the key concept for geoscience teaching and learning. Avalanche training as a way of promoting it.
08:50-09:10	Adamina M.	Kompetenzen und Kompetenzentwicklungen von Schülerinnen und Schülern zur räumlichen Orientierung in der Primarstufe
09:10-09:30	Heer A. J.	Practical teaching of geography at high school level - experiences from own teaching practice.
09:30-09:50	Reinfried S., Tempelmann S.	Exploring secondary school students' conceptual understanding of hillslope springs through learning process analyses

10:00-11:00 *Morning Poster Session with coffee*

Posters Session 1:

P 1.1	Sauron A., Haslinger F.	Seismo at School – introducing seismology to the classroom in Switzerland
P 1.2	Madonna E.	Fehlvorstellungen zum Thema Jahreszeiten und deren Änderungen durch den Unterricht

Session 2: Structural Geology, Tectonics and Geodynamics

**Room
ExWi A006**

Conveners: Neil Mancktelow, Guido Schreurs, Paul Tackley

		Chair: Paul Tackley
09:15-09:30	Fischer R.	Self-consistent modelling of planetary differentiation and onset of mantle convection on Mars. A comparative study in 2D and 3D
09:30-09:45	Zhu G., Gerya T., Tackley P., Kissling E.	4-D Numerical Modeling of Crustal Growth at Active Continental Margins
09:45-10:00	Ueda K., Willett S., Gerya T.	Coupling of landscape evolution and rheologically layered thermomechanical models in three dimensions

10:00-11:00 *Morning Poster Session with coffee*

		Chair: Neil Mancktelow
11:00-11:15	Bauville A., Schmalholz S.	Thermo-mechanical model for the finite strain distribution in kilometer-scale shear zones
11:15-11:30	Ruh J., Gerya T., Burg J.-P.	Towards 4D modeling of transpressional fold-and-thrust belts

11:30-11:45	Frehner M., Reif D., Grasemann B.	Mechanical versus kinematical shortening reconstructions of the Zagros High Folded Zone (Kurdistan Region of Iraq)
11:45-12:00	Robyr M., Banerjee S., El Korh A.	New time-constraints on the prograde metamorphism in the High Himalaya of NW Lahul (NW India)
12:00-12:15	Ben Slama M., Ghanmi M., Ben Youssef M., Zargouni F.	Early Cretaceous Triassic salt extrusion rates at Jebel Ech Cheid (N. Tunisia, southern Tethyan passive margin)

12:15-13:50

Lunch

		Chair: Marco Herwegh
13:50-14:00	Herwegh M.	Introduction to Special Symposium on Alpine Geology in honour of Adrian Pfiffner
14:00-14:15	Scheiber T., Pfiffner O.A., Schreurs G.	The nature of the "Frilhorn nappe" (Valais, Switzerland)
14:15-14:30	Sala P., Pfiffner O.A., Frehner M.	Alpine fold and thrust structures: a 3-D model of the Säntis area (Switzerland)
14:30-14:45	Wehrens P., Baumberger R., Herwegh M.	Deformational evolution of the Aar Massif (Central Alps): From macro- to micro-scale
14:45-15:00	Cardello G.L., Mancktelow N.S.	Oblique normal faulting in carbonates at different crustal levels: examples from the SW Helvetic and Central Apennines

15:00-16:00

Afternoon Poster Session with coffee

		Chair: Guido Schreurs
16:00-16:15	Schmid S.M., Scharf A., Handy M.R., Rosenberg C.L.	The Tauern Window (Eastern Alps, Austria) – A new tectonic map, cross-sections and tectonometamorphic synthesis
16:15-16:30	Beltrán-Triviño A., Einkler W., Bussien D., von Quadt A.	Early Mesozoic rift-related sandstones of the Southern Alpine Tethys margin characterised by detrital zircons: U-Pb dating and Hf-isotopes analysis
16:30-16:45	Heuberger S., Naef H.	The St.Gallen Fault Zone (NE Switzerland): A long-lived, multiphase structure in the North Alpine Foreland - Insights from high-resolution 3D seismic data
16:45-17:00	Madritsch H., Birkhäuser P., Heuberger S., Malz A., Meier B., Schnellmann M.	Thin- vs. Thick-skinned tectonics in the Alpine foreland of central northern Switzerland: New perspectives based on reprocessed and new reflection seismic data
17:00-17:15	Villiger A., Geiger A., Marti U., Brockmann E., Schlatter A.	Swiss 4D: Determination of strain rates from GNSS campaign and levelling data
17:15-17:30	Gonzalez L., Pfiffner O.A.	Structure and evolution of the Central Andes of Peru

Posters Session 2:

P 2.1	Thielmann M., Rozel A., Kaus B.J.P., Ricard Y.	Dynamic recrystallization and shear heating in numerical models of lithospheric-scale shear zones
P 2.2	Rolf T., Coltice N., Tackley P.J.	Dynamic origin of Wilson cycles in mantle convection with self-consistent plate tectonics and continental drift
P 2.3	Liao J., Gerya T.	3D numerical modeling of continental extension to oceanic spreading
P 2.4	Crameri F., Tackley P., Meilick I., Gerya T., Kaus B.	Implications of single-sided subduction in global self-consistent models of mantle convection
P 2.5	Ueda K., Gerya T.	Exhumation of HP to UHP-HT rocks during delamination in orogenic settings - distribution of P-T paths from numerical modelling

P 2.6	Golabek G., Gerya T., Morishima R., Tackley P., Labrosse S.	Towards combined modelling of planetary accretion and differentiation
P 2.7	May D.	A 3D Marker-In-Cell Finite Element based Discretisation for Lithospheric Scale Geodynamics: Theory and Applications
P 2.8	von Tscharnier M., Schmalholz S.	3D FEM modeling of fold nappe formation in the Western Swiss Alps
P 2.9	Frehner M., Exner U.	Do foliation refraction patterns around buckle folds represent finite strain?
P 2.10	Collignon M., Kaus B., Frehner M., Fernandez N., Castellort S., Simpson G., Burg J.-P.	Modeling interactions between tectonic and surface processes in the Zagros Mountain, Iran
P 2.11	Bahiraie S., Abbasi M.	Kinematic Investigation of the Central Alborz Mountain belt
P 2.12	Bagheri S., Damani G.S., Jafari S.	Cenozoic deformation of Mount Birk: A key to restoring of Iranian Baluchestan tectonic history
P 2.13	Mohammadi A., Winkler W., Burg J.-P.	Sandstone detrital mode and heavy mineral study in the Makran accretionary wedge, southeast Iran: implication for the tectonic setting
P 2.14	Heredia B.D., Hilgen F., Gaylor J.R., Kuiper K., Mezger K.	The Cretaceous-Palaeogene (K/Pg) boundary: cyclostratigraphic and U-Pb zircon geochronological constraints
P 2.15	Peybernes C., Martini R., Chablais J.	The breccias of Sambosan Accretionary Complex (southwestern Japan): tectonic vs depositional origin
P 2.16	Abdelfettah Y., Mauri G., Kuhn P., Schill E., Vuataz F.-D.	Investigation of deep geological structures in the north-west part of Canton of Neuchâtel using a combination of gravity and 3D geological model
P 2.17	Arndt D., Jordan P., Madritsch H.	The Born Engelberg Anticline (Eastern Jura Mountains): New insights from balanced cross sections and 3D modelling
P 2.18	Malz A., Madritsch H., Meier B., Heuberger S., Navabpour P., Kley J.	To what extent have inherited normal faults influenced thrust propagation at the front of the easternmost Jura fold-and-thrust belt?
P 2.19	Mauri G., Negro F., Abdelfettah Y., Schill E., Vuataz F.-D.	Deep geothermal exploration of low enthalpy reservoir in the Neuchâtel Jura (GeoNE project) – Use of gravity survey to validate and improve 3D geological models.
P 2.20	Negro F., Mauri G., Vuataz F.-D., Schill E.	Exploration of deep low enthalpy geothermal reservoirs in the Neuchâtel Jura (GeoNE project) – 3D geological and thermal modeling of potential aquifers.
P 2.21	Giroud N., Vuataz F.-D., Schill E.	Permeable Fault Detection in Deep Geothermal Aquifer Exploration by Soil Gas Measurement
P 2.22	Abedgno M., Vouillamoz N., Deichmann N., Husen S., Wüst-Bloch H.G., Mosar J.	Cross-correlation and location error assessment of nano-earthquakes on the Fribourg Lineament - Switzerland
P 2.23	Peters M., Weber C.	The application of titanium-in-quartz geothermometry in recrystallized quartz - a methodological discussion
P 2.24	Poilvet J.-C., Goncalves P., Oliot E., Marquer D.	Role of brittle deformation and fluid-rock interaction on the formation of ductile shear zone under blueschist facies conditions
P 2.25	Moulas E., Podladchikov Y., Vrijmoed J., Tajmanova L., Simon N., Burg J.-P.	Transient Temperature and Pressure variations in crustal shear zones – numerical modelling using local-thermodynamic equilibrium and a conservative approach
P 2.26	Moulas E., Burg J.-P., Kostopoulos D., Schenker F.	Chemical zoning and ductility of natural garnet at lower crustal conditions: An example from the Rhodope Massif

P 2.27	Antić M., Kounov A., Trivić B., Peytcheva I., von Quadt A., Gerdjikov I.	Fission-track constraints on the thermal evolution of the Serbo-Macedonian Massif (south Serbia, southwest Bulgaria and east Macedonia)
P 2.28	Schenker F.L., Forster M., Burg J.-P.	The Eastern Pelagonian metamorphic core complex: insight from the $^{40}\text{Ar}/^{39}\text{Ar}$ dating of white micas
P 2.29	Ladeb M.F., Zargouni F.	Inversion tectonique d'une zone de relais extensive adjacente à un diapir salifère: terminaison orientale du J. Chambi (Atlas central tunisien).
P 2.30	Egli D., Mancktelow N., Spikings R.	$^{40}\text{Ar}/^{39}\text{Ar}$ dating of Alpine shear zones in the Mont Blanc area
P 2.31	Pleuger J., Mancktelow N., Spikings R.	Structural and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronological data from different mylonite belts along the Canavese Fault
P 2.32	Cavargna-Sani M., Epard J.-L., Bussy F., Ulianov A.	Basement lithostratigraphy of the Adula nappe: implications for alpine kinematics
P 2.33	Ziegler M., Loew S., Moore J.R.	Distribution and inferred ages of exfoliation joints in the Aar Granite (Central Alps, Switzerland)
P 2.34	Almqvist B.S.G., Misra S.	Seismic properties and anisotropy in melt-generating metapelites
P 2.35	Hetényi G., Kissling E., Husen S., Clinton J. and the AlpArray Working Group	AlpArray – the next generation seismology initiative
P 2.36	Houlié N.	Deformation of flat areas by using InSAR. Application to the Geneva (CH) and la Fauté-sur-mer (FR) areas

Session 3: Mineralogy, Petrology, Geochemistry

**Room
ExWi B005**

Convenors: Eric Reusser, Bernard Grobéty, Benjamin Heredia, Sebastien Pilet, Thomas Nägler, Elias Samankassou, Andrea R. Voegelin

		Chair: Eric Reusser
09:00-09:15	Tran T.D., Audiguier M., Cojean R.	Experimental study of the sensitivity to shrink/swell behaviour of clayey soils in the Paris Basin
09:15-09:30	Ferreiro Mählmann R., Bozkaya Ö., Potel S., Le Bayon R., Segvic B., Nieto García F.	The pioneer work of Bernard Kübler and Martin Frey in very low-grade metamorphic terranes: Paleo-geothermal potential of variation in Kübler-Index/organic matter reflectance correlations – a review
09:30-09:45	Mattsson, H.B.	Ascent and fragmentation in volcanic eruptions involving CO_2 -rich silicate magmas
09:45-10:00	Nandedkar R., Ulmer P., Müntener O., Hürlimann N.	Trace element partitioning along the liquid line of descent from olivine-tholeiite to granite

10:00-11:00 Morning Poster Session with coffee

		Chair: Benjamin Heredia
11:00-11:15	Cooper L., Reubi O., Dungan M., Bourdon B., Langmuir C., Turner S., Schaefer J.	Using U-series and beryllium isotopes to reveal the occurrence and relative timing of crustal and mantle processes in the Southern Volcanic Zone of Chile
11:15-11:30	El Korh A.	Ablation behaviour of titanite and constraints for U–Th–Pb geochronology using LA-ICP-MS

11:30-11:45	Greber N.D., Neubert N., Nägler T.F.	Do Mo isotope fractionation processes accompany the dissolution of molybdenites? Studying the interface of water, molybdenite and their weathering products.
11:45-12:00	Pretet C., Nägler T.F., Reynaud S., Samankassou E.	First results of Barium isotope fractionation in scleractinian coral skeleton

12:00-14:00 **Lunch**

12:30-13:15 **Mitgliederversammlung der SMPG / General Assembly SSMP**

		Chair: Peter Ulmer
14:00-14:15	Cochrane R., Spikings R., Chew D., Wotzlaw J. F., Chiaradia M., Tyrrell S., Schaltegger U., Van der Lelij R.	Extracting accurate high temperature thermal histories from crustal rocks
14:15-14:30	von Niederhäusern B., Engi M., Rubatto D.	HP metamorphism in the Sesia Zone (Western Alps, Italy): Constraints on subduction dynamics of continental crust from in-situ U-Th-Pb dating of accessory minerals
14:30-14:45	Luginbühl S., Ulmer P., Pettke T.	The geochemistry of aqueous fluids and hydrous melts in subduction zones
14:45-15:00	Ortelli M., Kouzmanov K., Dilles J.H., Rusk B.G.	Fluid inclusion study in ore and gangue minerals from Main Stage veins at Butte, Montana.
15:00-15:15	Pinget M. MC., Dold B., Fontboté L.	Exotic mineralization at Chuquicamata, Chile: focus on the copper wad enigma
15:15-15:30	Moeller K., Schoenberg R., Grenne T., Thorseth I.H., Pedersen, R.B.	Fe stable isotope fractionation in modern and ancient hydrothermal Fe-Si deposits

15:30-16:00 **Afternoon Poster Session with coffee**

Posters Session 3:

P 3.1	Galster F., Müntener O.	Accessory mineral thermometry, a case study from the Ivrea Verbano Zone
P 3.2	von Niederhäusern B., Manzotti P., Cenki-Tok B., Zucali M., Engi M., Rubatto D., Darling J.	The Permian evolution of the internal Austroalpine units (Sesia Zone, Dent Blanche tectonic system): Constraints from in-situ U-Pb geochronology
P 3.3	Negro F., Bousquet R., Vils F., Pellet C.M., Schaub J.	Thermal structure and metamorphic evolution of the Piemonte-Ligurian metasediments in the northern Western Alps
P 3.4	Vogel M., Früh-Green G., Schwarzenbach E., Boschi C.	Serpentinization and fluid-rock interaction in mafic and ultramafic seafloor: Constraints from Ligurian ophiolite sequences
P 3.5	Hauser A., Bussy F.	Residual liquid segregation and rhythmic magmatic layering by syn-magmatic shear in the Punta Falcone intrusion (Sardinia, Italy)
P 3.6	Tornare E., Bussy F.	Origin and emplacement of a clinopyroxenite body in the feeder-zone of an ocean island volcano (Fuerteventura, Canaries)
P 3.7	Rochat L., Pilet S.	Alkaline melts –peridotite reaction as the process responsible for the nephelinite-alkali basalt transition
P 3.8	Suter D., Franz L., de Capitani C.	PT-t evolution of migmatites from the region of Todtnau (southern Schwarzwald, southwest Germany)
P 3.9	Hunziker D., Reusser E., Grolimund D., Lottermoser W., Burg J-P.	Fe ³⁺ /Fe ²⁺ ratios in minerals and bulk of metamorphic rocks: Mössbauer spectroscopy, wet chemistry and high resolution XANES on the blueschists of Syros and Sifnos (Cyclades, Greece)

P 3.10	Müller F., Mullis J.	Geochemical investigation of fluid inclusions in fissure-quartzcrystals of the Meta-dolomites in the Binn-Valley, Wallis, Switzerland
P 3.11	Wolf M., Mullis J.	Retrograde fluid evolution and its impact on mineral precipitation. An example from an Alpine fissure of the Gotthard rail base tunnel between Amsteg and Sedrun, external part of the Central Alps.
P 3.12	Dolder F., Mäder U.K., Jenni, A.	Experimental characterization of cement-bentonite interaction using core infiltration techniques coupled with 4D X-ray tomography
P 3.13	Bader T., Zhang L., Franz L., Ratschbacher L., de Capitani C.	The enigmatic Songshugou complex (Qinling orogen, central China): mélange of high-pressure and (ultra) high-temperature metamorphic rocks?
P 3.14	Beridze G., Tedliashvili K.	New data about regional metamorphism and magmatism of Khrami crystalline massif (the Caucasus, Georgia)
P 3.15	Kayani, S.	Elemental composition of a bangle shard from Harrappa, an Indus valley settlement
P 3.16	Novrooz Z., Moosavi Harami R., Mahboubi A., Mahmoodi Gharai M. H., Ghaemi F.	Geochemistry of Silurian Niur sandstones in Tabas Block, Central Iran
P 3.17	van der Lelij R., Spikings R., Gerdes A., Ulianov A.	Early Palaeozoic tectonic process in north-western Gondwana as revealed by zircon hafnium isotope analysis: tectonic switching along an active margin
P 3.18	Grakova O.	Accessory ilmenorutile of diamondiferous terrigenous rocks of South Timan in the north-east borderland of the East-European platform.
P 3.19	Vardanashvili K., Maisuradze N.	Exocontact metamorphism in Klich gabbro-diorite intrusive
P 3.20	Ulyasheva N.	Metamorphism of the polarural precambrian rocks
P 3.21	Gialli S., Moritz R., Popkhadze N., Gugushvili V., Migineishvili R., Spangenberg J.	The Madneuli polymetallic deposit, Bolnisi district, Georgia: Evidence for a magmatic input in a submarine, transitional hydrothermal system.
P 3.22	Hemon P., Moritz R., Ramazanov V.	The Gedabek epithermal Cu-Au deposit, Lesser Caucasus, Western Azerbaijan: geology, alterations, petrography and evolution of the sulfidation fluid states.
P 3.23	Lambiel F., Dold B., Fontboté L.	Present copper-rich “gel” formation in the giant porphyry copper deposit of Chuquicamata (northern Chile)
P 3.24	Rezeau H., Moritz R., Beaudoin G., Gobeil C.	New mineralogical and fluid inclusion genetic constraints for Archean batholith-hosted gold veins at the Lac Herbin deposit, Val-d’Or, Canada
P 3.25	Saintilan N., Stephens M.B., Fontboté L., Lundstam E.	Reactivation of fault zones in Precambrian crystalline basement and the location of stratabound, sandstone-hosted Pb-Zn deposits along the front of the Scandinavian Caledonides.
P 3.26	Decrouy L., Bourquard M., Vennemann T.	Isotope composition of lacustrine vapour of Lake Geneva
P 3.27	Naumenko M.O., Mezger K., Nägler T.F., Villa I.M.	Thermal ionisation mass spectrometric determination of the $^{40}\text{K}/^{39}\text{K}$ ratio

Session 6: Geophysics and Rockphysics

**Room
ExWi B006**

Convenors: Marcel Frehner, Klaus Holliger

12:00-14:00

Lunch

		Chair part I, Geophysics: Klaus Holliger
14:00-14:15	Steiner B.	3D-seismic for geothermal energy in St. Gallen
14:15-14:30	Altwegg P., Schill E., Abdelfettah Y.	Fault zone porosity determination by joint interpretation of 3D seismic and gravity data for geothermal exploration - application in the St. Gallen geothermal project
14:30-14:45	Cordonnier B., Tisato N., Boutareaud S., Hirose T.	Talc lubrication of faults at seismic velocities: comparaison between the rate and state approach and a fluid constrain
14:45-15:00	Wu W.	Seismic-induced stick-slip friction in simulated granular layers

15:00-16:00

Afternoon Poster Session with coffee

		Chair part II, Rock Physics: Marcel Frehner
16:00-16:15	Nussbaum C., Bossart P., Gibert D., Le Gonidec Y., Nicollin F., Maineult A., Wieczorek K., Wassermann J., Lesparre N., Thovet J.-F., Adler P.M., Lavielle B.	Geophysical monitoring of the Excavation Damaged Zone during a gallery excavation in the Opalinus Clay (Mont Terri underground rock laboratory, Canton of Jura)
16:15-16:30	Milani M., Rubino J.G., Baron L., Sidler R., Holliger K.	Analysis of seismic attenuation mechanisms in unconsolidated surficial sediments
16:30-16:45	Tisato N., Madonna C., Saenger E.H.	How stress affects Berea sandstone seismic-wave-attenuation
16:45-17:00	Biedermann A.R., Erni M., Hirt A.M., Pistone M., Zappone A.	Seismic and magnetic anisotropy of the Finero Peridotite (Ivrea Zone)

Posters Session 6:

P 6.1	Abdelfettah Y., Schill E.	Delineation of the Permo-Carboniferous graben in the crystalline basement of Switzerland using gravity
P 6.2	Baillieux P., Schill E., Abdelfettah Y., Dezayes C.	Localization of temperature anomalies in Soultz area (Upper Rhine Graben): insights from gravity, magnetics and slip and dilation tendency analysis
P 6.3	Bakker R., Benson P., Vinciguerra S.	Deformation of Etna Basalt at high temperature and low confining pressure
P 6.4	Baumann C.F.D., Dalguer L.A., Burjánék J., Michel C., Fäh D.	Attempt to identify the fault associated with the great Mw=6.2 Earthquake of Visp 1855
P 6.5	Biedermann A.R., Hirt A.M., Pettke T.	Magnetic fabrics and anisotropy in rock-forming minerals
P 6.6	Cordonnier B., Kaus B., Manga M., Caricchi L., Pistone M., Castro J., Hess K.-U., Dingwell D.B., Burlini L.	Brittle onset of monodispersed magmatic suspensions: impact of the particle shape.
P 6.7	Di Tommaso G., Abdelfettah Y., Schill E.	VLF Measurement in the cristallin area, new survey in the EGS research project in Black Forest

P 6.8	Gischig V.S., Burjánek J., Moore J.R., Loew S.	Seismic response of the active instability above Preonzo (TI)
P 6.9	Hilbich C., Scapozza C., Lambiel C.	Geophysically based estimations of rock/air/ice/water contents and validation with ground truth data at three alpine permafrost sites
P 6.10	Madonna C., Tisato N., Saenger E.H.	Laboratory experiments of seismic wave attenuation from 0.01 Hz up to 100 Hz
P 6.11	Mastouri R., Marchant R., Marillier F., Jaboyedoff M., Bouaziz S.	Application the similarity attributes and the fault enhancement for 3D seismic data from the Kerkennah islands (Tunisia)
P 6.12	Preisig G., Perrochet P.	Mountains - up and down: the role of groundwater pressure
P 6.13	Riahi N., Saenger E.H.	Measuring local seismic anisotropy using ambient noise: a three-component array study
P 6.14	Saenger E.H., Madonna C., Frehner M., Almquist B.S.G.	Numerical support of laboratory experiments: Attenuation and velocity estimations
P 6.15	Shih P.-J., Almquist B.S.G., Zappone A., Tisato N., Maurer H.	Simulating the in situ physical properties of the upper Muschelkalk aquifer, northern Switzerland
P 6.16	Steeb H., Kurzeja P., Frehner M., Schmalholz S.M.	Phase velocity dispersion and attenuation of seismic waves due to trapped fluids in residual-saturated porous media
P 6.17	Tisato N., Quintal B.	Measuring and simulating transient pore pressure as a consequence of seismic waves
P 6.18	Zhang Y., Song S.G., Dalguer L.A., Clinton J.	Inferring earthquake source properties from dynamic rupture models by means of non-linear kinematic source inversion

Session 7: Stratigraphy in Switzerland - from field to application

**Room
ExWi B007**

Convenors: Reto Burkhalter, Oliver Kempf, Karl Ramseyer, Ursula Menkveld-Gfeller, Christian Klug

		Chair: Oliver Kempf
08:30-08:45	Strasser A., Charollais J., Conrad M., Clavel B.	Facies heterogeneity versus lithostratigraphic nomenclature – examples from shallow-water limestones in the Swiss Jura
08:45-09:00	Graf H.R., Burkhalter R.	Die Ablagerungen des Eiszeitalters: stratigrafisches Konzept und Nomenklatur am Beispiel der Nordschweiz
09:00-09:15	Morard A., Burkhalter R., Möri A., Strasky S.	Lithostratigraphy of Switzerland – options and challenges for a harmonisation
09:15-09:30	Jordan P., Arbeitsgruppe Jura-Ost SKS	Neugliederung der Trias in der Nordschweiz – ein Diskussionsvorschlag
09:30-09:45	Hochuli P.A., Rebetez D., Schneebeli-Hermann E., Ramseyer K.	Middle Triassic of the Weiach borehole – results from palynology and isotope chemostratigraphy
09:45-10:00	Reisdorf A.G., Wetzel A., Schlatter R., Jordan P.	A new stratigraphic scheme for the Early Jurassic of northern Switzerland: the Staffelegg Formation

10:00-11:00 Morning Poster Session with coffee

		Chair: Karl Ramseyer
11:00-11:15	Hostettler B.	New lithostratigraphic units for the Callovian stage in the central NW Swiss Jura Mountains

11:15-11:30	Bitterli-Dreher P.	Die Ifenthal-Formation im nördlichen Jura
11:30-11:45	Bonvallet L., Godet A., Spangenberg J.E., Arnaud A., Föllmi K.B.	The Urgonian Formation in the Helvetic Alps (late Barremian to early Aptian): a multidisciplinary approach for the correlation of a transect through the Sântis realm
11:45-12:00	Jost J., Kempf O., Kälin D.	Stratigraphy of the Upper Marine Molasse in central Switzerland

12:00-14:00 Lunch

14:00-15:00 Plenumssitzung des Stratigraphischen Komitee der Schweiz / Séance du plénum du Comité suisse de stratigraphie, (Leitung: Reto Burkhalter)

15:00-16:00 Afternoon Poster Session with coffee

Posters Session 7:

P 7.1	Derakhshan E., Khaksar K., Kebriaei Zadeh M.R.	Lower Carboniferous corals from Gerd-kuh section, Eastern Alborz, North Iran
P 7.2	Gouffon Y., Sartori M., Marthaler M.	Lithostratigraphy of Penninic nappes in Valais: legend harmonisation of the Geological Atlas of Switzerland
P 7.3	Khaksar K., Yazdizadeh H., Kebriaei Zadeh M.R.	Frasnian reef biostromes of the Hojedk section, North Kerman, Central Iran
P 7.4	Khaksar K., Nazif L., Kebriaei Zadeh M.R.	Lower Carboniferous corals from the Namake section in the North Damghan, East Alborz, Iran
P 7.5	Meier I., Bernasconi S.M., Ramseyer K., Brack P., Bläsi H.-R., Wohlwend S., Hochuli P.A.	Sulfur isotope stratigraphy of Middle to Upper Triassic marine evaporites in the Jura Mountains, Northern Switzerland
P 7.6	Ragusa J., Ospina-Ostios L.-M., Kindler P.	Using Dickinson's method for a better understanding of the origin of the Voirons Flysch (Gurnigel nappe, Haute-Savoie, France)
P 7.7	Reber R., Akçar N., Ivy-Ochs S., Tikhomirov D., Burkhalter R., Zahno C., Lüthold A., Kubik P.W., Vockenhuber C., Schlüchter C.	The last deglaciation of the northern Alpine Foreland: evidence from the Reuss Glacier
P 7.8	Rebetez D., Ramseyer K.	The Middle Triassic (Anisian) marine transgression in the Tödi area, Central Switzerland
P 7.9	Wohlwend S., Weissert H.	From "black shales" to red beds in the northern Helvetic Seewen Formation (Cenomanian–Turonian)

Session 8: Palaeontology – in memoriam of Jean-Pierre Berger

**Room
HG 220**

Convenors: Lionel Cavin, Damien Becker, Christian Klug

08:30-08:40	Damien Becker	Tribute to the late Professor Jean-Pierre Berger (1956-2012)
		Chair: Christian Klug
08:40-09:00	Constandache M., Yerly F., Spezzaferri S.	Pore morphometry applied to Oligocene planktonic foraminifera : a method to disentangle phylogeny?
09:00-09:20	Knappertsbusch, M.	Morphological evolution of <i>Globorotalia menardii</i> and related forms during the past 8 million years at ODP Site 925B (Ceara Rise, western tropical Atlantic)

09:20-09:40	*Mary Y., Costeur L., Knappertsbusch M.	Micro-dissection reveals inner structure and ontogenetic growth of Pliocene menardellids (planktonic foraminifera)
09:40-10:00	*Rigaud, S., Martini, R.	New insights on the stratigraphic distribution and phylogeny of foraminifers from the study of a Panthalassan terrane
10:00-10:20	Poisson A., Berger J-P., Kängal Ö., Kavak K., Temiz H., Vrielynck B.	Stratigraphic studies in the Sivas basin (Central Anatolia, Turkey). 1- The role of the charophytes

10:20-11:00 Morning Poster Session with coffee

		Chair: Damien Becker
11:00-11:20	Frisk Å.M., Bucher H., Hautmann M., Baud A., Brosse M., Guodun K.	Unusually diverse bivalve assemblages from the Early Triassic (Griesbachian) of South China
11:20-11:40	*Tessitore L., Schemm-Gregory M., Korn D., Wild F. R. W. P., Naglik C., Klug C.	Taphonomy and palaeoecology of the green pentamerid Devonian brachiopods from the Aferdou el Mrakib, eastern Anti-Atlas, Morocco
11:40-12:00	*Naglik C., Klug C., De Baets K., Götz S.	Empirical 3D-models of Palaeozoic ammonoids and the ontogeny of septum- and chamber-volumes of three major ammonoid-clades
12:00-12:20	Klug C., Riegraf W., Lehmann J.	Soft-part preservation in heteromorph ammonites from the Cenomanian-Turonian Boundary Event (OAE 2) in the Teutoburger Wald (Germany)

12:20-13:40 Lunch

		Chair: Lionel Cavin
13:40-14:00	*Romano C., Kogan, I.	Palaeogeography and evolution of the Triassic basal ray-finned fish <i>Saurichthys</i>
14:00-14:20	Ehrbar I., Furrer H., Scheyer T.M.	The pachypleurosaurs from the Ducan area, southeastern Switzerland – validation of the species <i>Neusticosaurus staubi</i> ?
14:20-14:40	Sánchez-Villagra M. R.	Embryos in Deep Time - Palaeontology and the Study of the Evolution of Biological Development
14:40-15:00	*Neenan J. M., Scheyer T. M.	Comparative skull anatomy of placodonts (Diapsida: Sauropterygia) using µCT scanning - implications for palaeobiogeography and palaeoecology

15:00-15:40 Afternoon Poster Session with coffee

		Chair: Laureline Scherler
15:40-16:00	*Püntener C.	Taxonomy and phylogeny of the turtle <i>Tropidemys langii</i> Rüttimeyer, 1873 based on new specimens from the Kimmeridgian of the Swiss Jura Mountains
16:00-16:20	Meyer Ch. A., Wizevich, M., Thüring, B.	From beachboys to river rafters – The sedimentary environment of the vertebrate tracksites of the autochthonous Triassic of the Aiguilles Rouges Massif (SW Switzerland)
16:20-16:40	*Mennecart B., Hiard F.	Ruminantia ecomorphology and the complexity of the phylogenetic signal
16:20-16:40	Lavoyer T.	Paleontology and stratigraphy of the North- Middle Upper Rhine Graben (N-Middle URG): relationships between rift system, alpine orogeny and paleoclimate
16:40-17:00	*Hiard F., Becker D., Métais G.	Phylogenetic and ecological impact of Eocene climatic events on European artiodactyls
17:00-17:30	Swiss Commission of Palaeontology Prize (* = applicants for the Swiss Palaeontology Prize)	

Posters Session 8:

P 8.1	Frey L., Schemm-Gregory M., Fryda J., Kröger B., Taylor P. D., Wilson M. A., Klug C.	Alpha diversity and palaeoecology of invertebrate associations of the Early Devonian in the Moroccan Anti-Atlas
P 8.2	Klug C., Naglik C., De Baets K., Monnet C., Korn D.	Comparing intraspecific variability of ammonoids
P 8.3	Mennecart B., Bourgeois R., Londeix L., Spezzaferri S.	New coastline morphology in Western France during the Miocene
P 8.4	Schaefer K.	Variability of the dental morphology in marine crocodilians (Thalattosuchia) from the Kimmeridgian of Ajoie (Jura, Switzerland)

Session 9: Quaternary environments: landscapes, climate, ecosystems, human activity during the past 2.6 million years

**Room
ExWi 119**

Convenors: Olivier Heiri, Christine Pümpin

		Chair: Oliver Heiri
09:10-09:30	Schimmelpfennig I., Schäfer J., Akçar N., Ivy-Ochs S., Finkel R., Florineth D., Schlüchter C.	An 'Older Little Ice Age' ~3 kyr ago? Evidence from the Steingletscher, central Swiss Alps
09:30-09:50	Reber R., Akçar N., Yavuz V., Tikhomirov D., Kubik P.W., Vockenhuber C., Schlüchter C.	Paleoglacier chronology of the southwestern Black Sea Region
09:50-10:10	Poster presentors	Short presentations of posters

10:10-11:15 Morning Poster Session with coffee

		Chair: Oliver Heiri
11:15-11:35	Schwörer C., Berthel N., Rey F., Henne P., Heiri O., Tinner W.	A model-data comparison of Holocene mountain vegetation dynamics in the Bernese Alps, Switzerland
11:35-11:55	Häberle S., Hounslow O., Fuller B., Nehlich O., Van Neer W., Collins M., Schibler J., Hüster Plogmann H.	Swiss aquatic ecosystems in medieval times: A combined archaeozoological and biomolecular approach
11:55-12:15	Wegmüller F., Brönnimann D., Schindler M.	Die Fundstelle „Abri Unterkobel“. Ein wichtiges siedlungs- und landschaftsgeschichtliches Archiv im St. Galler Rheintal

12:15-14:00 Lunch

		Chair: Christine Pümpin
14:00-14:20	Lowick S., Anselmetti F., Graf H.-R., Preusser F., Schnellman M.	The application of optically stimulated luminescence to overdeepened valleys in northern Switzerland
14:20-14:40	Hippe K., Ivy-Ochs S., Kober F., Zasadni J., Wieler R., Wacker L., Kubik P., Schlüchter C.	Chronology of deglaciation and Lateglacial ice flow reorganization in the Gotthard Pass area, Central Swiss Alps, based on cosmogenic ¹⁰ Be and in situ ¹⁴ C
14:40-15:00	Heer A.J., Adamiec G., Veit H.	Chronology of complex LGM and postglacial sediments in Wauwilermoos (Swiss Plateau) substantiated by new methodological approach in optically stimulated luminescence (OSL) dating.

15:00-16:00 Afternoon Poster Session with coffee

Posters Session 9:

P 9.1	Adolf C., Rütli T., Erler R., Behling H., Tinner W.	Past vegetation and land-use of the páramo in southern Ecuador
P 9.2	Affolter S., Leuenberger M., Fleitmann D.	Water isotope signature of fluid inclusions in speleothems
P 9.3	Claude A., Ivy-Ochs S., Kober F., Antognini M., Salcher B., Kubik P.W.	Geomorphology and landscape evolution of the Chironico landslide (Leventina valley, southern Swiss Alps)
P 9.4	Hajmohammadali J. Khaksar K., Marahem R.	Erosion control and steep slope on the Quaternary soils of Chandab area-Iran
P 9.5	Hayoz, P.	GEMAS: A harmonised geochemical dataset for soils in Europe and in Switzerland
P 9.6	Mauri A., Davis B.A.S., Kaplan J. O.	A new pollen-based gridded Holocene climate reconstruction for Europe: multi-proxy evaluation, data-model comparisons and the role of climate modes.
P 9.7	Rahimzad N., Mohammadi A., Lak R.	Sediments size characteristic of Jazmurian playa as an important source of dust production in the world and harmful effects of dust on human health
P 9.8	Schälli L., Schnellmann M., Fischer U. H., Haeberli W.	Solid-rock surface model of the Rhine and Seez valley
P 9.9	Tikhomirov D., Akçar N., Alfimov V., Ivy-Ochs S., Schlüchter C.	Calculation of shielding factors for production of cosmogenic nuclides in fault scarps

Session 10: Geomorphology

**Room
HG 114**

Convenors: I. Gärtner-Roer, R. Delaloye, C. Graf, M. Keiler, N. Kuhn, S. Lane, S. Morard, M. Schneuwly-Bollschweiler

		Chair: Reynald Delaloye
08:30-08:50	Champagnac J.-D., Molnar P., Sue C., Herman F.	Tectonics, Climate, and Mountain Topography
08:50-09:10	Plotzki A., May J.-H., Preusser F., Veit H.	Rio Mamoré - Holocene river dynamics in the Bolivian lowlands
09:10-09:30	Scapozza C., Castelletti C., Soma L., Ambrosi C.	Sediment transfer in the Southern Swiss Alps since the Last Glacial Maximum: evidences of paraglacial crisis
09:30-09:50	Savi S., Norton K. P., Brardinoni F., Akçar N., Kubik P., Picotti V., Schlunegger F.	Erosion and sedimentation rate variability following the LGM ice-retreat
09:50-10:10	Delunel R., van der Beek P., Carcaillet J., Bourlès D., Schlunegger F.	Strong imprint of periglacial-environments dynamics on stream sediments seen through a 10Be-budget of an alpine catchment (French Alps).

10:10-11:00 Morning Poster Session with coffee

		Chair: Margreth Keiler
11:00-11:20	Kober F., Hippe K., Salcher B., Ivy-Ochs S., Kubik P.W., Christl M., Wacker L., Hähnen N.	Cosmogenic nuclide denudation rates in the debris-flow dominated Haslital-Aare and Matter catchments

11:20-11:40	Jäggi M., Zimmermann M., Rickenmann D., Turowski J. M., Keiler M.	Geomorphological catchment parameters affecting bed load transport in mountain torrents
11:40-12:00	Bast A., Wilcke W., Lüscher P., Graf F., Gärtner H.	Electrical Resistivity Soundings on a Stabilized Slope of a Subalpine Catchment: A new Approach to Detect the Spread of Root Systems
12:00-12:20	Küfmann, C.	Alpine Cambisols and their genetic implications for eolian influence on karst soil development (Northern Calcareous Alps)

12:20-13:00 **SGmG General Assembly**

12:20-14:00 **Lunch**

Posters Session 10:

P 10.1	Mandal S.K., Haghipour N., Burg J.-P.	Transient fluvial incision and active surface uplift in the southern India
P 10.2	Trauerstein M., Norton K.P., Preusser F., Schlunegger F.	Climatic imprint on landscape morphology in the western escarpment of the Andes
P 10.3	Bekaddour T., Norton K.P., Schlunegger F.	Dip direction controls of bedrock on channel morphologies and denudation rates in the eastern Swiss Alps
P 10.4	Dürst Stucki M., Schlunegger F.	Bedrock surface model of Switzerland: indication for glacial erosion processes
P 10.5	Castelletti C., Soma L., Scapozza C., Ambrosi C.	Quaternary geological map of Sheet Reichenau (Canton Graubünden): improvement of several GIS tools
P 10.6	Valla P.G., Guralnik B., Lowick S.E., Champagnac J.-D., Herman F., Jain M., Murray A.S.	Quantifying glacial erosion and relief evolution using luminescence thermochronometry (Granite Range, Alaska)
P 10.7	Moore J.R., Aerne U., Nagelisen J., Egloff J., Hunziker M.	Four years of avalanche erosion measurements in the Guggigraben catchment, Canton Valais
P 10.8	Trappmann D., Stoffel M., Schneuwly-Bollschweiler M., Hübl J.	Quantifying rockfall hazards through injury counting on the bark of trees
P 10.9	Willi C., Deubelbeiss Y., Graf C., Keiler M.	Detection of surface changes in a torrent channel and comparison of surveying techniques
P 10.10	Schneider D., Cochachin A., Frey H., García J., Giraldez C., Gómez J., Haerberli W., Huggel C., Ludeña S., Price K., Rohrer M., Salzmann N.	Hazard mapping and an early warning system for lake outburst floods in the Cordillera Blanca, Peru
P 10.11	Bigler V., Keiler M.	Bewirkt ein Extremereignis eine Veränderung des Systemzustands in Wildbacheinzugsgebieten? Fokus: Auswirkungen auf den Geschiebehaushalt – Fallbeispiel Lötschental
P 10.12	Gebbers D., Keiler M.	Process interactions during damage-relevant torrent events in the Swiss Alps

Session 11: Cryospheric Sciences

Room
HG120

Convenors: J. Alean, A. Bauder, B. Krummenacher, J. Nötzli, C. Lambiel, M. Lüthi, J. Schweizer, M. Schwikowski

		Chair: Margit Schwikowski
09:00-10:00	All Poster Authors	Short poster presentations, 3min. each (see poster program below)

10:00-11:00 *Morning Poster Session with coffee*

		Chair: Charles Fierz
11:00-11:20	Keller, A., Funk M.	A fiber bundle damage model for viscoelastic ice
11:20-11:40	Girard L., Gruber S., Weber S., Beutel J.	Continuous monitoring of near-surface damage in a freezing rock-wall
11:40-12:00	Röösli C., Walter F., Husen S., Lüthi S., Catania G.A., Andrews L.C.	Monitoring of Ice Sheet Dynamics in Greenland Using Seismological Techniques

12:00-14:00 *Lunch*

		Chair: Christian Hauck
14:00-14:20	Schmid L., Mitterer C., Heilig A., Schweizer J., Eisen O.	Tracking wetting of a snowpack using upward-looking ground-penetrating radar
14:20-14:40	Sold L., Huss M., Hoelzle M., Joerg P., Salzmann N., Zemp M.	Measuring and understanding winter mass balance and snow depth distribution on alpine glaciers from LiDAR DEM differentiation, GPR and snow soundings
14:40-15:00	Sorg A., Bolch T., Stoffel M., Solomina O., Beniston M.	Climate change impacts on glaciers and runoff in Tien Shan (Central Asia)
15:00-15:20	Horender S., Walter B., Gromke C., Lehning M.	Intermittent snow drift - experimental study and analysis

15:20-15:50 *Afternoon Poster Session with coffee*

		Chair: Marcia Phillips
15:50-16:00	SEP Young Scientist Awards	
16:00-16:20	Lüthi M.P., Nicolay Oliver	Storage and release of persistent organic pollutants (POPs) from glaciers
16:20-16:40	Hauck C., Hoelzle M., Salzmann N., Scherler M., Schneider S., Hilbich C.	On the sensitivity of different mountain permafrost occurrences to climate change
16:40-17:00	Machguth H., Rastner P., Bolch T., Mölg N., Sørensen L.	Future sea level rise contribution from Greenland's local glaciers and ice caps - the impact of predicted high Arctic precipitation changes

Posters Session 11:

P 11.1 09:00-09:03	Leisinger S., Wählin J., Löwe H.	Micro-computed tomography of salted snow
P 11.2 09:03-09:06	Riche F., Montagnat M., Schneebeil M.	Orientation of snow crystals: Evolution of orientation during temperature gradient metamorphism
P 11.3 09:06-09:09	Reiweger, I., Mayer, K., Schweizer, J.	Acoustic emissions related to avalanche release

P 11.4 09:09-09:12	Walter B., Horender S., Lehning M.	Tracer-LIF (Laser-Induced-Fluorescence) measurements of water flow through snow
P 11.5 09:12-09:15	van Herwijnen A., Rubin M., Schweizer J.	Towards the automatic detection of seismic signals generated by snow avalanches
P 11.6 09:15-09:18	Schmucki E., Marty C., Fierz C., Lehning M., Weingartner R.	SNOWPACK model uncertainty and future trends of the Swiss snowpack
P 11.7 09:18-09:21	Helfricht K., Hanzer F., Schöber J., Kuhn M.	Estimation of snow cover distribution in alpine catchments by application of airborne laser scanning
P 11.8 09:21-09:24	Nussbaumer S. U., Masiokas M. H., Luckman B. H.	Historical glacier variations in southern South America since the Little Ice Age: examples from Lago Viedma (southern Patagonia) and Mendoza (central Andes)
P 11.9 09:24-09:27	Bosson, J.-B., Lambiel, C.	Current evolution of some high mountain debris-covered glaciers in western Alps
P 11.10 09:27-09:30	Frey H., Machguth H., Huggel C., Bajracharya S., Bolch T., Linsbauer A., Stoffel M., Salzmann N.	Ice volumes in the Himalayas and Karakoram: evaluating different assessment methods
P 11.11 09:30-09:33	Dalban Canassy P., Walter F., Husen S., Maurer H.	Information on glacier dynamics from probabilistic icequakes location (Triftgletscher, Switzerland)
P 11.12 09:33-09:36	Naegeli K., Benn D., Zemp M.	Using glacio-speleological methods to test GPR interpretations about changes in dynamics, thermal state and drainage system of Tellbreen, a high arctic glacier on Svalbard
P 11.13 09:36-09:39	Fischer M., Huss M., Hoelzle M.	Understanding the response of very small glaciers in the Swiss Alps to climate change: An integrated study approach applying different monitoring techniques
P 11.14 09:39-09:42	Machguth, H.	A straightforward method for the automated calculation of glacier flow lines
P 11.15 09:42-09:45	Ryser C., Lüthi M., Funk M., Catania G., Andrews L., Hawley R., Neumann T., Hoffman M.	Caterpillar-like flow of the Greenland Ice Sheet: observations of basal control on ice motion.
P 11.16 09:45-09:48	Herren P.-A., Eichler A., Machguth H., Papina T., Tobler L., Zapf A., Schwikowski M.	Complex age-depth relation in a mid-latitude glacier
P 11.17 09:48-09:51	Kern Z., Thomas, S.	Ice level changes from seasonal to decadal time-scale at Lava Beds National Monument, NE California, USA
P 11.18 09:51-09:54	Delaloye R., Hilbich C., Lambiel C., Nötzli J., Staub B., Völksch I.	Towards an integrative analysis of mountain permafrost monitoring elements
P 11.19 09:54-09:57	Staub B., Delaloye R., Vogel D., Krummenacher B.	The evolution of ground surface temperatures and rock glacier dynamics in the Furggental Valley (Gemmi, VS)

Session 12: Advances in applied hydrology and limnology

Room
HG 215

Convenors: Bettina Schaepli, Tobias Jonas, Michael Doering,
Massimiliano Zappa

		Chair: Bettina Schaepli
08:55-09:20	Fischer B.M.C., Rinderer M.	Investigating spatial and temporal runoff generation mechanisms in a Swiss pre-alpine catchment
09:20-09:40	Meeks J., Hunkeler D., Pronk M.	Assessing controls on cold-season recharge: The Vers Chez Les Brandt study site in the Swiss Jura Mountains
09:40-10:00	Wever N., Fierz C., Jonas T., Lehning M.	The dual nature role of the snow cover in rain on snow events and a note on latent heat

10:00-11:00 Morning Poster Session with coffee

		Chair: Massimiliano Zappa
11:00-11:20	Malard A., Vouillamoz J., Weber E., Jeannin P.-Y., Eichenberger U.	NRP61/SWISSKARST Project. Mapping karst water resources using KARSYS approach. Application to the Bernese Jura (BE, Switzerland)
11:20-11:40	Jörg-Hess S., Fundel F., Jonas T., Zappa M.	A statistical approach to refining snow water equivalent climatologies in the Swiss Alps
11:40-12:00	Tilg A.-M., Marty C., Jonas T., Kuhn M.	Trend analysis of snow water equivalent

12:00-14:00 Lunch

12:30-13:15 General Assembly of the Swiss Society for Hydrology and Limnology

13:15-14:00 Hydrobiology-Limnology Award (Chair: Reinhard Bachofen)

		Chair: Michael Doering
14:00-14:20	Halder J., Vennemann T.	Application of stable water isotopes to evaluate tributary mixing and micropollutant fate in Swiss lakes
14:20-14:40	Sommer T., Carpenter J.R., Schmid M., Wüest A.	Temperature and salinity staircases in Lake Kivu
14:40-15:00	Rinta P., van Hardenbroek M., Schilder J., Stötter T., Heiri O.	Environmental factors affecting methane concentrations in Central and Northern European lakes

15:00-16:00 Afternoon Poster Session with coffee

Posters Session 12:

P 12.1	Darvishi Khatouni J., Lak R., Mohammadi Ali	Hydrogeochemistry and Brine Evolution of Urmia Lake (NW of Iran)
P 12.2	Rinderer M., Kollegger A., Fischer B.M.C., Stähli M., Seibert J.	Sensing with boots and trousers - A new qualitative field method to capture shallow soil moisture patterns in wet environments
P 12.3	Schaepli B., Nicótina L.	Accounting for precipitation and temperature co-variation for design flood estimation in Alpine environments
P 12.4	Sideris I., Gabella M., Sassi M., Germann U.	Operational implementation design of radar and raingauge combination in Switzerland
P 12.5	Tobin C., Rinaldo A., Schaepli B.	Snowfall limit forecasts for hydrological modeling

Session 13: Limnogeology and the interdisciplinary study of lacustrine sediments: Crystallizing F.-A. Forel vision

Room
HG 106

Convenors: Stéphanie Girardclos, Mario Morellon-Marteles, Adrian Gilli

		Chairs: Stéphanie Girardclos, Mario Morellon-Marteles, Adrian Gilli
08:30-08:50	Le A.D., De Pascalis F., Umgiesser G., Wildi W.	Thermal structure and circulation patterns of Lake Geneva (Lac Léman)
08:50-09:10	Graham N., Loizeau J.-L.	Advection of particle-bound contaminants in Vidy Bay, Lake Geneva, Switzerland
09:10-09:30	Decrouy L.	Evolution of the ostracod fauna in Lake Geneva since the pioneer work of F.-A. Forel
09:30-09:50	Amann B., Mauchle F., Grosjean M.	Varved Lake Oeschinen: quantitative assessment of climate signal in the sediments
09:50-10:10	Glur L., Wirth S.B., Anselmetti F.S., Gilli A.	Enhanced occurrence of extreme precipitation events during periods with cool summers: A 2500-year long Northern Alpine flood reconstruction

10:10-11:15 *Morning Poster Session with coffee*

		Chairs: Stéphanie Girardclos, Mario Morellon-Marteles, Adrian Gilli
11:15-11:35	Bellwald B., Anselmetti F.S., Gilli A.	Paleoseismologic implications of the sediment stratigraphy in Lake Silvaplana (Engadine, Eastern Switzerland)
11:35-11:55	Filella M., Rodríguez-Murillo J.C.	Carbon fluxes from sediments of a Mediterranean semiarid freshwater wetland and comparison with other continental sediments
11:55-12:15	Lak R., Darvishi khatooni J., Mohammadi A., Salehipuor Milani A.	Paleolimnology study and causes of Sudden decrease in water level of Urmia Lake

12:15-14:00 *Lunch*

Posters Session 13:

P 13.1	Arantegui A., Corella J.P., Loizeau J.L., Anselmetti F.S., Stark N., del Sontro T., Le Dantec N., Girardclos S.	Sedimentological processes in the Rhone Delta subaquatic canyons (France-Switzerland)
P 13.2	Corella J.P., Loizeau J.L., Hilbe M., Le Dantec N., Sastre V., Anselmetti F.S., Stark N., del Sontro T., S Girardclos S.	Triggering mechanisms and geomorphological implications of debris flows in subaquatic canyons: The Rhone delta (Lake Geneva, Switzerland, France)
P 13.3	Kremer K., Corella J.P., Girardclos S.	Lake Geneva sediments as archive for past environmental changes and human activity during the last 3000 years
P 13.4	Reusch A., Moernaut J., Clerc N., Hilbe M., Gorin G., Mosar J., Anselmetti F., Strasser M.	Subaquatic landslides and sediment deformation structures within the geologic archive of Lake Neuchâtel
P 13.5	Jeannet A., Corella J. P., Kremer K., Girardclos S.	Lake Biel sediment record during the last 7500 years and impact of the Aare river deviation in 1878 AD.

P 13.6	Schönbächler H.B., Anselmetti F.S., Mayr C., Ohlendorf C., Zolitschka B.	Traces of the Great Lisbon Earthquake (AD 1755) in the sediments of Walchensee (Bavaria, Germany) ?
P 13.7	Recasens C., Ariztegui D., Maidana N. I and the PASADO Science Team	The PASADO sediment record: paleoclimatic and paleoenvironmental changes in Southern Patagonia since the Late Pleistocene
P 13.8	Och L.M., Müller B., Voegelin A., Ulrich A., Göttlicher J., Steiniger R., Mangold S., Vologina E.G., Sturm M.	New insights into the formation and burial of Fe/Mn accumulations in Lake Baikal sediments
P 13.9	Stötter T., van Hardenbroek M., Rinta P., Schilder J., Schubert C.J., Heiri O.	Can lipids help to reconstruct changes in methane availability and methane fluxes in lakes?
P 13.10	van Hardenbroek M., Wooller M.J., Rinta P., Schilder J., Stötter T., Heiri O.	Exploring stable isotope composition of Cladocera and Bryozoa using flotsam from lakes
P 13.11	Rahimzad N., Mohammadi A., Lak R.	Surface sediments characteristics survey in the Persian Gulf

Session 14: Environmental Biogeosciences

**Room
HG 101**

Convenors: Jasquelin Peña, Rizlan Bernier-Latmani

		Chairs: Peña Jacquelin, Bernier-Latmani Rizlan
08:30-08:35	Peña J. & Bernier-Latmani R.	Introduction by symposium conveners
08:35-08:50	Bragazza L., Parisod J., Buttler A., Bardgett R.	Plant-soil microbe interactions for nutrient acquisition in peatlands: responses to climate warming and vegetation change
08:50-09:05	Schleppi P., Bucher-Wallin I., Hagedorn F., Körner C.	Increased nitrate availability in the soil of a mixed mature temperature forest subjected to elevated CO ₂ concentration (canopy FACE)
09:05-09:25	Lehmann M.F.	Isotope effects during nitrogenous gas production by microbes in anaerobic environments
09:25-09:35	Peña J. & Bernier-Latmani R.	wrap-up

09:35-10:30 Morning Poster Session with coffee

		Chairs: Peña Jacquelin, Bernier-Latmani Rizlan
10:30-11:00	Orphan V.J., Marlow J., Case D., Steele J., McGlynn S., Dekas A., Thurber A., Grupe B., Rouse G, Levin L.	Authigenic carbonates as dynamic microbial ecosystems: expanding views of methane cycling in the deep sea
11:00-11:15	Kopp C., Pernice M., Domart-Coulon I., Djediat C., Spangenberg J., Alexander D., Hignette M., Meziane T., Meibom A.	NanoSIMS study of trophic interactions in the coral-dinoflagellate endosymbiosis
11:15-11:30	Hofmann B.	Signatures of ancient deep microbial activity and applications in the search for life on Mars
11:30-11:45	Geiger K., Ziegler S., Mann F., Krause S., Gescher J.	Biogeochemical analysis as a tool to isolate extremophilic Archaea

11:45-12:00	Bueche M., Sauvain L., Junier T., Wunderlin T., Kohler R., Masson M., Gascon E., Tercier-Waeber M.-L., Loizeau J.-L., Junier P.	Endospore-forming bacteria as an indicator of pollution in sediments of Lake Geneva
12:00-12:10	Peña J. & Bernier-Latmani R.	wrap-up

12:10-14:00

Lunch

		Chairs: Peña Jacquelin, Bernier-Latmani Rizlan
14:00-14:20	Slaveykova V., Worms I., Cheloni G., Marti E.	Zooming in on trace metal bioavailability to phytoplankton in surface waters
14:20-14:35	Vriens B., Winkel L.	Robust method for quantitative trapping of volatile organic selenium and sulfur species
14:35-14:50	Hofacker A., Voegelin A., Behrens S., Kappler A., Kaegi R., Kretzschmar R.	Biogenic copper and metal sulphide colloid formation in a contaminated floodplain soil
14:50-15:05	Alessi D. S., Stylo M., Lezama-Pacheco J. S., Bargar J. R., Bernier-Latmani R.	Lability of monomeric U(IV) species in laboratory and field experiments
15:05-15:15	Peña J. & Bernier-Latmani R.	wrap-up

15:15-16:00

Afternoon Poster Session with coffee

		Chairs: Peña Jacquelin, Bernier-Latmani Rizlan
16:00-16:15	Voegelin A., Senn A.-C., Hug S., Kaegi R.	Dynamic Fe precipitation by Fe(II) oxidation in water
16:15-16:30	Simanova A., Bone S., Sposito G., Peña J.	Synthetic δ -MnO ₂ as a model for biogenic Mn oxides: Ni and Co adsorption
16:30-16:45	Shao P., Bernier-Latmani, R.	Biological controls on the product of microbial U(VI) reduction
16:45-17:00	Mandaliev P., Mikutta C., Fakra S., Kotsev T., Barmettler K., Kretzschmar R.	Micro-Spectroscopic arsenic speciation in a highly contaminated, mining-affected river floodplain
17:00-17:15	Peña J. & Bernier-Latmani R.	wrap-up

Posters Session 14:

P14.1	Albrecht R., Verrecchia E.	Soil organic matter dynamics: bridging the gap between Rock-Eval pyrolysis and chemical characterization (CPMAS ¹³ C NMR)
P 14.2	Bigalke M., Schädler W., Valarezo C., Wilcke W.	Biogeochemical cycling of trace elements in a tropical montane rain forest in Ecuador
P 14.3	Bravo D., Cailleau G., Job D., Junier P., Verrecchia E.	The oxalate-carbonate pathway: at the interface between biology and geology
P 14.4	Meusel H., Bandowe B.A.M., Wilcke W.	Influence of plant diversity on polycyclic aromatic compounds and their metabolites in temperate grassland soils
P 14.5	Pacton M., Wacey D., Kilburn M.R., Vasconcelos C.	Biologically induced vs. biologically influenced mineralization of carbonates from a hypersaline microbial mat, Pernambuco Lagoon, Brazil
P 14.6	Senn A.-C., Kaegi R., Hug S., Hering J., Voegelin A.	Effects of P, Si and Ca on composition, structure and As uptake of fresh and aged Fe precipitates.

P 14.7	Thomas C., Vuillemin A., Waldmann N., Ariztegui D.	Evidence for a life-influenced Dead Sea during the last glacial-interglacial cycles
P 14.8	Tisato N., Bontognali T. R. R., Monteux S., Torriani S. F. F., Tavagna M. L., Wälle M., Chailloux D., Renda M.	Are the spectacular speleothems of Asperge biogenic?
P 14.9	Vuillemin A., Ariztegui D., The PASADO Science Team	Stratification of active methanogenic consortium along the Holocene record of Laguna Potrok Aike, Patagonia

Session 15: Biogeochemical cycles in a changing environment

Room
HG 205

Convenors: Ansgar Kahmen, Werner Eugster, Christoph Ritz

Greenhouse Gases: Linkages between biosphere and climate

		Chairs: Christoph Ritz, Werner Eugster
09:00-09:15	Eugster W., Kling G. W.	A low-cost approach to measure ambient methane concentrations in preliminary studies
09:15-09:30	Stieger J., Eugster W., Buchmann N.	Quantification of methane emissions at the farm scale using boundary-layer volume budgets
09:30-09:45	Aslan S.G., Evrendilek F.	Long-term monitoring of CO ₂ and H ₂ O dynamics using Eddy Covariance technique in peatlands of lake Yenicağa (Bolu-Turkey)
09:45-10:00	Ammann C., Neftel A., Leifeld J., Jocher M., Fuhrer J.	A decade of continuous greenhouse gas exchange measurements at the Oensingen grassland site

10:00-11:00 *Morning Poster Session with coffee*

		Chairs: Christoph Ritz, Werner Eugster
11:00-11:15	Imer, D., Merbold, L., Eugster, W., Stieger, J., Buchmann, N.	Greenhouse gas flux budget of a managed Swiss grassland
11:15-11:30	Hiller R., Neininger B., Henne S., Künzle T., Buchmann N., Eugster W., Brunner D.	Assessment of the Swiss methane inventory with the help of in situ aircraft measurements and backward Lagrangian particle dispersion simulations
11:30-11:45	Schnadt Poberaj C., Brunner D., Henne S., Spahni R.	Understanding Atmospheric Methane Variability between 2000 and 2008 using a Global Lagrangian Transport Model
11:45-12:00	ACP Award Winner	Title to be announced

12:00-14:00 *Lunch*

Biogeochemical cycles in a changing environment

		Chairs: Ansgar Kahmen, Lutz Merbold
14:00-14:15	Prechsl U., Kahmen A., Hammerle A., Burri S., Gilgen A., Buchmann N.	The water sourcing strategy of drought affected temperate grasslands
14:15-14:30	Gentsch L., Sturm P., Hammerle A., Siegwolf R., Wingate L., Ogée J., Barthel M., Peter Pluess P., Baur T., Buchmann N., Knohl A.	Photosynthetic ¹³ C discrimination of <i>Fagus sylvatica</i> branches: Insights from continuous, high-frequency field measurements and a Bayesian modelling approach

14:30-14:45	Burri S., Sturm P., Baur T., Prechsl U., Knohl A., Buchmann N.	Tracing carbon through grassland: the impact of drought on the short-term carbon flow from photosynthesis to soil respiration
14:45-15:00	Mills R.T.E., Durand H., Gavazov K., Spiegelberger T., Buttler A.	Snow-cover effects on substrate-induced respiration and SOM density fractions in transplanted pasture soils.

15:00-16:00 *Afternoon Poster Session with coffee*

		Chairs: Ansgar Kahmen, Lutz Merbold
16:00-16:15	Wilcke W., Leimer S., Schwarz M.T., Valarezo C.	Response of carbon and nitrogen cycles of a tropical montane forest in Ecuador to environmental change
16:15-16:30	Rodríguez-Murillo, J.C., Filella, M.	Temporal trends of organic carbon in Swiss rivers, 1974-2010
16:30-16:45	Halder J., Pralong C., Vennemann T.	$\delta^{13}\text{C}$ (DIC) profiles of Lake Geneva, Switzerland/France
16:45-17:00	Schilder J., Bastviken D., van Hardenbroek M., Rinta P., Stötter T., Heiri O.	Diffusive flux of methane and other greenhouse gases from lakes has a distinct within-lake spatial distribution

Posters Session 15:

P 15.1	Blattmann T., Griffith D., Martin W., Eglinton T.	Modeling ^{14}C of Organic Carbon in Marine Surface Sediments
P 15.2	Blazina T., Berg M., Winkel L.	Loess as an environmental archive of atmospheric selenium deposition
P 15.3	Gavazov K., Mills R., Durand H., Spiegelberger T., Buttler A.	Soil respiration and microbial biomass constrained by warmer winter climate and reduced snow cover in transplanted subalpine pasture turfs

Session 17: Alpine Meteorology

**Room
HG 201**

Convenors: Michael Sprenger & Tobias Grimbacher

		Precip I: Radar observation and modelling; Chair: Michael Sprenger
08:30-08:50	Germann U., Gabella M., Boscacci M., Sideris I., Sartori M., Hering A., Clementi L., Sassi M.	Precipitation measurements with the new fourth-generation Swiss weather radar network: strategy and first results
08:50-09:05	Nisi L., Ambrosetti P., Clementi L.	Severe convection in the Alpine region: the approach COALITION for nowcasting the storm severity
09:05-09:20	Betschart M., Romppainen-Martius O., Arpagaus M.	Hailstorm Studies In Switzerland Using A High Resolution NWP Model
09:20-09:35	Hassanzadeh H., Schmidli J., Langhans W., Schär C.	Mountain size and atmospheric Conditions' Impact on the diurnal Cycle of Clouds and Precipitation
09:35-09:50	Miltnerberger A., Joos H., Pfahl S., Seifert A., Wernli H.	A Lagrangian Perspective on Orographic Precipitation
09:50-10:05	Monhart S., Schneebeli M., Berne A.	Classification of alpine hydrometeors in 2 dimensional video disdrometer data
10:05-10:10		Introduction to Poster Session (30" per poster)

10:10-11:10 *Morning Poster Session with coffee*

		Foehn and irradiance; Chair: Tobias Grimbacher
11:10-11:25	Sprenger M., Lentink H., Wilhelm M., Buzzi M., Hächler P., Dürr B., Schmidli J.	Foehn - extremes, trajectories and representation in NWP models
11:25-11:40	Dürr B., Gutermann T., Richner H., Bader S.	Altdorf foehn climatology: the long series (1864-2008) and comparison to further sites
11:40-11:55	Steger C., Posselt R., Stöckli R., Liniger M.	Satellite-based monitoring of solar irradiance over complex terrain

11:55-14:00 Lunch

13:15-14:00 **Mitgliederversammlung der Schweizerischen Gesellschaft für Meteorologie**

		Precip II: Climatology and Extremes; Chair: Saskia Willemse
14:00-14:20	Martius O.	Heavy precipitation in the Alpine area
14:20-14:35	Isotta F., Frei C., Liniger M.	Precipitation in the Alpine region as seen from a trans-national multi-decadal rain-gauge dataset
14:35-14:50	Giannakaki P., Martius O.	Heavy precipitation events in northern Switzerland
14:50-15:05	Froidevaux P., Romppainen-Martius O., Weingartner R.	Atmospheric Precursors to Floods in Switzerland

15:05-15:30 Afternoon Poster Session with coffee

		Temperature climatologies/Seasons and phenology; Chair: Michael Sprenger
15:30-15:45	Frei C.	Interpolation of surface air temperature in mountainous terrain: A km-scale, daily dataset for Switzerland
15:45-16:00	Philipona R.	Greenhouse warming and solar brightening in and around the Alps
16:00-16:15	Jeannet P., Begert M., Brocard E., Philipona R., Scherrer S.	Temperature and Humidity trends over the Swiss Alps and the troposphere above - from 1959 to 2011
16:15-16:30	Bolmgren K.	People love spring! Can Facebook and a diversity of responses to climate change make them love phenology networks?
16:30-16:45	Rixen C., Rutishauser T.	Verleihung Schweizer Preis für Phänologie und Saisonalität

Posters Session 17:

P 17.1	Kern Z., Leuenberger M., Kohán B.	Steps toward a process based model for the stable oxygen isotope composition of precipitation over Switzerland
P 17.2	Cossu F., Hocke K.	Orographic effects on precipitation and atmospheric water cycle in the Weather Research and Forecasting Model
P 17.3	Löwe H., Helbig N.	Quasi-analytical treatment of spatially averaged radiation transfer in complex terrain
P 17.4	Weibel B., Liniger M., Appenzeller C.	NCCR Climate related research at MeteoSwiss - The Swiss climate of today and tomorrow
P 17.5	Dürr B., Richner H., Gutermann T., Bader S.	The integration of the automatic foehn index into the longest time series for foehn (starting 1864 for Altdorf, Switzerland)

Session 19: Geoscience and Geoinformation - From data acquisition to modelling and visualisation

Room
HG 105

Convenors: Nils Oesterling, Adrian Wiget, Massimiliano Cannata

		Chair: Adrian Wiget
09:20-09:40	Psimoulis, P., Rothacher, M., Dalguer, L., Zhang, Y.	Development of a method for the detection of seismic events based on high-rate GNSS network measurements
09:40-10:00	Bozzini C., Krebs P., Conedera M.	Quantifying landscape changes through the georeferencing of single oblique historical photos

10:00-11:00 *Morning Poster Session with coffee*

		Chair: Adrian Wiget
11:00-11:40	Jaboyedoff M., Abellan A., Carrea D., Derron M.-H., Epard J.-L., Humair F., Loye A., Matasci B., Metzger R., Michoud C., Schreiber L.	3D geological investigations coupled to Lidar data: toward vertical geology. (Key-Note: Aquisition)
11:40-12:00	Caduff R., Kos A., Schlunegger F.	Deformation and radiometric mapping with terrestrial radar interferometry – From radar-geometry to high resolution 3d-surface maps
12:00-12:20	Schmassmann S., Filipponi, M., Jeannin P.-Y., Parriaux A.	KarstALEA : a practical guide for the prediction of karstrelated hazards in underground works

12:20-13:40 *Lunch*

		Chair: Nils Oesterling
13:40-14:20	Pamer R.	Getting the "logic" out of geological 3D modelling. (Key-Note: Modelling)
14:20-14:40	Arndt D., Bär K., Sass I., Hoppe A.	Geological structural model of the Federal State of Hesse (Germany) to evaluate geothermal potentials with consideration of parameter uncertainties
14:40-15:00	Baumberger R., Wehrens P., Herwegh M.	Large scale mapping of 3D deformation structures – a combined remote sensing and field work approach

15:00-16:00 *Afternoon Poster Session with coffee*

		Chair: Nils Oesterling
16:00-16:40	Nebiker S., Christen M.	3D visualisation – state-of-the art and perspectives. (Key-Note: Visualisation)
16:40-17:00	Terrington R., Hughes L., Napier B., Ramos L.	Geoscience Data Integration and Visualisation in 3D - GeoVisionary
17:00-17:20	Matzenauer E, Mosar J.	3D Modelling and Visualisation of the Structures within the Préalpine Nappe Stack

Posters Session 19:

P 19.1	Dresmann H., Huggenberger P., Epting J., Wiesmeier S., Scheidler S.	The 3D-model Basel region – a planning tool
P 19.2	GeORG-Project Team	The EU-project GeORG – products

P 19.3	Liu Z.	Small and Fast Motion Detection using GPS receiver Single-Frequency Carrier Phase Observations
P 19.4	Neyer, F.	Visualizing vector data: Clustering noisy displacement fields

Session 20: Earth System Science related Earth Observation

**Room
HG 214**

Convenors: Michael E. Schaepman, Brigitte Buchmann, Alain Geiger

		Chair: Michael Schaepman
09:00-09:20	Männel B., Rothacher M.	Co-location in space and its impact on the geodetic reference frame for Earth observation
09:20-09:40	Madonna E., Wernli H., Joos H., Martius O., Böttcher M.	Precipitation in extratropical cyclones: the role of warm conveyor belts
09:40-10:00	König S.J., Fontana F., Seiz G., Foppa N.	Extending Global Monitoring of Essential Climate Variables through the GCOS Cooperation Mechanism

10:00-11:00 Morning Poster Session with coffee

		Chair: Alain Geiger (TBD)
11:00-11:20	Leiterer R., Morsdorf F., Schaepman M.E.	High resolution retrieval of forest canopy structure using multi-temporal airborne laser scanning
11:20-11:40	Leinss, S., Hajnsek, I.	Feasibility study on snow property extraction based on differential SAR interferometry
11:40-12:00	Riffler M., Schulze S., Wunderle S.	Toward a satellite-based climatology (1989–2011) of lake surface water temperature from AVHRR 1-km for European water bodies
12:00-12:20	Fatehi P., Damm A., Kneubühler M., Schaepman M.	Alpine vegetation biomass mapping from imaging spectrometer data

12:20-14:00 Lunch

Posters Session 20:

P 20.1	Stöckli R., Posselt R., Steger C., Liniger M.	MSG SEVIRI-based solar energy mapping over complex terrain
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Convenors: Matthias Bürgi, Thomas Hammer

		Chair: Bürgi Matthias / Hammer Thomas
09:00 - 09:10	Bürgi M. & Hammer T.	Einführung: Landscape and its meanings for society
09:10 - 09:40	Konold W.	Die funktionale, ideengeschichtliche und sozialhistorische Substanz von Kulturlandschaften
09:40 - 10:10	Degenhardt B.	What makes a landscape healthy? GIS-assisted mapping and other approaches to better understand the meanings of nearby recreation areas for a healthy society

10:10-11:00 Coffee break

		Chair: Bürgi Matthias / Hammer Thomas
11:00 - 11:30	Kienast F., Bürgi M., Segura-Moran L., Haines-Young R., Potschin M.	Indicator-driven landscape service assessment at various geographical scales
11:30 - 11:50	Graf C., Buchecker M.	Photovoltaikanlagen an Lawinenverbauungen: Wahrnehmung und Akzeptanz verschiedener Bevölkerungsgruppen
11:50 - 12:10	Keller R.	Wahrnehmung und Nutzung kultureller Ökosystemleistungen in der Schweiz
12:10 - 12:30	Ioja C.I., Tudor C.A., Hersperger A., Patru-Stupariu I. G.	People's perception toward externalities caused by potentially conflicting land uses. Case study of Bucharest cemeteries, Romania

12:30-13:45 Lunch

		Chair: Bürgi Matthias / Hammer Thomas
13:45 - 14:05	Garrard R., Kohler T., Wiesmann U., Price, Byers A., Sherpa AR.	Repeat photography as a tool in detecting landscape change and environmental services in Sagarmatha (Mt. Everest) National Park, Nepal
14:05 - 14:25	Leng M.	Schutz und Erhalt der Moorlandschaften in der Schweiz
14:25 - 14:45	Stroebele M.F., Tobias S., Hunziker M.	Spatial demands of society
14:45 - 15:05	Tiefenbach M.	Alpkorporationen - traditionelle Institutionen nachhaltiger Landschaftsentwicklung. Das Beispiel der Bergschaften Grindelwalds
15:05 - 15:15	Bürgi M. & Hammer T.	Schlussbemerkungen

15:15-16:00 Coffee break

Convenors: Juliet Fall, Bettina Fredrich, Olivier Graefe, Pia Hollenbach, Olivier Ejderyan, Martin Müller, Carolin Schurr, Karin Schwiter, René Véron

Part I: Knowledge, power and decision-making in environmental policy and management

		Chairs: Juliet Fall, Olivier Graefe, Olivier Ejderyan, René Véron, Martin Müller
09:30-10:00	Johnson L.	Index insurance, climate vulnerability, and risk-bearing subjects
10:00-10:30	Kayani S.	Mangla dam raising project (Pakistan): general review and socio-spatial impact assessment
10:30-11:00	Coffee break	
11:00-11:30	Zimmer A.	Wastewater governance – practices and contestations in Delhi's informal settlements
11:30-12:00	Rattu P.	Urban Water in French Switzerland: a Neoliberal Ecological History
12:00-14:00	Human Geography Lunch	
14:00-14:30	Alms E.	Local impact of global conservation governance in Chinese national parks
14:30-15:00	Müller M.	How natural disturbance triggers political conflict: bark beetles and the meaning of landscape in the Bavarian Forest
15:00-15:30	Tait-Jamieson T.	The hunter and the wolf: Environmental ethics in Switzerland
15:30-16:00	Coffee break	

Part II: Performative Geographies (Paper and Panel session)

		Chairs: Carolin Schurr, Bettina Fredrich, Karin Schwiter, Pia Hollenbach
16:00-16:30	Lévy B., Gal M.	City and Literature
16:30-18:00	Schurr C., Fredrich B., Schwiter K., Hollenbach P.	Discussing performative geographies - affect, embodiment and the now in research practice. • Thrift, N., Dewsbury, J.-D., 2000. Dead geographies - and how to make them live. <i>Society and Space</i> 18, 411–432 • Kelly, D., 2006. Affect - an ethnocentric encounter? Exploring the 'universalist' imperative of emotional/affectual geographies. <i>Area</i> 38 (2), 213-217.

Meetings of Societies on Friday 16th November

Time		Room
11:00-12:00	Generalversammlung Erlebnis Geologie / Assemblée générale Géologie Vivante	Restaurant Beaulieu, Bern
11:00-13:00	IUGG Swiss national committee meeting	207 at GIUB

Meetings of Societies on Saturday 17th November

Time		Room
12:15-13:00	IUGS swiss national committee meeting	HG 217
12:20-13:00	SGmG General Assembly	HG 114
12:30-13:15	Mitgliederversammlung der SMPG / General Assembly SSMP	ExWi B005
12:30-13:15	General Assembly of the Swiss Society for Hydrology and Limnology	HG 215
13:15-14:00	Mitgliederversammlung der Schweizerischen Gesellschaft für Meteorologie	HG 201
14:00-15:00	Plenumssitzung Stratigraphisches Komitee der Schweiz / Séance du plénum du Comité suisse de stratigraphie	ExWi B007

Notes



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Landestopografie swisstopo
Office fédéral de topographie swisstopo
Ufficio federale di topografia swisstopo

Landesgeologie
Service géologique national
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