



Program Booklet 11th Swiss Geoscience Meeting

Lausanne, 15th – 16th November 2013



Cycles and Events in the Earth System

sc | nat 

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

Unil

UNIL | Université de Lausanne

Faculté des géosciences
et de l'environnement

Large photo: View from Tierbergli on the Steisee, Sustenpass and Titlis (BE)

Small photo: Warning sign along the Wyssa aqueduct (Bisse/Suone) above Mund (VS) (Photo's: Pierre Dèzes, SCNAT)

A cordial welcome to the 11th Swiss Geoscience Meeting 2013 in Lausanne

Dear Geoscientists

We are very happy to welcome you to the 11th edition of the Swiss Geoscience Meeting, which is hosted this year by the Faculty of Geosciences and Environment of the University of Lausanne and by the Cantonal Museum of Geology in Lausanne.

The 11th Swiss Geoscience Meeting attracted the record number of 424 contributions for the record number of 27 proposed sessions. This illustrates not only the strength of and diversity in geosciences in Switzerland, but also the vigorous and ever increasing interest of geoscientists to meet and gather on a regular base.

The main theme of this year's Swiss Geoscience Meeting – "Cycles and Events in the Earth System" - is an invitation to consider both the interaction of cyclical change with, as well as the impact of sudden and often unexpected events on the geo- and biosphere. On Friday afternoon, five internationally acclaimed scientists will refer to the importance of cycles and events in various geoscientific domains. The main theme is also reflected by the sessions proposed for Saturday.

The Swiss Geoscience Meeting is supported by the Platform Geosciences of the Swiss Academy of Natural Sciences, and we cordially thank their representative - Pierre Dèzes - for his important logistical support. We also gratefully acknowledge the support of the University of Lausanne, the Cantonal Museum of Geology, the "Amis du Musée de Géologie de Lausanne", the Canton of Vaud, the Herbette Foundation, and the Swiss committees of the International Union of Geological Sciences and the International Union of Geodesy and Geophysics. We finally thank all the students, administrators, and technical staff for their assistance, and – last but not least – you all who participate and contribute to the success of the 11th edition of the Swiss Geoscience Meeting.

The organizing committee

Karl Föllmi (president)

Gilles Borel

Benita Putlitz

Thierry Adatte

Stuart Lane

Emmanuel Reynard

Eric Verrecchia

François Bussy

Organisation

Swiss Academy of Natural Sciences
University of Lausanne, Faculty of Geosciences and Environment

Local committee

Karl Föllmi, president
Thierry Adatte
Gilles Borel
François Bussy
Pierre Dèzes
Stuart Lane
Benita Putlitz
Emmanuel Reynard
Eric Verrecchia

Technical and administrative Staff

Jean-Paul Dutoit
Angélique Batchelor
Catherine Freiburghaus
Simon Hiscox

Catering

SV Group, Géopolis, University of Lausanne

Partners

Association des Amis du Musée de Géologie de Lausanne
Musée cantonal de géologie, Lausanne

Sponsors

Canton de Vaud
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International Union of Geodesy and Geophysics (IUGG)
International Union of Geological Sciences (IUGS)

Registration and information

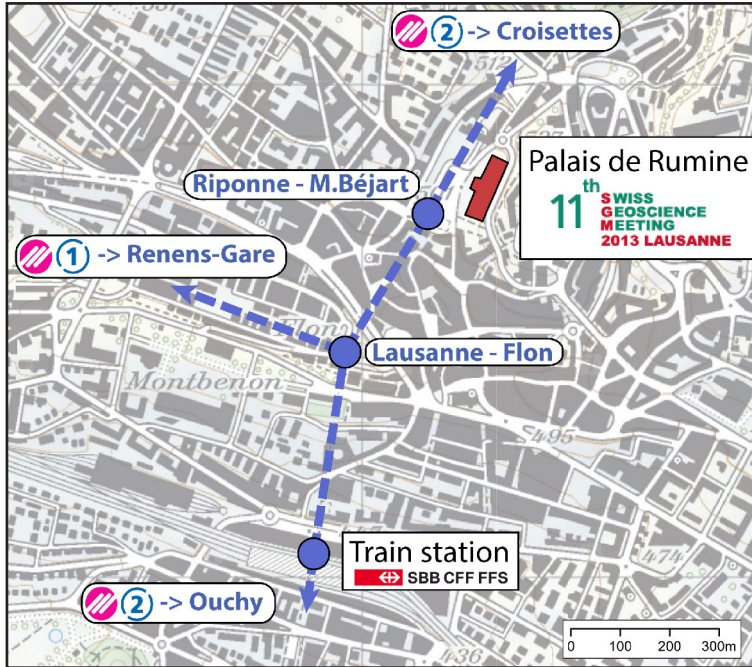
Friday : 12:30 – 18:30, Palais de Rumine
Saturday : 8:00 – 17:00, University of Lausanne, Building Geopolis (see plans on page 3)

Saturday lunch bags

Bags are delivered in the cafeteria, starting at 12:00.

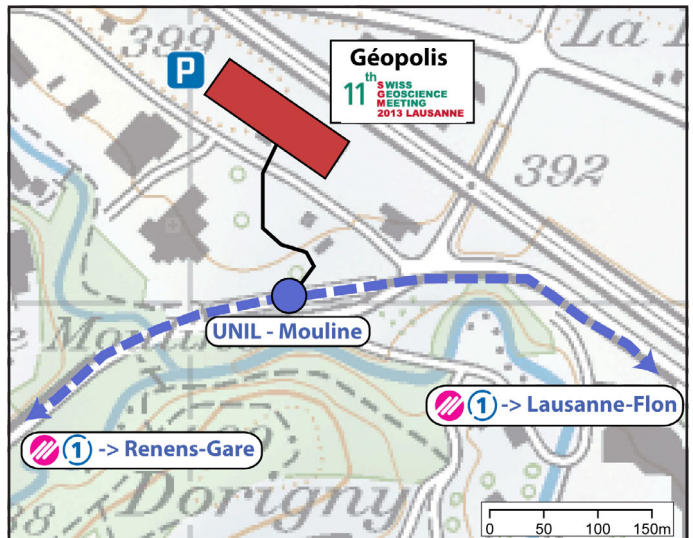
How to get there ?

Friday, Palais de Rumine



Saturday, University of Lausanne, Quartier Mouline, Building Geopolis

From Lausanne railway station, Metro M2, direction Croisettes; change at Lausanne-Flon to Metro M1, direction Renens-Gare, stop at UNIL-Mouline.



11th Swiss Geoscience Meeting, Lausanne 2013

Cycles and Events in the Earth System

Plenary Session, Friday November 15th 2013

Palais de Rumine, place de la Riponne

	Chairperson: Karl Föllmi	
13:30 - 14:00	Welcome address by the Minister of Education, Youth and Culture of the Canton of Vaud Welcome address by the Rector of the University of Lausanne Welcome address by the Director of the Cantonal Museum of Geology at Lausanne	Anne-Catherine Lyon Dominique Arlettaz Gilles Borel
	Chairperson: Benita Putlitz	
14:00 - 14:35	Fluids and Crustal Processes through Orogenic Cycles	Bruce Yardley University of Leeds
	Chairperson: Eric Verrecchia	
14:35 - 15:10	Banded Iron Formation and the Rise of Oxygen	Kurt Konhauser University of Alberta
	Chairperson: Thierry Adatte	
15:10 - 15:45	The impact of oceanic anoxic events on marine biota, ocean chemistry and Earth processes	Angela Coe The Open University
15:45 - 16:30	<i>Coffee break</i>	
	Chairperson: Stuart Lane	
16:30 - 17:05	Accounting for extreme events in Earth Surface Processes: the critical challenges	Oliver Korup University of Potsdam
	Chairperson: François Bussy	
17:05 - 17:40	Carbonation of mantle peridotite: Natural systems, global carbon cycle, engineered capture & storage	Peter Kelemen Columbia University
	Chairperson: Pierre Dèzes	
17:40 - 18:30	<ul style="list-style-type: none">• Communications Platform Geosciences• Géologie Vivante – Erlebnis Geologie – Avventura Geologia• Presentation SGM 2014 in Fribourg• Paul Niggli Medal• Swiss Geological Society Award• CHGEOL Award	Bruno Schädler Matthias Damo Jon Mosar Klaus Holliger Neil Mancktelow Jean-Marc Fasel
18:30 - ??	Swiss Geoscience Party (food, drinks and rejoicing) for registered participants	

Symposium Sessions, Saturday November 16th 2013

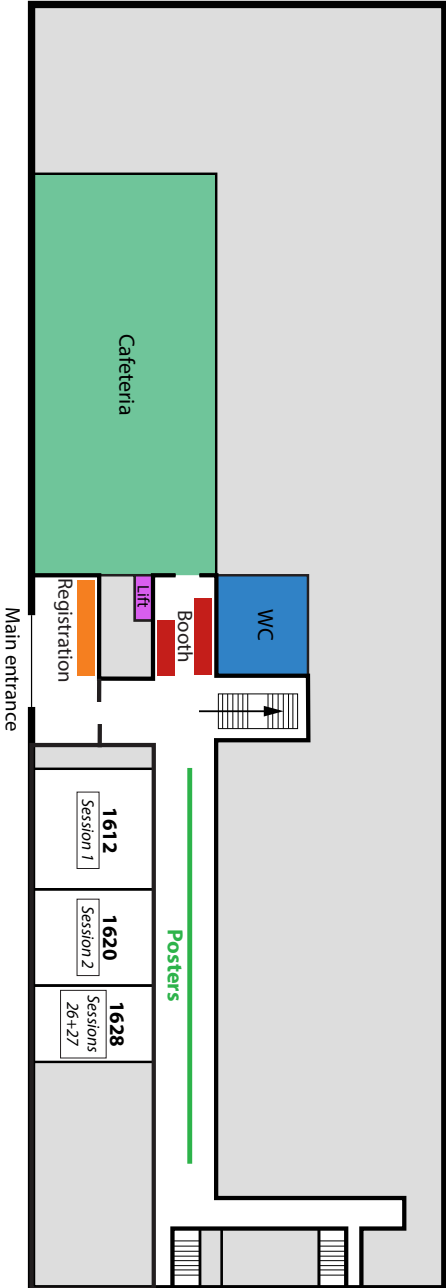
Géopolis, University of Lausanne

1. Structural Geology, Tectonics and Geodynamics
2. Mineralogy, Petrology, Geochemistry
4. Cycles and Events in Earth History
5. Alpine Geology
6. Stratigraphy in Switzerland - new data and developments
7. Palaeontology
8. Fossils and plate tectonic events: Oceanic and continental gateways, landbridges and the dispersal of biota
9. Environmental Biogeosciences
10. Biogeochemical cycles in a changing environment
11. Geophysics and Rockphysics
12. Shale-Gas, CO₂ Storage and Deep Geothermal Energy
13. Atmospheric predictability, phenology and seasonality
14. Cryospheric Sciences
15. Greenhouse Gases: Linkages between Biosphere and Climate
17. Computational GIScience
18. Geoscience and Geoinformation - From data acquisition to modelling and visualisation
19. Earth System Science related Earth Observation
20. Quaternary environments: landscapes, climate, ecosystems, human activity during the past 2.6 million years
21. Scientific challenges for geoheritage conservation and promotion in Switzerland
23. Symposium in Human Geography
24. Sustainable Water Management – Scientific Findings from recent research
25. Limnological and hydro(geo)logical advances for mid-sized lakes as a water resource for the next century
26. Geomorphology
27. Fluxes of water, sediment and dissolved substances in geomorphologically active/changing environments

Map of lecture rooms in Géopolis, University of Lausanne:

Ground floor

North



First floor

North



South

Session Programm Saturday

Symposium Sessions, Saturday November 16th 2013

Session 1: Structural Geology, Tectonics and Geodynamics

Room 1612

Convenors: Guido Schreurs, Neil Mancktelow, Paul Tackley

		Chair: Paul Tackley
09:00 - 09:15	Kaczmarek M.-A., Grange M., Reddy S.M., Nemchin A.	Deformation mechanisms in Martian meteorites
09:15 - 09:30	Lourenço D. L., Tackley P. J.	The effect of melting and crustal production on plate tectonics on terrestrial planets
09:30 - 09:45	Houlié N., Stern T.	A comparison of GPS solutions for strain and SKS fast directions: implications for modes of shear in the mantle of a plate boundary zone
09:45 - 10:00	Moulas E., Burg J-P., Podladchikov Y.	Rheology-driven phase equilibria and the in-situ formation of high-pressure rocks

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

		Chair: Guido Schreurs
11:00 - 11:15	Nazari H., Ghorashi M., Kaveh Firouz A.	Probable Tsunami In The South Caspian Sea By A Large Earthquake!
11:15 - 11:30	Hunziker D., Burg J.-P., Vonquadt A., Bouilhol P.	Jurassic extension in Northern Makran, SE Iran: Geochemistry, U/Pb ages and Sr-Nd isotopes
11:30 - 11:45	Simon-Labric T., Reiners P., Braun J.	Orographic precipitations need glaciers to control long-term erosion rates and topography of tectonically inactive mountain ranges
11:45 - 12:00	Strasser, M., Kodaira, S., Dinten, D.	Structural and morphological changes in the shallow plate boundary system and trench, triggered by rare subduction megathrust earthquakes

12:00-13:45 Lunch

		Chair: Neil Mancktelow
13:45 - 14:00	Valla P.G., Rahn M., Shuster D.L., van der Beek P.A.	Exhumation history, topographic relief evolution and geothermal activity in the Swiss Central Alps (Rhône valley): insights from low-temperature thermochronology
14:00 - 14:15	Malz A., Madritsch H., Meier B., Navabpour P., Heuberger S., Kley J.	The Baden-Irchel-Herdern Lineament: An inherited normal fault controlling the front of the eastern Jura fold-and-thrust belt
14:15 - 14:30	Sala P., Pfiffner A.	The internal structure of the Säntis nappe: folds, thrusts and wrench faults
14:30 - 14:45	Schubert R., Herwegh M.	Kinematics and 3D pattern of ductile shear zones in the Gruebensee-Gelmersee transect (Hasli Valley, central Switzerland).
14:45 - 15:00	Wehrens P., Herwegh M., Berger A.	Fluid involved, high grade cataclasis during Alpine ductile deformation in basement rocks of the Aar massif

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

Posters Session 1:

P 1.1	Bagheri S., Sarani M.	On the origin of the Naybandan Arc-shaped structures, Tabas, Central Iran
P 1.2	Bauville A., Schmalholz S.M.	2D thermo-mechanical modeling of basement-cover deformation with application to the Western Alps
P 1.3	Buchs D., Cukur D., Masago H.	Tectonosedimentary evolution of the Nankai forearc (Japan) constrained by detrital minerals in off-shore (IODP) drill sites and modern river beds
P 1.4	Cioldi S., Moulas E., Burg J.P.	Geospeedometry of inverted metamorphic gradients of a crustal-scale thrust zone: first approach
P 1.5	Collignon M., May D.A., Kaus B. J.P., Fernandez N.	Effects of surface processes on multilayer detachment folding: a numerical approach.
P 1.6	Duret T., Schmalholz S. M.	Thermo-mechanical feedback and modelling of crustal-scale shear zones
P 1.7	Fischer R., Gerya T.	Was plate tectonics different in a hotter Earth? History and evolution of subduction in the Precambrium
P 1.8	Frehner M.	3D fold growth rates
P 1.9	Golabek G., Jutzi M., Gerya T., Asphaug E.	Towards coupled giant impact and long term interior evolution models
P 1.10	Gruber M., Sommaruga A., Mosar J.	3D Modeling of the Fribourg Area - Western Swiss Molasse Basin, Switzerland
P 1.11	Jaquet Y., Bauville A., Schmalholz S.	Viscous overthrusting versus folding: 2-D quantitative modeling and its application to the Helvetic and Jura fold and thrust belts
P 1.12	Kelevitz K., Houlié N., Rothacher M., Giardini D.	Mapping Earth's interiors with GPS records: the first steps.
P 1.13	Kilian R.	The role of phase distribution and reaction in an amphibolite facies ultramylonite
P 1.14	Liao J., Gerya T.	Offsetting crustal and mantle neckings generates abandonment of continental rifts
P 1.15	Lupi, M., Miller, S. A.	Deformation of the Sumatran, Chilean, and Japanese volcanic arcs after mega-thrust slips.
P 1.16	Malz A., Jordan P., Meier B., Madritsch H., Navabpour P., Kley J.	Tectonic events predating the formation of the Jura fold-and-thrust belt: Constraints from cross section balancing
P 1.17	Marti S., Heilbronner R., Stünitz H.	Semi-brittle deformation of fault rocks - an experimental study of the brittle-to-viscous transition in mafic rocks
P 1.18	May D.A.	A scalable, parallel matrix-free Stokes solver for geodynamics applications
P 1.19	Mohammadi A., Winkler W., Burg J.P., Ruh J., Von Quadt A.	Detrital zircon and provenance analysis on the onshore Makran accretionary wedge, SE Iran: implication for the geodynamic setting
P 1.20	Moulas E., Burg J-P., Kostopoulos D., Schenker F., Chatzitheodoridis E.	Metamorphic conditions and exhumation of the Keshebir-Kardamos dome – Rhodope Metamorphic Complex (Greece-Bulgaria)
P 1.21	Niane B., Moritz R., Guédron S., Poté J., Ngom P M., Pfeifer H.-R.	Assessment of mercury distribution in sediments, soil, fish and human hair sampled in gold mining areas in the Gambia River Basin at Kedougou, southeastern Senegal
P 1.22	Philippe T.A., Frehner M., May D.A.	Single Viscous Layer Fold Interplay And Linkage: A 3d-Fem Modelling Approach
P 1.23	Rabin M., Sue C., Champagnac J.D. & Eichenberger U.	Geomorphology approach in karstic domain: importance of underground water.
P 1.24	Richter B., Kilian R., Stünitz H., Heilbronner R.	The effect of hot-pressing on the grain size distribution and microstructure of quartz gouge along the brittle-to-viscous transition in shear experiments
P 1.25	Rozel A., Tackley P.J.	Convection and grain size evolution in mantle and lithosphere of the Earth

P 1.26	Schmalholz S.M., Medvedev S., Lechmann S.M., Podladchikov Y.	Relationship between tectonic overpressure, deviatoric stress, driving force, isostasy and gravitational potential energy
P 1.27	Valla P.G., Lowick S.E., Herman F., Champagnac J.-D., Guralnik B., Steer P., Chen J., Qin J.	Exploring feldspar IRSL-50 as a low-temperature thermochronometer: insights from field applications (Alaska, Norway and Pamir)
P 1.28	Von Tscharnier, M., Schmalholz, S.	3D FEM modelling of geological structures caused by geometrical instabilities and contrasts in rock strength
P 1.29	Von Tscharnier, M., Duretz, T., Schmalholz, S.	Slab detachment – 3D versus 1D
P 1.30	Zhu Y.F.	Baijiantan-Baikouquan ophiolitic mélanges: Implications for geology evolution of west Junggar, Xinjiang, NW China

Session 2: Mineralogy, Petrology, Geochemistry

Room 1620

Convenors: Eric Reusser, Bernard Grobéty, Sébastien Pilet

		Chair: Sébastien Pilet
09:00 - 09:15	Rottier B., Kouzmanov K., Fontboté L.	Ore-forming fluids associated with the early mineralization at Cerro de Pasco, Peru
09:15 - 09:30	Tomé C., Kouzmanov K., Fontboté L., Bendezú A., Wälle M.	Magmatic-hydrothermal fluid evolution of a multiphase porphyry-centered system: the Miocene Morococha district, central Peru
09:30 - 09:45	Schlatter D.M., Stensgaard B.M.	Evaluation of the mineral potential in the Bjørnesund greenstone belt, southern West Greenland, combining multivariate studies, field work and geochemistry
09:45 - 10:00	Gilgen S. A., Diamond L. W., Mercolli I.	Volcanostratigraphic Controls on the Occurrence of Massive Sulfide (VMS) Deposits in the Semail Ophiolite, Oman

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

		Chair: Olivier Bachmann
11:00 - 11:15	Leuthold J., Blundy J., Holness M.	Quantification of successive reactive melt flow episodes in a layered intrusion (Unit 9, Rum Eastern Series, Scotland)
11:15 - 11:30	Fomin I., Dubinina E., Avdeenko A., Ariskin A.	Oxygen isotopes in Ioko-Dovyren layered intrusion rocks
11:30 - 11:45	Tripoli B. A., Cordonnier B., Ulmer P.	Effects of crystallization and bubble nucleation on the seismic properties of magmas
11:45 - 12:00	Bosshard-Stadlin S.A., Stewart C., Mattsson, H.B.	Leaching of natrocarbonatitic ash and consequences for drinking water: The 2007/2008 explosive eruption of Oldoinyo Lengai, northern Tanzania

12:00-13:45 Lunch

12:15 - 13:00 Annual Meeting of the SMPG / SSMP

		Chair: Olivier Reubi
13:45 - 14:00	Vils F., Elliott T., Willbold M., Teagle D.	Molybdenum isotopes: the new tracer to identify subducted material? Hints from the altered oceanic crust and oceanic eclogites.
14:00 - 14:15	Ewing T., Müntener O.	Formation and geochemistry of rutile from the roots of island arcs: an example from the Jijal Complex, Kohistan
14:15 - 14:30	El Korh, A.	Ablation behaviour and matrix effects during U–Th–Pb geochronology of allanite by LA-ICP-MS

14:30 - 14:45	Thien B., Kosakowski G., Kulik D.	Modeling water-rock interactions in Icelandic hydrothermal systems
14:45 - 15:00	Pretet C., Nägler T. F., Reynaud S., Böttcher M. E., Samankassou E.	Barium isotope fractionation in coral skeleton: Tracking anthropogenic contaminations?

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

		Chair: Eric Reusser
16:00 - 16:15	Schenker F. L., Burg J.-P., Kostopoulos D.	Distinguishing metacarbonates from marbles – Challenge from the carbonate-amphibolite-epidote rock association in the Pelagonian zone (Greece)
16:15 - 16:30	Floess D., Baumgartner L.	Constraining magmatic fluxes through thermal models for contact metamorphism
16:30 - 16:45	Bretscher A., Pettko T.	The mineral and fluid chemistry of high-P serpentinite dehydration
16:45 - 16:00	Burn M., Giuntoli F., Regis D., Lanari P., Engi M.	Mobile Fragments in a Subduction Channel: Correlation of P-T-D-t stages
17:00 - 17:15	Ferreiro Mählmann R.	Standardisation, calibration and correlation of the Kübler-Index and the vitrinite/bituminite reflectance: an inter-laboratory and field related study

Posters Session 2:

P 2.1	Bouvier A.-S., Manzini M., Baumgartner L.	Cl isotopes in melt inclusions
P 2.2	Siron G., Baumgartner L. P., Bouvier A. S.	Development of $\delta^{18}\text{O}$ and $\delta^{37}\text{Cl}$ SIMS analysis on biotites
P 2.3	Siron G., Baumgartner L., Bodner R., Putlitz B., Müntener O.	High chloride concentration in biotites of host rocks documents infiltration of fluids exsolved from the Torres del Paine granites
P 2.4	Baumgartner L., Bouvier A.-S., Putlitz B.	Development of a quartz oxygen isotope standard for the SwissSIMS
P 2.5	Ulianov A., Müntener O., Schaltegger U.	Uncertainties of the laser ablation ICPMS analysis: how do they arise and how do we calculate them?
P 2.6	Honisch M., Ulianov A., Ulmer P., Müntener O.	Stress and strain in olivine - a RAMAN-mapping approach
P 2.7	Giuntoli F., Engi M., Regis D, El Korh A., Lanari P.	Recognizing metamorphic stages and tectonic slices in HP-terraces: Case study in the Sesia Zone (NW-Alps, Italy)
P 2.8	Franz L., De Capitani C., Romer R.L.	Whiteschists - protoliths and phase petrology
P 2.9	May E., Vennemann T., Meisser N.	Geochemical study of mineral paragenesis from Alpine-type veins in the western Swiss Alps.
P 2.10	Seitz S., Putlitz B., Baumgartner L.P., Leresche S., Nescher P.	Oxygen isotope and trace element behaviour in rhyolites from the contact-aureole of the Chaltén Plutonic Complex (Mt. Fitz Roy, Patagonia, Argentina)
P 2.11	Axelsson E., Mezger K., Villa I.M.	Biotite Rb-Sr and Rutile U-Pb age data confirming an extensive Neoproterozoic overprint in the Eastern Ghats Belt (India)
P 2.12	Galster F., Müntener O., Ewing T.	Nb/Ta, Zr/Hf and HREE to Understand Accessory Mineral Thermometers at High and Ultra-High Temperatures
P 2.13	Tene Djoukam J., Moritz R., Tchouankoue J.	CO ₂ -rich fluid inclusion in upper mantle xenoliths from Nyos and Barombi-Mbo lakes: Cameroon Volcanic Line
P 2.14	Caricchi L., Annen C., Blundy, J., Simpson G.	Control of magma recharge and buoyancy on the frequency and magnitude of volcanic eruptions
P 2.15	Ernst K., Franz L., Decapitani C., Harlow G., Krzemnicki M., Kouznetsov N.	A new occurrence of kosmochlor in Cr-jadeite from Kenterlau-Itmurundy (Lake Balkhash, Kazakhstan)

P 2.16	Schweinar K., Franz L., De Capitani C., Hänni H.A., Thyesun T.	Kosmochlor from Myanmar - Investigations on a possible miscibility gap in the solid solution jadeite-kosmochlor
P 2.17	Casanova V., Kouzmanov K., Fontboté L., Bendežú R.	Multiple quartz generations associated with polymetallic mineralization at Colquijirca, central Peru: a fluid inclusion and SEM-CL study
P 2.18	Lambiel F., Dold B., Fontboté L., Vennemann T., Spangenberg J.E.	Neof ormation of "exotic" copper minerals from gel-like precursors at the Exotica deposit (northern Chile)
P 2.19	Buret Y., Kouzmanov K., Spikings R., Gerdjikov Y.	Timing of polymetallic Pb-Zn mineralisation in the Laki district, southern Bulgaria - constraints from ⁴⁰ Ar/ ³⁹ Ar dates
P 2.20	Large S., Bakker E., Weis P., Wälle M., Heinrich C., Ressel M.	A magmatic origin of ore-forming fluids in Carlin-type deposits? Fluid inclusion studies on Carlin-type deposits and a Au-Cu porphyry deposit on the Carlin and Battle Mountain-Eureka trends, Nevada
P 2.21	Davoudi A., Lak R., Bahramabadi B	Estimation of environmental contaminations value of heavy metals in the sediments of Sari area with using geochemical parameter of Enrichment Factor (EF)
P 2.22	Franz L., Wetzel A., Doerner E.	Petrographic and sedimentologic investigation of boulders in the riverbed of the 'Hauensteiner Murg'
P 2.23	Bauer, K., Adatte, T., Vennemann, T.	Oxygen and hydrogen stable isotopes in waters and soils from the Visp catchment, Valais, Switzerland

Session 4: Cycles and Events in Earth History

Room 2227

Convenors: Karl Föllmi, Urs Schaltegger, Thierry Adatte

		Chair: Urs Schaltegger
9:00-9:15	Baresel B., Bucher H., Schaltegger U.	High precision time calibration of the Permo-Triassic boundary mass extinction event by U-Pb geochronology
9:15-9:30	Sanson-Barrera A., Hochuli P. A., Bucher H., Meier M., Schneebeli-Hermann E., Weissert H., Bernasconi S.M.	Latest Permian to Early Triassic high-resolution stable carbon isotope record from North-east Greenland
9:30-9:45	Brack, P.	Latemar - What dictates the rhythm?
9:45-10:00	Wotzlav J.-F., Guex J., Bartolini A., Gallet Y., Krystyn L., McRoberts C., Taylor D., Schoene B., Schaltegger U.	Towards accurate numerical calibration of the Late Triassic: High-precision U-Pb constraints on the duration of the Rhaetian

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

		Chair: Thierry Adatte
11:00-11:15	Sell B., Schaltegger U., Ovtcharova M., Bartolini A., Jourdan F., Guex J.	Evaluating the causal link between the Karoo LIP and climatic-biologic events of the Toarcian Stage with high-precision geochronology
11:15-11:30	Hosseini S., Kindler P., Conrad A.M.	Valanginian Weissert event in a shallow-platform setting, Zagros fold-thrust belt, southern Tethys
11:30-11:45	Charbonnier G., Duchamp-Alphonse S., Adatte T., Spangenberg J.E., Colin C., Gardin S., Boulila S., Galbrun B., Föllmi K.B.	Detrital and nutrients influxes in the Northwestern Tethyan margin during the Valanginian: new insights from weathering changes during the Weissert episode
11.45-12:00	Freeman, R.	Cyclic Sedimentation in the Drusberg Beds, Wägital region, Helvetic Alps, Switzerland

12:00-14:00 Lunch

		Chair: Karl Föllmi
14:00-14:15	Bonvallet L., Godet A., Adatte T., Spangenberg J.E., Arnaud-Vanneau A., Föllmi K.B.	Depositional geometries in the Tierwis and Schratzenkalk Formations: a geochemical and sequence stratigraphic correlation
14:15-14:30	Deconinck J.-F., Ghirardi J., Martinez M., Bruneau L., Pellenard P., Pucéat E.	Orbital chronology of the Lower-Middle Aptian: Palaeoenvironmental implications (Serre Chaitieu section, Vocontian Basin, France)
14:30-14:45	Gertsch B., Keller G., Adatte T., Spangenberg J.E., Berner Z.	Environmental and climatic changes on the Brazilian shelf during the Campanian-Maastrichtian
14:45-15:00	Adatte T., Fantasia A., Samant B., Mohabey D., Keller G., Khozyem H., Gertsch B.	Deccan Volcanism: a main trigger of environmental changes leading to the KTB mass extinction?

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

		Chairs: Elias Samankassou/Helmut Weissert
16:00-16:15	Khozyem H., Adatte T., Spangenberg J.E., Keller G., Sament B.	Response of terrestrial environment to the Paleocene Eocene Thermal Maximum (PETM)
16:15-16:30	Kocsis L., Ozsvárt P., Becker D., Ziegler R., Scherler L., Codrea V.	Continental climate reconstruction during late Eocene–early Oligocene in Europe
16:30-16:45	Greber N.D., Nägler T.F., Mäder U.	Experimental investigation of molybdenum solubility under low atmospheric O ₂ concentrations: Implications for pre GOE conditions

Posters Sessions 4:

P 4.1	Corminboeuf F., Adatte T., Spangenberg, J.E.	Origin of Devonian conical mud mounds of Hamar Lakhdad Ridge, Anti-Atlas, Morocco: hydrothermal or hydrocarbon venting ?
P 4.2	Fantasia A., Adatte T., Samant B., Mohabey D., Keller G.	Sedimentological, mineralogical and geochemical study of sediments associated with the Deccan Traps in the Nagpur area, India
P 4.3	Gnos E., Hofmann B.A., Al-Wagdani K., Mahjub A., Abdullah Al-Solami A., Habibullah S.N., Matter A., Halawani M.A.	The Jabal Rayah meteorite impact crater, Saudi Arabia
P 4.4	Ovtcharova M., Goudemand N., Galfetti T., Brayard A., Hammer O., Bucher H., Schaltegger U.	Early-Middle Triassic boundary – precision and accuracy achieved by combining U-Pb zircon geochronology and biochronology
P 4.5	Wohlwend S., Celestino R., Weissert H.	Sea level and current controlled sedimentary successions in the Hawasina Basin (Oman) during the Late Jurassic to Early Cretaceous time

Convenors: Lukas Baumgartner, Jean-Luc Epard, Fritz Schlunegger

		Chair: Baumgartner, Epard, Schlunegger
09:00 - 09:15	Lanari P., Louri C., Burn M., Riel N., Rolland Y., Schwartz S., Guillot S., Vidal O., Engi M.	Tracing the continuous P-T path by combining thermobarometry with a micro-mapping approach
09:15 - 09:30	De Meyer Caroline M. C., Baumgartner Lukas P., Beard Brian L., Johnson Clark M.	Rb-Sr isochron ages from phengite inclusions in garnets from eclogite facies metasediments of the Zermatt-Saas Fee Zone (Western Alps)
09:30 - 09:45	Gnos E., Berger A., Janots E., Whitehouse M., Soom, M., Frei, Waight T.E.	Constraining Alpine brittle deformation with hydrothermal monazite
09:45 - 10:00	Mullis J., Wolf M.	Retrograde evolution of paleo- to recent fluids and their impact on mineral precipitation in the Gotthard base tunnel between Amsteg and Sedrun, Switzerland.

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

		Chair: Baumgartner, Epard, Schlunegger
11:00 - 11:15	Kunz B., Von Niederhäusern B., Manzotti P., Lanari P., Engi M.	Tracing Permian lower continental crust through rifting and orogeny
11:15 - 11:30	Letsch D., Winkler W., Gallhofer D., Von Quadt A.	The volcano-sedimentary evolution of a Late-Variscan intermontane basin in the Swiss Alps (Glarus Verrucano) as revealed by zircon U-Pb age dating
11:30 - 11:45	Masson H., Steck A.	New tectonic limits in the Central Alps: the case of the "Simano nape"
11:45 - 12:00	Ragusa J., Ospina-Ostios L-M., Kindler, P.	Provenance analysis of the Voirons Flysch (Gurnigel nappe, Haute-Savoie, France): highlighting two major sources

12:00-13:50 Lunch

Posters Sessions 5:

P 5.1	Cavagna-Sani M., Epard J.-L.	Structure and kinematics of the northern Adula nappe (Central Alps, Switzerland) and its emplacement in the Lower Penninic nappe stack
P 5.2	Marger K., Mueller T.	Fluid-infiltration driven formation of reaction rims between carbonates and silica-rich sediments during contact metamorphism of the Buchenstein formation in the Southern Adamello contact aureole, Italy
P 5.3	Proce M., Mullis J.	Fluid investigation on prograde, T-max and retrograde inclusions in quartz from the southern part of the NEAT Gotthard base tunnel, Central Alps: preliminary results.
P 5.4	Skora S., Baumgartner L., Johnson C.	Lu-Hf ages from the Zermatt-Saas Fee ophiolite
P 5.5	Youcef Brahim E., Chadi M	Drowning history of Jurassic carbonate platform, Northern Atlasic fringe (NE ALGERIAN)
P 5.6	Fiebich E., Müller T., Foster C.T. Jr.	Diffusion-controlled garnet growth in silicious marbles of the Adamello contact aureole, N-Italy

Session 6: Stratigraphy in Switzerland - new data and developments

Room 2218

Convenors: Alain Morard, Reto Burkhalter, Oliver Kempf, Ursula Menkveld-Gfeller

		Chair: O. Kempf
09:00-09:20	Morard A.	Stratigraphic scaling and correlations - mind the gaps!
09:20-09:40	Jordan P.	Neugliederung der Trias in der Nordschweiz – ein Arbeitsbericht
09:40-10:00	Reisdorf A., Hostettler B., Waltschew A., Jaeggi D., Menkveld-Gfeller U.	Chrono- and Biostratigraphy of the Opalinus Clay of the Mont Terri Rock Laboratory, Canton Jura, Switzerland

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

		Chair:
10:40-11:00	Hostettler B.	Die Rolle der Biostratigraphie für die Korrelation lithostratigraphischer Einheiten
11:00-11:20	Deplazes G., Bläsi H., Jordan P., Meier B., Traber D., Schnellmann M.	Tracing the extent and formation of the Oxfordian limestone-marl successions of the Effingen Member
11:20-12:20	Schweizerisches Komitee für Stratigraphie (SKS)	Plenumsitzung des Schweizerisches Komitee für Stratigraphie (SKS)

12:00-14:00 Lunch

Posters Sessions 6:

P 6.1	Dall'Agnolo S., Plancherel R.	Lithostratigraphy in the Prealps: proposed units in the area of Château-d'Oex
P 6.2	Kempf O., Dall'Agnolo S., Funk H.-P.	New lithostratigraphic formations of the middle penninic Klippen nappe (late Triassic – early Jurassic)
P 6.3	Rebetez D., Ramseyer K.	The Middle Triassic (Anisian) marine transgression in central Switzerland, comparisons with the Jura Mountain and the Brescian Prealps

Session 7: Palaeontology

Room 2224

+Session 8: Fossils and plate tectonic events: Oceanic and continental gateways, landbridges and the dispersal of biota

Convenors: Lionel Cavin, Damien Becker, Christian Klug (session 7), & P.O. Baumgartner, Laureline Scherler (session 8)

		Chair: Christian Klug
09:00-09:20	Martini P., Costeur L., Le Tensorer J.-M., Schmid P.	The evolution of Pleistocene camelids from El Kowm, Syria
09:20-09:40	Costeur L.	The ruminant inner ear: evolutionary perspectives
09:40-10:00	Pictet A., Föllmi K.B., Linder P., Spangenberg J.	Ammonite biostratigraphy ... what utility? Example of the Aptian Grunten Member and Lutere Bed in the Alpine Helvetic domain

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

		Chair: Lionel Cavin
11:00-11:20	Brosse M., Goudemand N., Frisk Á.M., Baud A., Bagherpour B., Bucher H.	New conodonts from the Griesbachian microbialite in South China: implications for an improved definition of the base of the Triassic
11:20-11:40	Neehan J.M., Li C., Rieppel O., Bernardini F., Tuniz C., Muscio G., Scheyer T.M.	Unique method of tooth replacement in Placodontia (Diapsida, Sauropterygia), with new data on the dentition of Chinese taxa
11:40-12:00	Klug C., De Baets K., Kröger B., Bell M.A., Korn D.	Latitudinal shifts of Palaeozoic marine invertebrate gigantism and global change

12:00-13:10 Lunch

		Chair: Laureline Scherler
13:10-13:20	Baumgartner P.O.	Introduction
13:20-13:40	Forasiepi A.M., Carrillo J.D.	Geographic isolation, land connection, and evolution of the terrestrial mammalian associations during the Cenozoic in South America: the carnivorous zone
13:40-14:00	Hiard F.	Eocene migrations of European mammals
14:00-14:20	Sandoval M.I., Baumgartner P.O., Scientific Party of IODP (Integrated Ocean Drilling Program 344 Expedition)	Radiolarian biostratigraphy and Miocene to Recent Cocos Plate motion in the frame of the tropical, E-Pacific palaeoceanographic setting (IODP Exp. 344, off Costa Rica)
14:20-14:40	Andjic G., Baumgartner-Mora C., Baumgartner P.O.	Shallow-water events in the Sandino Forearc Basin, Nicaragua - Costa Rica, evidence for subduction of seamounts ?
14:40-15:00	Baumgartner P.O., Sandoval M.I., Escuder-Virute J.	Radiolarians and radiolarites, Pangea breakup and the plate tectonic evolution of the Caribbean region

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

		Chair:
16:00-16:30		Swiss Commission of Palaeontology Prize

Posters Sessions 7 & 8:

P 7.1	Baldessin E., Kindler P., Fischer G., Godefroid F.	Upper Cenozoic dolostones from the Mayaguana Bank, SE Bahamas: new insights from a core study
P 7.2	Baumgartner-Mora C., Baumgartner P.O., Andjic G., Barat F.	Mid Cretaceous to Oligocene rise of the Middle American landbridge – documented by south-eastwards younging Larger Foraminifera in shallow water carbonates (Nicaragua – Costa Rica – Panama)
P 7.3	Böle M., Baumgartner P.O.	Geochemistry and ³⁰ Si of Radiolaria and Mesozoic Radiolarites of Panthalassa and Tethys
P 7.4	Fischer G., Kindler P., Godefroid F., Baldessin E.	The Mayaguana Bank (SE Bahamas) from the Late Oligocene to the present: A delicate equilibrium between tectonics and sedimentation
P 7.5	Marchegiano M., Gliozzi E., Buratti N., Ariztegui D., Cirilli S.	Middle Pleistocene ostracod assemblages from Lake Trasimeno, Perugia, (Italy)
P 7.6	Scherler L., Mennecart B., Hiard F., Becker D.	The “ <i>Microbunodon</i> Event”, or the European evolution of ungulates during the Oligocene-Miocene transition
P 7.7	Székely S. F., Spezzaferri S., Stalder C., Filipescu S.	Paleoenvironmental reconstruction based on foraminiferal assemblages and the sedimentary phosphorus record in the Oligocene of Romania (Transylvanian Basin)

Convenors: Jasquelin Peña, Rizlan Bernier-Latmani

		Chair: Peña Jasquelin and Bernier-Latmani Rizlan
09:00-09:05	Peña Jasquelin and Bernier-Latmani Rizlan	Introduction by symposium conveners
09:05-09:20	Le Faucheur S., Portilla Castillo E., Slaveykova V.	Toxicity of mercury towards <i>Chlamydomonas reinhardtii</i> in presence of perfluorooctane sulphonate
09:20-09:35	Wang Y., Fruttschi M., Suvorova E., Phrommavanh V., Descostes M., Osman A., Geipel G., Bernier-Latmani R.	Uranium(IV) mobility in a mining-impacted wetland
09:35-10:05	Lloyd J.R.	Hot topics in environmental biogeosciences; the microbiology of the nuclear fuel cycle
10:05-10:20	Dumas N., Peña J.	Impact of microbial surfaces on biogenic birnessite reactivity
10:20-10:25	Peña Jasquelin and Bernier-Latmani Rizlan	wrap-up

10:30-11:10 Morning Poster Session with coffee

		Chair: Peña Jasquelin and Bernier-Latmani Rizlan
11:15-11:30	Senn A.-C., Kaegi R., Hug S., Hering J., Voegelin A.	Composition and structure of fresh and aged Fe oxidation products
11:30-11:45	Kluepfel L., Piepenbrock A., Kappler A., Sander M.	Natural organic matter as a fully regenerable terminal electron acceptor for anaerobic microbial respiration in temporarily anoxic systems
11:45-12:00	Jassey V.E.J., Lamentowicz M., Payne R., Mitchell E.A.D., Gilbert D., Robroek B.J.M., Mills R.T.E., Fournier B., Bragazza L., & Buttler A.	Use of a trait-based framework for predicting where microbial adaptation to climate change will affect peatland functioning
12:00-12:15	Spangenberg J. E., Ferrer M., Jacomet S., Bleicher N. & Schibler J.	Plant oils used to maintain bone and antler tools in the Neolithic lakeshore settlement, Zurich Opera Parking
12:15-12:20	Peña Jasquelin and Bernier-Latmani Rizlan	wrap-up

12:20-14:00 Lunch

		Chair: Peña Jasquelin and Bernier-Latmani Rizlan
14:15-14:30	Simanova A.A., Peña J.	Time-resolved in situ investigation of metal sorption mechanisms in layer-type manganese oxides
14:30-14:45	Monteux S., Tisato N., Bontognali T.R.R., Torriani S., Tavagna M.-L., Chailloux D., Renda M., Eglinton T.	Hints towards a biogenic origin of Asperge Cave concretions
14:45-15:00	Brauchli M., Bontognali T.R.R., McKenzie J. A., Vasconcelos C.	Evaluating the importance of microbial mats for dolomite formation in the Dohat Faishakh sabkha, Qatar
15:00-15:05	Peña Jasquelin and Bernier-Latmani Rizlan	wrap-up

15:05-16:00 Afternoon Poster Session with coffee

		Chair: Peña Jasquelin and Bernier-Latmani Rizlan
16:00-16:20	Eglinton T., Shah S., Pearson A., Griffith D., Slater G., White H., Reddy C.	Utilizing natural abundance variations in radiocarbon to probe microbial metabolism in the environment
16:20-16:35	Bagnoud A., Schwyn B., Leupin O., Bernier-Latmani R.	<i>In situ</i> microbial oxidation of H ₂ in the deep subsurface
16:35-16:55	Wrighton K.C., Castelle C.J., Wilkins M.J., Hug L.A., Sharon I., Thomas B.C., Lipton M.S., Long P.E., Williams K.H., Banfield J.F.	Metabolic interdependencies between phylogenetically novel fermenters and respiratory organisms in an unconfined aquifer
16:55-17:00	Peña Jasquelin and Bernier-Latmani Rizlan	wrap-up

Posters Sessions 9:

P 9.1	Cailleau G., Pons S., Bindschedler S., Junier P., Verrecchia E.	When a century is enough to invert a million years' pedogenesis: the oxalate carbonate pathway in tropical agro-ecosystems
P 9.2	Koishi A., Bragazza L., Maltas A., Sinaj S., Albrecht R., Pfeifer HR.	Long-term Organic Management Induced Changes in Soil Organic Matter Stability and Enzyme Activities
P 9.3	Marafatto F.F., Pena J.	Mineralogical and chemical controls on the photoreductive dissolution of birnessite minerals
P 9.4	Martignier A., Jaquet J.-M., Nirel P.	Typology of alkaline-earth metal precipitates in meso-oligotrophic lake (Léman, Switzerland)
P 9.5	Pestrimaux C., Le Faucheur S., Mortimer M., Bernardi Aubry F., Botter M., Zonta R., Slaveykova V.	Effects of salinity on TiO ₂ nanoparticles behavior and toxicity towards natural plankton. A case study: the Venice Lagoon, Italy
P 9.6	Reinsch, B., Descostes, M., Bernier-Latmani, R., Rossi, P.	The impacts of acidic in-situ recovery of uranium in southern Kazakhstan on geochemistry and microbial community structure
P 9.7	Pinard G., Spangenberg J. E., Adatte T., Verrecchia E.P	Distribution and dynamics of SOM on carbonate rocks (Jura Mountains): a geochemical approach
P 9.8	Tavagna M.L., Eglinton T.	Building a global database on organic geochemical characteristics of surface marine sediments: design & call for input
P 9.9	Thomas C., Ariztegui D.	Archaeal 16S rRNA gene sequences in the deep extreme Dead Sea sediments: determining who is there and why?
P 9.10	Wildi M., Le Faucheur S.	Structure of biofilm communities and their sensitivity to metals. A case study of the Lagoon of Venice
P 9.11	Feldmann M.	The influence of the biological nitrogen cycle on stromatolite formation
P. 9.12	Lacroix E., Brovelli A., Barry D. A., Holliger C.	Utilization of Silicate Minerals for pH Control during <i>In Situ</i> Bioremediation of Chlorinated Solvents

Session 10: Biogeochemical cycles in a changing environment Room 2230

+Session 15: Greenhouse Gases: Linkages between Biosphere and Climate

**Convenors: Ansgar Kahmen, Werner Eugster (session 10)
& Werner Eugster, Christoph Ammann, Christoph Ritz (session 15)**

Session 15: Greenhouse Gases: Linkages between Biosphere and Climate

		Session Chairpersons: Christof Ammann/Werner Eugster
09:00–09:15	Felber R., Neftel A., Munger A., Ammann C.	Discerning cows from pasture – Contribution of grazing animals to eddy covariance greenhouse gas fluxes
09:15–09:30	Skinner, C., Gattinger, A., Muller, A., Mader, P., Fliebach, A., Stolze, M., Ruser, R., Niggli, U.	Greenhouse gas fluxes from agricultural soils under organic and non-organic management – a global meta-analysis
09:30–09:45	Bamberger I., Stieger J., Eugster W., Buchmann N.	Spatial variability of atmospheric methane: Attributing measured concentrations to emissions
09:45–10:00	Brunner, D., Henne, S., Oney, B., Bamberger, I., Buchmann, N., Davin, E., Mystakidis, S., Seneviratne, S., Gruber, N., Liu, Y., Leuenberger, M., Roches, A., Bey, I.	Understanding and quantifying CO ₂ and CH ₄ greenhouse gas fluxes on the regional scale: The project CarboCount CH
10:00–10:15	ACP Award Winner	Title to be announced

10:15-11:30 *Morning Poster Session with coffee*

Session 10: Biogeochemical cycles in a changing environment

		Session Chairpersons: Werner Eugster/Ansgar Kahmen
11:30–11:45	Aemisegger, F., Pfahl, S., Spiegel, J., Eugster, W., Sodemann, H., Wernli, H.	Importance of evapotranspiration and rainfall reevaporation for the $\delta^2\text{H}$ and $\delta^{18}\text{O}$ signature of precipitation and boundary layer water vapour: a case study
11:45–12:00	Gavazov K., Mills R., Bahn M.	Winter climate extremes and their role in biogeochemical processes under the snow
12:00–12:15	Robroek B.J.M., Mills R.T.E., Jassey V.E.J., Signarbieux C., Refine M.-A., Vitali S., Bragazza L., Buttler A., Dorrepaal E.	SnowMan: peatland carbon and nitrogen cycling under changing snow conditions

12:15-14:00 *Lunch*

		Session Chairpersons: Ansgar Kahmen/NN
14:15–14:30	Mystakidis S., Davin E.L., Gruber N., Seneviratne S.I.	Constraining future climate-land carbon cycle projections using observationally-based carbon flux estimates
14:30–14:45	Mills R.T.E., Robroek B.J.M., Buttler A., Jassey V., Gatenby P., Gavazov K.S., Fujii K.	Altitude effects on soil function in forest and grassland systems of the Swiss Jura.
14:45–15:00	Tomlinson G., Buchmann N., Schleppi R., Siegwolf R., Waldner P., Weber P.	The mobility of nitrogen between tree-rings of Norway spruce (<i>Picea abies</i> L.) and the effect of extraction on tree-ring $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$
15:00–15:15	Dietrich F., Cailleau G., Golay A., Junier P., Verrecchia E.	The Ca biogeochemical cycle in soils during a tropical tree lifetime

15:15-15:45 *Afternoon Poster Session with coffee*

		Session Chairpersons: Ansgar Kahmen/NN
15:45–16:00	Lehmann M.M., Rinne K.T., Blessing C., Siegwolf R., Buchmann N., Werner R.A.	Carbon isotopic signatures in leaf dark-respired CO ₂ under different environments in potato
16:00–16:15	Rehmus A., Bigalke M., Valarezo C., Wilcke W.	Aluminum toxicity in tropical montane forest soils
16:15–16:30	Schwarz M.T., Bischoff S., Blaser S., Schmitt B., Thieme L., Boch S., Fischer M., Michalzik B., Schulze E.-D., Siemens J., Wilcke W.	Woody plant diversity drives retention of nitrogen in Central European forest canopies

Posters Sessions 10 + 15:

P 10.1	Bamberger I., Hörtnagl L., Walser M., Hansel A., Wohlfahrt G.	Gap-filling Strategies for Annual VOC Flux Data Sets
P 10.2	Bao R., Eglinton T.	Hydrodynamic controls on the age and composition of sedimentary organic matter on continental shelves: a case study from Chinese marginal seas
P 10.3	Krüger J.P., Leifeld J., Alewell C.	Uplifting of hummocks in palsa peatlands in northern Sweden identified by stable carbon isotope profiles
P 10.4	Schomburg A., Krüger J.P., Conen F., Alewell C.	Soil respiration rates of degrading palsa mires in northern Sweden

Session 11: Geophysics and Rockphysics

Room 2238

Convenors: Marcel Frehner, Klaus Holliger

12:00-14:00 Lunch

		Chair: Klaus Holliger
14:00-14:15	Dafflon B., Hubbard S.S., Ulrich C., Peterson J.E., Wainwright H., Wu Y.	Investigating arctic permafrost behaviors using geophysical, point-scale and remote sensing data
14:15-14:30	Hunfeld U., Brenner O., Orlowsky D.	High-resolution CMP-refraction seismics in combination with refraction tomography, reflection seismics and surface wave analysis
14:30-14:45	Lupi, M., Saenger, E.H., Fuchs, F., Miller, S.A.	Focusing of seismic energy at LUSI mud volcano, Indonesia
14:45-15:00	Vouillamoz N., Abednego M., Deichmann N., Wust- Bloch H.G., Mosar J.	Lowering microseismic detection threshold by sonogram analysis for Fribourg area (Switzerland)

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

		Chair: Marcel Frehner
16:00-16:15	Thüring M., Sayah S.M.	Assessment of the complex rock mass conditions for tunnels and underground caverns of the Hydropower Project Cerro del Águila (Peru)
16:15-16:30	Bakker R.R., Benson P.M.	Tensile fracturing and dyking in volcano-tectonic settings, a laboratory approach
16:30-16:45	Jougnot D., Rubino J.G., Rosas Carbajal M., Linde N., Holliger K.	Seismoelectric effects due to mesoscopic heterogeneities: numerical study for a fractured rock
16:45-17:00	Favero V., Ferrari A., Laloui L.	Shales retention properties and permeability through laboratory testing

Posters Sessions 11:

P 11.1	Correia Demand J., Marillier F., Kremer K., Girardclos S.	Large mass wasting deposits in Lake Geneva off the city of Lausanne revealed by detailed reflection seismic data
P 11.2	Demirel S., Roubinet D., Irving J.	Modeling electric current flow in 3D fractured media
P 11.3	Koepeke C., Irving J., Roubinet D.	Exploring the issue of model error in stochastic solutions to hydrogeophysical inverse problems
P 11.4	Kuhn P., Abdelfettah Y., Mauri G., Schill E., Vuataz F.	Improvement of the regional 3D modeling of deep geological structures with gravity: A case study in the Neuchatel Jura Mountains
P 11.5	Mo Y.K., Greenhalgh S.A., Karaman H., Robertsson J.	Laboratory seismic scale model study of reflection imaging beneath a distorting near surface zone
P 11.6	Peters, M., Poulet, T., Karrech, A., Regenauer-Lieb, K., Herwegh, M.	Material softening as a potential cause for the development of boudinage - an elasto-visco-plastic numerical modeling approach
P 11.7	Rosas Carbajal M., Linde N., Kalscheuer T., Vrugt J.	Two-dimensional probabilistic inversion of plane-wave electromagnetic data
P 11.8	Roubinet D., Irving J.	Discrete dual porosity modeling of electrical current flow in fractured media
P 11.9	Rubino J.G., Müller T.M., Guarracino L., Holliger K.	Seismic energy dissipation in fractured rocks
P 11.10	Shih P.J.R., Fehner M.	Numerical modeling and laboratory measurements of seismic properties in fractured fluid reservoirs
P 11.11	Subramaniyan S., Madonna C., Tisato N., Saenger E.H., Quintal B.	Seismic attenuation: Laboratory measurements in fluid saturated rocks
P 11.12	Tisato N., Quintal B., Podladchikov Y.	How much seismic energy is "stolen" by bubbles?
P 11.13	Wei Wu	Some new observations on dynamically induced fault slip
P 11.14	Zhang Y., Song S., Dalguer L., Clinton J.	Effect of network density and geometric distribution on non-linear kinematic source inversion models

Session 12: Shale-Gas, CO₂ Storage and Deep Geothermal Energy

Room 2207

Convenors: Paul Bossart, Lyesse Laloui, Larryn Diamond

		Chair: L. Laloui
09:00-09:30	Wyss R.,	Deep geothermal Energy in Switzerland – actual developments and perspectives for the future (Keynote)
09:30-09:50	Diamond L.W., Alt-Epping, P.	Simulation of water-rock interaction and porosity evolution in a granitoid-hosted, enhanced geothermal system (Basel, Switzerland)
09:50-10:10	Aschwanden L., Diamond L.D., Ramseyer K., Mazurek M., Fallick T., Donnelly T.	Development of porosity in the Upper Muschelkalk carbonate aquifer, NE-Switzerland: relevance for geothermal energy and gas storage
10:10-10:30	Badoux V., Mégel T.	Cartographic representation of a geomechanical criterion for site-screening of sub-surface projects in the energy sector

10:30-11:00 *Morning Poster Session with coffee*

		Chair: L. Diamond
11:00-11:20	Herwegh M., Baumberger R., Wehrens P., Schubert R., Mock S., Berger A., Mäder U., Spillmann T.	Internal structure of the Aar Massif: What can we learn in terms of exploration for deep geothermal energy?
11:20-11:40	Moscariello A., Mondino F., Vinard P.	The geothermal site of Eclépens: new geological insights from an integrated seismic and satellite study.
11:40-12:00	Abdelfettah Y., Schill E., Kuhn P.	Delimitation and characterization of geothermally relevant Permo-Carboniferous graben in the Swiss Crystalline basement
12:00-12:20	Tomin P., Lunati I.	Multiphysics methods: a link between pore-scale and Darcy-scale models

12:00-13:40 Lunch

		Chair: P. Bossart
13:40-14:10	Burri P., keynote speaker	Unconventional Hydrocarbons - The Revolution in Exploration (Chances and Risks) (Keynote)
14:10-14:30	Gawenda P.	Unconventional plays along the East European Craton – a review of E & P activities in Poland
14:30-14:50	Schilke S., Probert T., Bradford I., Özbek A., Robertsson J. O. A.	Use of surface patches for hydraulic fracture monitoring
14:50-15:10	Manceau Jc., Claret F., Tremosa J., Audigane P., Nussbaum C.	Field experiment in an underground rock laboratory to study the well integrity in the context of CO ₂ geological storage
15:10-15:30	Paolacci S., Gorin G., Moscariello A.	The subsurface geology of the Western Swiss Plateau and its French extension: state of the art and implications for geo-resources exploration.

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

		Chair: P. Bossart
16:00-16:20	Li C., Laloui L.	Hydromechanical coupling in carbon dioxide injection into a deep aquifer
16:20-16:40	Alt-Epping P., Diamond L. W.	Numerical simulation of fluid-rock interaction upon CO ₂ injection into the Muschelkalk aquifer in N-Switzerland
16:40-17:00	Fabbri S., Zappone A., Madonna C., Mazzotti M.	The effects of CO ₂ injection in Muschelkalk: first laboratory results

Posters Sessions 12:

P 12.1	Jain C., Clauser C., Vogt C.	Optimized layout of engineered geothermal systems and potential in Germany
P 12.2	Räss L., Omlin S., Podladchikov Y. Y., Simon N. S. C.	Solving three-dimensional non-linearly coupled hydro-mechanical two-phase flow on GPUs
P 12.3	Soma L., Ambrosi C., Bernoulli D., Bonini L., Pera S. & Seno S.	Geochemical and structural data for the evaluation of the geothermal potential

Session 13: Atmospheric predictability, phenology and seasonality

Room 2235

**Convenors: Michael Sprenger & Tobias Grimbacher,
This Rutishauser, Martine Rebetz**

A) Atmospheric Predictability

		Chair: Michael Sprenger
9:30-10:00	Grams C.	Forecast uncertainty for the midlatitude flow
10:00-10:15	Giannakaki P., Rompainen-Martius O.	Forecast errors of Rossby waveguides
10:15-10:30	Wartenburger R., Brönnimann S., Stickler A.	Observation errors in historical upper-air observations

10:30-11:00 Morning Poster Session with coffee

		Chair: Tobias Grimbacher
11:00-11:15	Vogel R., Erdin R., Frei C.	Quantifying the uncertainty of spatial precipitation analyses with observation ensembles
11:15-11:30	Kuszli C.-A., Goyette S., Beniston M.	Improvement of a windgust parametrization with an application using the Canadian Regional Climate Model over Switzerland
11:30-11:45	Sprenger M., Meyer D., Piaget N.	The interannual variability of Foehn - Linking the long Foehn timeseries at Altdorf with the 20th Century Reanalysis

12:00-14:00 Lunch

12:00-12:30

Administrationsitzung Kommission für Phenologie und Saisonalität

13:15-14:00

Mitgliederversammlung Schweizerische Gesellschaft für Meteorologie

B) Phenology and Seasonality

		Chair: Christian Rixen
14:00–14:30	Höye T.	Rapid phenological responses to arctic climate change across trophic levels
14:30–14:45	Wheeler J., Wipf S., Hoch G., Cortes A., Sedlacek J., Rixen C.	Longer, warmer, less productive: the effects of early snowmelt and warming on Alpine shrub <i>Salix herbacea</i>
14:45–15:00	Hüsler F., Jonas T., Wunderle S.	Snow cover from satellite data: valuable information for phenological investigations

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

		Chair: This Rutishauser
15:30–15:45	Vitasse Y.	Seasonality of freezing resistance in temperate trees
15:45–16:00	Eugster M.	Seasonal observations with automated camera (PhenoCam)
16:00–16:20	Rutishauser T.	3. Schweizer Wettbewerb für Phänologie und Saisonalität (Preisverleihung)

Posters Sessions 13

P 13.1	Egli S., Büntgen U.	Linking long-term European mushroom productivity and phenology to climate variability
P 13.2	Koch E., Jurkovic A., Lipa W.,	www.pep725.eu – the Pan European Phenological database
P 13.3	Rutishauser T., Brönnimann S.,	«OpenNature» for climate impact science with citizens

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

		Chair: Marcia Phillips
10:30-10:50	Leinß S., Parrella, G., Hajsek I.	Snow Height Determination by Polarimetric Phase Differences in X-Band SAR Data
10:50-11:10	Schmucki E., Marty C., Fierz C., Lehning M., Weingartner R.	Future trends of the alpine and ephemeral snowpack at selected sites across Switzerland
11:10-11:30	Fischer M., Huss M., Hoelzle M.	Changes in area and volume of all Swiss glaciers over the last 25 years
11:30-11:50	Finger D., Vis M., Seibert J.	Estimations of glacier-, snow-, and rainfall contribution to alpine streams in the Swiss headwaters

		Chair: Ingrid Reiweger
11:50-12:23	All Poster Authors	Short poster presentations, 3min. each (see poster program below)

12:25-13:30 Lunch

13:30-14:30 Poster Session

		Chair: Martin Hoelzle
14:30-14:50	Haberkorn A., Phillips M., Hoelzle M., Kenner R.	Influences of the seasonal varying snow cover on thermal processes in steep Alpine permafrost rock walls
14:50-15:10	Kenner R., Phillips M.	Results from five years of ground surface monitoring in mountain permafrost regions using terrestrial laser scanning
15:10-15:30	Walter F., Rösli C., Dalban Canassy P., Faillietaz J., Husen S., Clinton J. F., Deichmann N., Funk M.	Seismic Monitoring Deployments of the Swiss Institute of Technology (ETH Zurich)

15:30-16:00 Coffee Break

		Chair: Jeanette Nötzli
16:00-16:10		SEP Young Scientist Award Ceremony
16:10-16:30	Koenig S.J., Foppa N., Fontana F., Seiz G.	Monitoring the Cryosphere in Switzerland and Incentives for Extending Glacier Observations Worldwide

Posters Sessions 14:

11:50	P 14.1: Spence R., Bavay M.	Precipitation Redistribution for Snow Models
11:53	P 14.2: Reiweger, I., Schweizer, J.	Measuring acoustic emissions in an avalanche starting zone to monitor snow stability
11:56	P 14.3: Naegeli K., Huss M., Hoelzle M., Hauck C.	State, changes and impact of glacier surface albedo in the Swiss Alps
11:59	P 14.4: Pellet C., Scherler M., Hauck C.	Soil moisture quantification in mountain permafrost: A model-data comparison between Southern Norway and the Swiss Alps

12:02	P 14.5: Sold L., Hoelzle M., Huss M., Eichler A., Schwikowski M.	Recent accumulation and firn compaction rates on Findelengletscher derived from airborne GPR and firn cores
12:05	P 14.6: Linsbauer A., Haeberli W., Fischer U.H.	On the morphological characteristics of overdeepenings in high-mountain glacier beds
12:08	P 14.7: Barbou C., Fischer M., Delaloye R., Huss M., Collet C.	Mapping of debris-covered ice using DInSAR and airborne photography: A pilot study in the Upper Valais (Swiss Alps)
12:11	P 14.8: Luethi R., Gruber S.	Towards a better understanding of temperature conditions in rock fall detachment areas in permafrost: a computer-simulation approach
12:14	P 14.9: Marmy A., Salzmann N., Scherler M., Hauck C.	Permafrost model sensitivity to seasonal climatic changes and extreme events in mountainous regions
12:17	P 14.10: Haeberli W., Drenkhan F., Torres J., Cochachin A., Salazar C.	Google Earth-based rapid assessment of glacier evolution, lake formation and hazard change – the example of Artesonraju in the Cordillera Blanca, Peru
12:20	P 14.11: Helfricht K., Schneider K., Sailer R., Kuhn M.	Lidar snow cover studies in the Ötztal Alps

Session 17: Computational GIScience

Room 2122

Convenors: M. Kanevski, Ch. Kaiser, F. Bavaud

		Chair: F. Bavaud
09:00–09:20	Emmanouilidis T.	GIS and urban planning: a new clustering algorithm for schools and students location-allocation
09:20–09:40	Joost S., Stucki S., Leempoel K.	Geocomputational approaches for the analysis of Next-Generation Sequencing (NGS) and multi-scale data in landscape genomics
09:40–10:00	Price B., Kienast F., Seidl I., Verburg P., Ginzler C., Bolliger J.	Spatially explicit modelling of land-use suitability and future land-use pattern for Switzerland

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

		Chair: C. Kaiser
11:00–11:20	Kanevski M.	Geospatial data analysis and modelling using geostatistics and machine learning
11:20–11:40	Lochbühler T., Vrugt J.A., Linde N.	Realistic model constraints in probabilistic inversion of geophysical data: Summary statistics from training images
11:40–12:00	Josset L., Demyanov V., Ginsbourger D., Lunati I.	Uncertainty quantification in porous media using stochastic sampling algorithm and Functional Data Analysis

12:00-13:40 *Lunch*

		Chair: M. Kanevski
13:40–14:00	Grangier L., Kaiser C.	Touristic guides on smartphone – The Kalman filter for a smarter GPS localization in mountain area
14:00–14:20	Guex G.	Mixing random walks and shortest paths to create new graph dissimilarities
14:20–14:40	Bavaud, F.	Spatial autocorrelation and clustering: a minimal yet sufficient formalism
14:40–15:00	Kaiser C.	Searching geolocated databases with vague spatial objects

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

Posters Sessions 17:

P 17.1	Calianno M., Gourley J. J., Ruin I.	Forecasting flash flood impacts utilizing anthropogenic exposure factors
P 17.2	V. Demyanov, M. Kanevski	Multi-scale spatial modelling of radioactive pollution with a kernel learning algorithm
P 17.3	Golay J., Kanevski M., Vega Orozco C.	The multipoint Morisita index for the analysis of geodemographic data
P 17.4	Leuenberger M., Kanevski M.	Extreme learning of environmental pollution
P 17.5	Leuenberger M., Vega Orozco C., Tonini M., Kanevski M.	Random Forest for susceptibility mapping of natural hazards
P 17.6	Ruggeri P., Irving J., Holliger K.	Evaluation of geostatistical resampling as a proposal mechanism in Bayesian MCMC solutions to hydrogeophysical problems
P 17.7	Tonini M., Vega Orozco C., Kanevski M.	Wildfires spatio-temporal aggregation: from global cluster to local mapping
P 17.8	Vega Orozco C., Tonini M., Kanevski M.	Analysis of the dynamic of urban areas and of their interaction with forest fires

Session 18: Geoscience and Geoinformation - From data acquisition to modelling and visualisation

Room 2879

Convenors: Nils Oesterling, Adrian Wiget, Massimiliano Cannata

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

		Chair: Adrian Wiget
11:00-11:40	Anselmetti F., Hilbe M., Girardclos St., Kremer K., Niemann St., Wessels M., Wildi. W.	Under water landscapes - The last frontier of geomorphologic explorations (Keynote)
11:40-12:00	Rickenbacher M.	Journeys through time with the Swiss national map series

12:00-14:00 *Lunch*

		Chair: Nils Oesterling
14:00-14:20	Akhtman Y., Rehak M., Constantin D., Tarasov M., Lemmin U.	Remote sensing methodology for an ultralight plane
14:20-14:40	Cannata M., Antonovic M., Molinari M.	HELI-DEM: Helvetia-Italy Digital Elevation Model
14:40-15:00	Baumberger R., Herwegh M., Kissling E., Wehrens P.	Towards the semi-automated analysis of lineaments in the Aar massif: uncertainty estimates for geological surface information – A combined remote sensing and field data approach

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

		Chair: Massimiliano Cannata
16:00-16:20	Aubert M., Kraiem A., Haeblerlin Y., Zwahlen F.	From satellite imagery to hydrogeological survey maps of Chad
16:20-16:40	Nussbaum M., Papritz A., Walthert L.	Predicting soil density of Swiss forests by component wise gradient boosting
16:40-17:00	Papritz A., Grêt-Regamey A., Keller A.	NRP68 projects PMSoil, iMSoil, OPSOL: From legacy soil data and element cycles in agro-ecosystems to a land use decision support system for sustainable use of soils

Posters Sessions 18:

P 18.1	Franz M., Podladchikov Y., Jaboyedoff M.	Modelling landslide-generated tsunamis in alpine lakes
P 18.2	Jaquet S., Schwab M., Yersin R., Ribeiro D.	Geographical information system for materials management in the canton Fribourg (Switzerland)
P 18.3	Molinari M., Cannata M., Ambrosi C., Meisina C.	A new open-source simulation model for fast landslide runout assessment
P 18.4	Neyer F., Limpach Ph., Geiger A.	Monitoring rock glaciers with GPS and high-resolution cameras
P 18.5	Psimoulis P., Houlié N., Meindl M., Rothacher M., Clinton J., Dalguer L.	Estimation of maximum ground shaking for the Tohoku 2011 earthquake based on collocated GPS and strong-motion data
P 18.6	Rogers S.R., Fischer M., Huss M.	GlaciArch: applying glaciological methods for gauging archaeological potential using GIS

Session 19: Earth System Science related Earth Observation

Room 2152

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

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

		Chair: Michael Schaepman
11:00-11:20	Matasci G., Volpi M., Kanevski M., Tuia D.	Hyperspectral and LiDAR data fusion for high resolution urban land cover/land use classification
11:20-11:40	Torabzadeh H., Morsdorf F., Leiterer R., Schaepman M.	Determining forest species composition using imaging spectrometry and airborne laser scanner data
11:40-12:00	Zwieback S., Hajnsek I.	Soil Moisture Effects in Differential SAR Interferometry – Impact on estimated deformations and elevations

12:00-14:00 Lunch

		Chair: Brigitte Buchmann / Alain Geiger
14:00-14:20	Garonna I., De Jong R., De Wit A., Múcher C.A., Schmid B., Schaepman, M.E.	Testing Land Surface Phenology (LSP) indicators in Europe
14:20-14:40	Salvini D., Parada I., Jerik A. C.	Defining the geodetic datum for a tectonically active country
14:40-15:00	Schanz A., Studer S., Hocke K., Kämpfer N.	The Diurnal Cycle in Stratospheric Ozone: Observation, Simulation and Understanding

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

Posters Sessions 19:

P 19.1	Parkan M., Tuia D.	Modelling coastal atmospheric temperature in Greenland with support vector regression
P 19.2	Volpi M., Matasci G., Kanevski M., Tuia D.	Interactive multisensor change detection in remote sensing images via kernel canonical correlation transformation

Session 20: Quaternary environments: landscapes, climate, ecosystems, human activity during the past 2.6 million years

Room 2137

Convenors: Naki Akçar, Luc Braillard, Gaudenz Deplazes, Hansruedi Graf, Irka Hajdas, Olivier Heiri, Susan Ivy Ochs, Christine Pümpin

		Chair: S. Ivy-Ochs
9:00-9:20	Herman F., Seward D., Valla P.G., Carter A., Kohn B., Willett S.D., Ehlers T.A.	Worldwide acceleration of mountain erosion under a cooling climate
9:20-9:40	Akçar N., Tikhomirov D., Ivy-Ochs S., Graf A., Schlunnegger F., Reber R., Claude A., Kubik P.W., Vockenhuber C., Hajdas I., Schlüchter C.	The Valais Glacier: its disappearance from the Alpine Foreland
9:40-10:00	Luetscher M., Boch R., Cheng H., Edwards R.L., Sodemann H., Spötl C.	A speleothem record of the Last Glacial Maximum from the western Swiss Alps
10:00-10:20	Lombardo U.	Mid to late Holocene environmental change in the Bolivian Amazon reconstructed from paleosols and archaeological sites.

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

		Chair: N. Akçar
11:00-11:20	Claude A., Akçar N., Ivy-Ochs S., Graf H.R., Kubik P.W., Vockenhuber C., Dehnert A., Rahn M., Rentzel P., Pümpin C., Schlüchter C.	The challenge of dating Swiss Deckenschotter with cosmogenic nuclides
11:20-11:40	Rodrigues L., Umberto L., Veit H.	An insight into the morphology of pre-Columbian raised fields in different landscapes in the Llanos de Moxos, Bolivia
11:40-12:00	Reber R., Tikhomirov D., Akçar N., Yesilyurt S., Yavuz V., Kubik P., Schlüchter C.	Late Quaternary Glacial History in northeastern Anatolia

12:00-13:40 Lunch

		Chair: To be announced
13:40-14:00	Tikhomirov D., Akçar N., Ivy-Ochs S., Schlüchter C.	Advanced model for limestone fault scarp dating and paleoearthquake history reconstruction
14:00-14:20	Wirsig C., Ivy-Ochs S., Zasadni J., Akçar N., Christl M., Schlüchter C.	Towards a 'true' age of LGM ice surface decay in Oberhaslital
14:20-14:40	Wüthrich L., Zech R., Haghypour N., Gnägi C., Christl M., Ivy-Ochs S.	Dating glacial deposits in the western Swiss lowlands using cosmogenic ¹⁰ Be
14:40-15:00	Amann B., Lobsiger S., Tylmann W., Grosjean M.	Scanning reflectance spectroscopy (380-730 nm) for Paleo-environmental and climatic changes assessment

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

Posters Sessions 20:

P 20.1	Belfar D., Deguaechia A., Djerrab Ar., Bouhleh S., Fehdi Ce.	Sedimentological and paleoenvironmental study of quaternary alluvial formations Zeiet Oued, Ain Zerga W Tébéssa. N-E Algeria.
P 20.2	Buechi M.W., Lowick S. E., Anselmetti F. S.	Multiphase depositional and erosional history recorded in the infill of the glacially overdeepened Lower Glatt valley, Northern Switzerland
P 20.3	Diaz N., Dietrich F., Cailleau C., Sebag D., Verrecchia E.	Origin of unexpected tropical carbonate mounds (TCM) in northern Cameroon – Carbonate accumulation context: hypotheses and challenges
P 20.4	Hippe K., Hajdas I., Ivy-Ochs S., Maisch M.	Middle Würm radiocarbon chronologies in the Swiss Alpine foreland - first results from the TIMS project
P 20.5	King G., Herman F., Valla P.	The new luminescence laboratory at the University of Lausanne
P 20.6	Lantos I., Spangenberg J.E., Giovannetti M.A., Maier, M., Ratto N.	Archaeometric evidence of foodways in the South-Central Andes: Prehispanic maize consumption in West Tinogasta (Catamarca, Argentina)
P 20.7	Messerli, M. Maisch, M., Ivy-Ochs S.	GIS-based geomorphological mapping, dating of selected landforms and landscape evolution during the Lateglacial and Holocene, in the region of Val Tuoi, Grisons, Switzerland
P 20.8	Mozafari Amiri N., Tikhomirov D., Özkaymak Ç., Sümer Ö., Ivy-Ochs S., Vockenhuber Ch., Uzel B., Sözbilir H., Akçar N.	Using cosmogenic ³⁶ Cl to determine periods of enhanced seismicity in western Anatolia, Turkey
P 20.9	Scapozza C., Ambrosi C., Castelletti C., Soma L., Dall'agnolo S.	Timing of deglaciation on the Southern Swiss Alps
P 20.10	Togni V., Adatte T., Foellmi K., Spangenberg J., Thevenon F., Wirth S.	Paleoenvironmental study of the Lago d'Alzasca (Ticino, Switzerland) during the last 10'000 years

Session 21: Scientific challenges for geoheritage conservation and promotion in Switzerland

Room 2130

Convenors: Emmanuel Reynard, Heinz Furrer, Pierre-Yves Jeannin, Philippe Häuselmann

		Chairs: E. Reynard, H. Furrer, Philipp Häuselmann, Pierre-Yves Jeannin
09:00-09:15	Regolini-Bissig G., Martin S., Reynard E., Kaiser Ch.	Promotion of geosciences through non-personal interpretation: the Lausanne Geoguide application
09:15-09:30	Perret A., Reynard E., Delanoy J.-J., Nugue N., Guyomard A.	Itinerant exhibition in the Chablais area. Association of "objective knowledge" and "interpretation method" to elaborate a geotourism product.
09:30-09:45	Biot V., Caze B.	La valorisation du patrimoine paléontologique : la réalisation de la maison de site du gisement Lagerstätte de La Voulte.
09:45-10:00	Perret A., Martin S., Guyomard A., Kramar N., Marthaler M.	A simplified geological map of the Chablais Geopark

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

Posters Sessions 21:

P 21.1	Buchmann M.	Geoheritage in the Moesano region – between nature protection and landscape enhancement
P 21.2	Bussard J.	Protection and promotion of geomorphological heritage in the Gruyère – Pays-d'Enhaut Regional Nature Park. Assessment and perspectives
P 21.3	Fanguin P.	Geoheritage promotion of Thonon-les-Bains (Fr) region by the development of a geotourism product
P 21.4	Maret H.	Cartography of the geomorphological diversity in Derborence (Valais, Swiss Alps)
P 21.5	Reynard E., †Berger J.-P., Constandache M., Dumas J., Felber M., Grangier L., Häuselmann P., Jeannin P.-Y., Martin S., Regolini G.	The revision of the Swiss Inventory of Geosites (2006-2012)

Session 23: Symposium in Human Geography

Room 2114

Convenors: Olivier Graefe & Martin Müller

		Chair: René Véron
09:30 - 09:50	Berndt C.	Behavioral economics, experimentalism and the marketization of development
10:00 - 10:20	Kern A.	Manpower agencies in Nepal and their contested function of facilitation
10:30 - 10:50	Mayer H., Bürcher S., Habersetzer A.	Entrepreneurship in peripheral regions: Conceptual approaches to studying entrepreneurial heritage and embeddedness from an evolutionary perspective

11:00-11:15 *Morning Poster Session with coffee*

		Chair: Olivier Graefe
11:15 - 11:35	Haisch, T.	Individual versus regional economic resilience: Perceptions of crises and resilience in resource-dependent communities
11:45 - 12:05	Raeymaekers T., Vogel C.	The geography of property: a case study from the Democratic Republic of Congo (DRC)
12:15 - 12:35	Mayer H., Baumgartner D.	The federal strategy for rural and mountain areas in Switzerland: Finding ways to embed endogenous territorial development into a coherent national framework

12:45-14:15 *Lunch*

		Chair: Christian Berndt
14:15 - 14:35	Guelat J., Kaenzig R., Piguet E.	Environmental change and human migration: state of the art and new research results
14:45 - 15:05	Sudmeier-Rieux K., Penna I., Jaquet S., Kaenzig R., Schwilch G., Jaboyedoff M., Liniger H.	Understanding migration impacts on sustainable land management. Case studies from Bolivian and Nepalese mountain populations.
15:15 - 15:35	Sontowski S.	Biometric border control in the making

15:45-16:00 *Afternoon Poster Session with coffee*

		Chair: Martin Müller
16:00 - 16:20	Forêt P.	Cycles and Events in Environmental History: The Return of Greenness in Victoria Harbour
16:30 - 16:50	Rattu P.	Gouvernementalité néolibérale de l'eau en Suisse: dynamiques en évolution, entre centralisation et renforcement des administrations locales

17:00 - 17:20	Militz E.	Europe as identifier - empirical insights from Azerbaijan
17:30 - 17:50	Laketa S.	Youth and Affective Geopolitics of Everyday Life in Bosnia and Herzegovina

Session 24: Sustainable Water Management – Scientific Findings from recent research

Room 2208

Convenors: Bruno Schädler, Tobias Jonas, Massimiliano Zappa, Sandro Peduzzi, Daniel Hunkeler, Christian Leibundgut

		Chair: Massimiliano Zappa
09:00-09:20	Weijss S., Mutzner R., Parlange M.	Could electrical conductivity replace water depth in rating curves for alpine streams?
09:20-09:40	Fischer B., Seibert J., Stähli M.	Runoff Generation Mechanisms In A Swiss Pre Alpine Catchment By Spatial Intercomparison
09:40-10:00	Poster-Authors	Short presentation of the Posters (3 minutes each)

10:00-10:40 Morning Poster Session with coffee

		Chair: Sandro Peduzzi
10:40-11:00	Schweizer R., Rodewald R., Liechti K., Knoefel P.	Cooperative irrigation governance in Valais: a model of sustainable water resource management?
11:00-11:20	Ryffel A., Celio E., Grèrè-Regamey A.	HydroServ – Vulnerability of Hydrological Ecosystem Services: linking land use, hydrology and ecosystem services for sustainable water management
11:20-11:40	Rey E., Schneider F., Liniger HP, Herweg K., Weingartner R.	Climate change and socio-economic scenarios, land use modelling and water resources in an inner alpine area, Switzerland
11:40-12:00	Milano M., Ruelland D., Dezetter A., Fabre J., Servat E.	Assessing the impacts of climate change and human activities on water allocation in the Ebro catchment (Spain)

12:00-12:30 Lunch

12:30-13:30	General Assembly of the Swiss Society for Hydrology and Limnology SGHL (Chair: Christoph Joerin)	
	and European Federation for Freshwater Sciences (EFFS) Award:	
	Tonolla D.	Hydroacoustic & thermal-infrared techniques for rapid spatial mapping of river landscapes
13:30-14:15	Hydrobiology-Limnology Award (Chair: Reinhard Bachofen)	

		Chair: Daniel Hunkeler
14:20-14:40	Marlard A., Vouillamoz J., Weber E., Jeannin P.-Y.	Geometric and hydrological characterization of karst-system combining KARSYS approach and simulation tools - Application to Beuchire/Creugenat and Bonnefontaine/Voyeboeuf karst systems (JU, Switzerland)
14:30-14:50	Künze R., Lunati I.	Multiscale Methods: Tools to Balance Accuracy and Efficiency
14:50-15:10	Vogt M.-L., Pera S., Hamit A., Haeberlin Y., Bünzli M.-A.	Hydrochemical exploration of Ennedi, Northern Chad
15:10-15:30	Rezaeian L., Karimi Y.	Mashhad Plain Groundwater Quality Assessment for Drinking and Irrigation Suitability, Iran

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

Posters Sessions 24:

P 24.1	Aelvoet P., Bullinger-Weber G., Le Bayon R.-C., Guenat C.	Impact Of River Restoration On Alluvial Soils
P 24.2	Brauchli T., Weijs S., Lehning M., Huwald H.	WeSenselt: A citizen-based observatory of water
P 24.3	Buchs A.	The dark side of the blueprint. A reflexive analysis of watershed management in Switzerland
P 24.4	Finger F., Bertuzzo E., Mari L., Knox A., Gatto M., Rinaldo A.	Rainfall driven cholera outbreak modelling
P 24.5	Heimann F., Böckli M., Rickenmann D., Turowski J., Badoux A.	Bedload transport dynamics in mountain rivers – Development and application of the model sedFlow
P 24.6	Kauzlaric M., Schädler B., Weingartner R.	Customization of a hydrological model for the estimation of water resources in an alpine karstified catchment with sparse data
P 24.7	Gasperini G., Amadori M., Pera S., Bronzini S., Toscani A.	Geochemical characterization of Chiasso aquifer

Session 25: Limnological and hydro(geo)logical advances for mid-sized lakes as a water resource for the next century

Room 2129

Convenors: Nathalie Chèvre, Jean-Luc Loizeau, Hans-Rudolf Pfeifer, Torsten Vennemann

		Chair: Nathalie Chèvre
9:00-9:30	Wüest Alfred	Using lakes as sources and sinks of heat – a new challenge in natural waters management
9:30-9:50	Rodríguez-Murillo J.C., Filella M.	Trends in organic carbon concentrations in Swiss lakes
9:50-10:10	Finger D., Wüest A., Bossard P.	Effects of oligotrophication on primary production in peri-alpine lakes

10:10-10:40 Coffee Break

		Chair: Hans-Rudolf Pfeifer
10:40-11:00	Gregorio V., Chèvre N.	Assessing the risk of mixture of micropollutants in Geneva lake: from the theoretical approach to “in-situ” ecological effects
11:00-11:20	Razmi A.M., Barry D.A., Lemmin U.	Current variability in a wide lacustrine embayment (Vidy Bay, Switzerland)
11:20-12:20	Poster presentations	Presentation of 5 poster - 5 mn presentation/5 questions

12:20-14:00 Lunch

		Chair: Torsten Vennemann
14:00-14:30	Garnier C., Oursel B., Syakti A.H., Durrieu G., Mounier S., Doumenq P., Lucas Y.	Evaluation of pollutants inputs from large agglomeration to the coastal zone: the case of Marseille (France)
14:30-14:50	Rossi L., Chesaux L., Chèvre N.	Diffuse sources of micropollutants in a mid-size-lake: how to handle them?

14:50-15:10	Daouk S., Copin P.-J., Chèvre N., Rossi L., De Alencastro L.F., Pfeifer H.-R.	Diffuse transfer of the herbicide glyphosate from the Lavaux vineyards to the Lake of Geneva: Dynamics and environmental risk assessment.
15:10-15:30	Bonvin F., Razmi A.M., Barry D.A., Kohn T.	Micropollutant dynamics in Vidy Bay- a coupled hydrodynamic-photolysis model to assess the spatial extent of ecotoxicological risk

15:30-16:00 Coffee Break

		Chair: Jean-Luc Loizeau
16:00-16:20	Gascon Diez E., Cosio C., Loizeau J.-L.	Mercury and Methylmercury resuspension in Vidy Bay, Lake Geneva (Switzerland)
16:20-16:40	Dang D. H., Lenoble V., Durrieu G., Omanovic D. François D., Mounier S., Garnier C.	Coastal sediments: sink or source of pollution? A case study (Toulon bay, SE France)
16:40-17:00	Girardclos S., Faessler J., Zehringer M.	Radionuclide fluxes in Lake Biel sediments (1955-2010) and Mühleberg NPP ¹³⁷ Cs liquid emissions

Posters Sessions 25:

P 25.1	Borgatta M., Waridel P., Decosterd L.-A., Buclin T., Chèvre N.	Chronic tests of two anticancer drug metabolites on <i>Daphnia pulex</i>
P 25.2	Bouffard D., Boegman L., Ackerman Jda.	Physical process and hypoxia in Lake Erie
P 25.3	Chevrolet A., Fischer B., Seibert J.	Spatial runoff estimations based on the deuterium-excess due to the isotopic evaporation effect in an upstream lake
P 25.4	Copin P.-J., Chèvre N.	Enhancement of the representativeness of herbicide effect modelling in watercourses
P 25.5	Darvishi Khatooni J., Lak R., Mohammadi A.	Calculation of Physical Chemistry Parameters (Amount and Rate of Salt Precipitation) from Brines Urmia Lake
P 25.6	Darvishi Khatuoni J., Mohammadi A., Salehipuor Milani A., Lak R.	The History of Sedimentation and the Risk of Falling Urmia lake level in Iran
P 25.7	Lak R., Fayazi Sh.	Evolution of Lake Maharlou brine during 4 years monitoring
P 25.8	Lak R., Rezaeian Langeroudi S.	Sedimentology, Sedimentary Sub-environments and Mineralogy of Holocene Sediments of Maharlou Lake, Southwest of Iran
P 25.9	Margot J., Kienle C., Magnet A., Weil M., Rossi L., De Alencastro L.F., Abegglen C., Thonney D., Chèvre N., Schärer M., Barry D.A.	Treatment of micropollutants in municipal wastewater: Ozone or powdered activated carbon?
P 25.10	Niel T., Coutu S., Margot J. & Faust A.-K.	Economical comparison of three water treatment projects in Vidy Bay (Geneva Lake, CH)
P 25.11	Queloz P., Bertuzzo E., Botter G., Rao P.S., Rinaldo A.	Herbicides export dynamics of a mid-sized lake tributary: lessons from observations and modelling
P 25.12	Rezaeian Langeroudi S., Lak R.	Verification of Holocene Sediments in Hoz-e-Soltan Lake (Qom) through Sedimentary Cores

Convenors: I. Gärtner-Roer, R. Delaloye, C. Graf, M. Keiler, N. Kuhn, S. Lane, B. Staub

A) Relief evolution under a changing climate

		Chair: Christoph Graf
9:00-9:15	F. Herman (in session Quaternary)	Worldwide acceleration of mountain erosion under a cooling climate (!!! in session 20: Quaternary, room 2137 !!!)
9:30-9:45	Champagnac J.-D., Valla P., Herman F.	Late-Cenozoic relief evolution under evolving climate: a global review
9:45-10:00	Keiler M., Fuchs S.	The challenge of frequency-magnitude relationship for mountain hazard management
10:00-10:15	Schoeneich P.	The glacial trough – an attempt at theoretical geomorphology

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

B) Glacial and periglacial geomorphology

		Chair: Isabelle Gärtner-Roer
11:15-11:30	Scapozza C., Conedera M., Bozzini C., Mari S., Lambiel C.	Multi-temporal rock glacier kinematics in the Southern Swiss Alps
11:30-11:45	Bosson J.-B., Capt M., Lambiel C.	Internal structure and geomorphic processes of a high mountain small glacier system: the case of Tsarmine Glacier (Arolla, Valais)
11:45-12:00	Frehner M., Gärtner-Roer I., Ling A.H.M.	Furrow-and-ridge structures on active rockglaciers explained by gravity-driven buckle folding: A finite-element study applied to the Murtèl rockglacier

12:00-14:00 Lunch

Posters Sessions 26:

P 26.1	Ambrosi C., Scapozza C.	Multi-method assessment of slope tectonics activity in Val Bedretto (Ticino)
P 26.2	Bätz N., Lane S., Verrecchia E.	The Fluvial Critical Zone – a co-evolving geomorphic-vegetation-soil system
P 26.3	Bayrakdar C., Görüm T., DurmusM., Ivy-Ochs S., Akçar N.	Reconstruction of the evolution and chronology of the Akdag rockslide (SW Turkey)
P 26.4	Borgeaud, L., Lane, S., Vittoz, P.	Interactions between hydrogeomorphology and vegetation on an Alpine alluvial fan: the case of Larzettes, Vallon de Nant (VD, Switzerland)
P 26.5	Castelletti C., Scapozza C., Ambrosi C.	Multi-methods assessment of shallow landslide evolution in the Cassarate watershed (Valcolla, Ticino)
P 26.6	Cuomo A., Sartori M., Manzella I., Bonadonna C.	Evaluation of landslide hazard on the Vulcano Island
P 26.7	Deluigi N., Lambiel C.	The permafrost distribution map of the Bagnes valley (VS)
P 26.8	Fischer B.	Risk evolution in debris flow prone regions of Lai-Ji, Taiwan
P 26.9	Giraldez C., Choquevilca W., Drenkhan F., Fernandez F., Frey H., Garcia J., Haeberli W., Huggel C., Price K.	"Proyecto Glaciares 513": an integrated assessment of high mountain hazards and related risk reduction in the Peruvian Andes.

P 26.10	Grischott R., Kober F., Hippe K., Lupker M., Christl M., Hajdas I., Willett S.	Paleodenudation rates and possible links with climate and sediment flux variations in the Engadine, Eastern Swiss Alps
P 26.11	Haghipour N., Burg J-P	Geomorphological analysis of the drainage system on the growing Makran Accretionary Wedge in SE Iran
P 26.12	Keiler M., Zischg A., Papathoma-Köhle M., Fuchs S.	A tool for vulnerability assessment to mountain hazards
P 26.13	Kummert M., Delaloye R.	The sediment yield at the front of active rock glaciers, results from the first summer of investigations at Gugla-Bielzug rock glacier, Mattertal (VS)
P 26.14	Lambiel C., Maillard B., Regamey B., Martin S., Kummert M., Schoeneich P., Pellitero Ondicol R., Reynard E.	Adaptation of the geomorphological mapping system of the University of Lausanne for ArcGIS
P 26.15	Maillard B., Regamey B., Kummert M., Reynard E., Lambiel C., Theler D.	The geomorphological map of the Hérens valley
P 26.16	Mandal, S.K., Lupker M., Burg, J-P, Haghipour, N., Christl, M.	Low denudation recorded by ¹⁰ Be in river sands from Southern Peninsular India
P 26.17	Mölg, N., Haerberli, W., Zemp, M., Linsbauer, A.	Changing glacial sediment balance - a GIS-based model approach for the Swiss Alps
P 26.18	Najafiha B., Boynagryan V., Dizeh J.	Evolutions of coastal lines of Gorgan Lagoon (East of Caspian Sea) by using satellite images
P 26.19	Yamani M., Moghimi E., Lak R., Salehipour Milani A., Tajik R.	Investigation and Elevation leveling of terraces as Indicator of Pleistocene Lake Levels (Urmia South west of Iran)
P 26.20	Schoeneich P., Lambiel C., Bosson J.-M.	Geomorphological map of the Diablerets massif – Swiss Alps
P 26.21	Utz S., Lambiel C.	Typology of solifluction landforms in the south-western Swiss Alps (Valais)

Session 27: Fluxes of water, sediment and dissolved substances in geomorphologically active/changing environments

Room 1628

Convenors: Nikolaus Kuhn, Stuart Lane

12:00-14:00 *Lunch*

		Chair: Stuart Lane & Wolfgang Fister
14:00 - 14:20	Wilfried Haerberli, Yvonne Schaub, Christian Huggel, Lorenz Böckli	Vanishing glaciers, degrading permafrost, new lakes and increasing probability of extreme floods from impact waves in cold mountain chains
14:20 - 14:40	Micheletti Natan, Lane Stuart N.	Investigation of mass movement and sediment flux at the decadal scale for Alpine mountain basins using archival digital photogrammetry
14:40 - 15:00	Fister Wolfgang, Heckrath Goswin, Greenwood Philip, Kuhn Nikolaus J.	Biochar erosion: A potential threat to its suitability for carbon sequestration?

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

		Chair: Stuart Lane & Wolfgang Fister
16:00 - 16:20	Greenwood Philip, Kuhn Nikolaus J.	Does the invasive plant, <i>Impatiens glandulifera</i> , influence soil flux from riparian zones? An investigation on a small watercourse in northwest Switzerland
16:20 - 16:40	Hu Yaxian, Xiao Liangang, Fister Wolfgang, Kuhn J Nikolaus	The effect of aggregation onto the fate of eroded carbon
16:40 - 17:00	Lane Stuart N., Balin D., Lovis B., Micheletti Natan	The impacts of climatically-driven hydrological flux upon coarse sediment flux in Alpine river basins

Posters Sessions 27:

P 27.1	Delunel Romain et al.	Transient sediment supply in a high-altitude Alpine environment evidenced through a ¹⁰ Be budget of the Etages catchment (French Western Alps)
P 27.2	Aurélien Gallice, Raphael Mutzner, Marc B. Parlange, Hendrik Huwald	Experimental Investigation of the Energy-Balance of an Alpine Catchment
P 27.3	Kuhn Nikolaus J.	Sediment on Mars: settling faster, moving slower
P 27.4	Schaub Yvonne, Schneider Demian, Guillén Ludeña Sebastián, Huggel Christian	Modeling process chains: rock/ice-avalanche induced outburst floods at Laguna 513, Cordillera Blanca, Peru
P 27.5	Alissa Zuijdgheest, Timothy Eglinton, Francien Peterse, Berhard Wehrli	Can soil biomarkers trace floodplain contributions to organic carbon export in a pristine, tropical river system?

Meetings of Societies on Friday 15th November

Time	
11:15-12:30	Swiss National Committee for IUGG meeting

Meetings of Societies on Saturday 16th November

Time		Room
11:20-12:20	Plenumsitzung des Schweizerisches Komitee für Stratigraphie (SKS)	2218
12:15-13:00	Annual Meeting of the SMPG/SSMP	1620
12:00-12:30	Administrationsitzung Kommission für Phenologie und Saisonalität	2235
13:15-14:00	Mitgliederversammlung Schweizerische Gesellschaft für Meteorologie	2235
12:30-13:30	General Assembly of the Swiss Society for Hydrology and Limnology SGHL	2208
12:00-14:00	IUGS national commission	2216

Participating Societies and Organisations

Association des amis du Musée de géologie de Lausanne (AMGL)
Association for Geographical Education Switzerland (VGD-CH/AGD-CH)
Federal Office of Meteorology and Climatology (MeteoSwiss)
Federal Office of Topography (swisstopo)
Forum for Climate and Global Change (ProClim-)
International Geosphere-Biosphere Programme, Swiss Committee (IGBP)
International Union of Geodesy and Geophysics, Swiss Committee (IUGG)
International Union of Geological Sciences, Swiss Committee (IUGS)
Kommission der Schweizerischen Paläontologischen Abhandlungen (KSPA)
ProDoc project Leman21
Steering Committee NRP 61
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Swiss Commission for Oceanography and Limnology (COL)
Swiss Commission for Phenology and Seasonality (CPS)
Swiss Commission for Remote Sensing (SCRS)
Swiss Committee for Stratigraphy (Platform Geosciences/SCNAT)
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Swiss Geological Survey (swisstopo)
Swiss Geomorphological Society (SGGm/SSGm)
Swiss Geophysical Commission (SGPK)
Swiss Geotechnical Commission (SGTK)
Swiss Geothermal Society (GEOTHERMIE.CH)
Swiss Hydrogeological Society (SGH)
Swiss Hydrological Commission (CHy)
Swiss Meteorological Society (SGM)
Swiss Paleontological Society (SPG/SPS)
Swiss Snow, Ice and Permafrost Society (SIP)
Swiss Society for Hydrology and Limnology (SGHL / SSSL)
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Working Group for Geotopes in Switzerland (Platform Geosciences/SCNAT)

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