

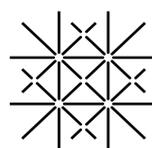
Symposia Program 13th Swiss Geoscience Meeting

Basel, 20th - 21st November 2015

Modelling the Earth

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



University
of Basel

Welcome to Basel and to the 13th Swiss Geoscience Meeting

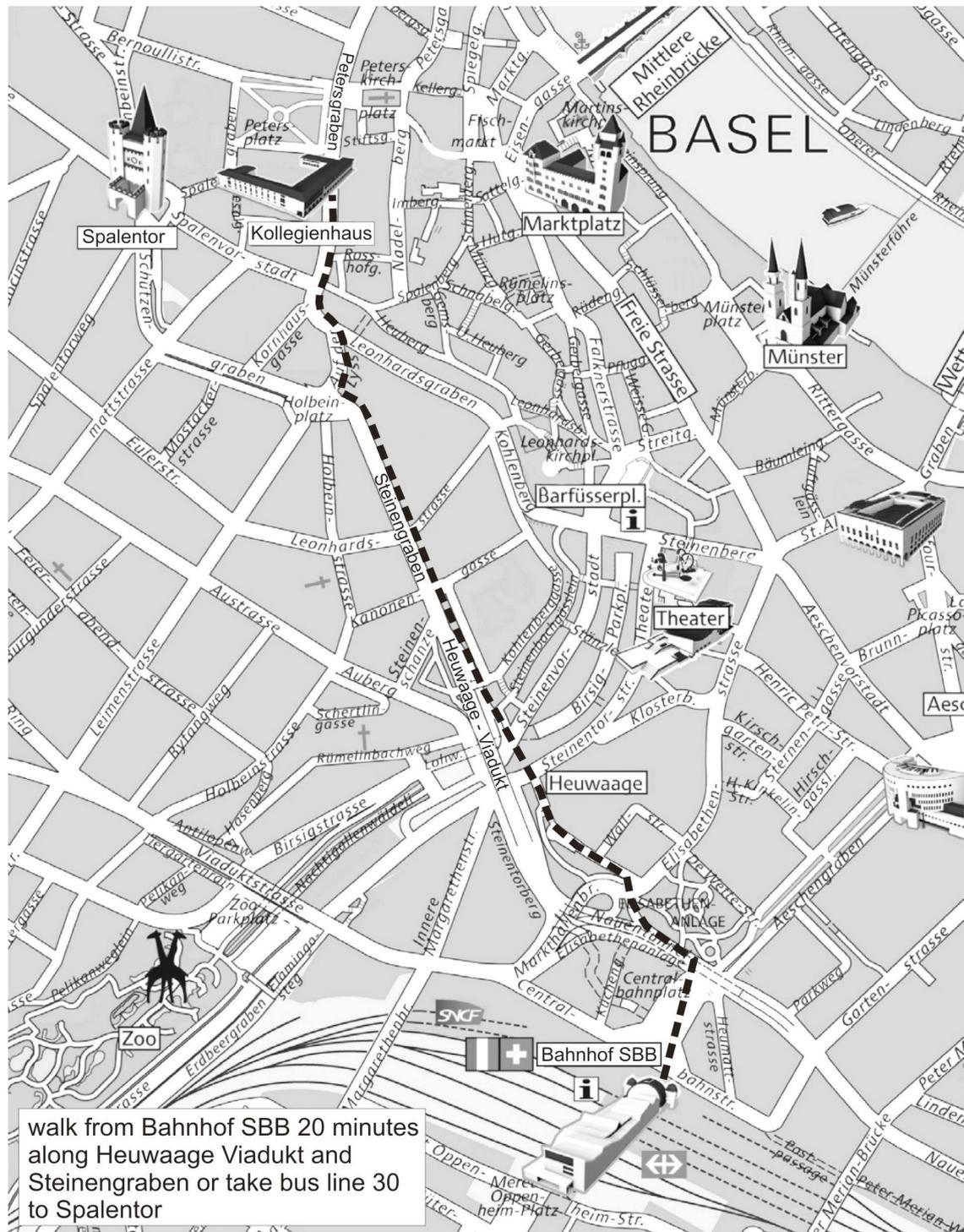
Dear Participants,

We are happy to welcome you to Basel, to the University and to the Department of Environmental Sciences. Thank you for joining us at the 13th Swiss Geoscience Meeting. The SGM is organized by our Department under the auspices of the Swiss Academy of Sciences. We look back at a very successful history of the SGM with steadily increasing numbers of oral and poster presentations from the beginning in 2003 until today. We expect more than 600 participants and more than 390 abstracts have been submitted. We would like to acknowledge the indefatigable effort of the session organizers who compiled a very interesting and comprehensive meeting program.

The topic of the general session of Friday is “Modelling the Earth” paying tribute to the increasing importance of computer-based methods in geosciences. Modelling helps to understand patterns based on sheer unmanageable amounts of data and furthermore enables us to perform detailed prognoses of future developments. Modelling based on geophysical and petrophysical data, for example, provides an insight into inaccessible parts of the Earth’s interior. Prof. Paul Tackley (ETH Zurich) will show us that the Earth’s deep mantle is increasingly revealed as a very complex region characterized by large variations in temperature and composition, phase changes, melting, and anisotropic structures. He will review some fundamentals of the relevant processes and uncertainties in the context of long-term Earth evolution and how it has led to the observed present-day structures. Dr. Gian-Kasper Plattner (IPCC WGI TSU, University of Bern) will show us that climate models can predict possible climate futures and resulting risks and impacts from climate change. Based on assessment reports of the Intergovernmental Panel on Climate Change (IPCC) he will review how climate models and projections have evolved over time and what they say about future climate change. Prof. Klaus Wallmann (GEOMAR Helmholtz Centre for Ocean Research Kiel) will talk about the effects of eustatic sea-level change on atmospheric pCO₂ and seawater composition over the late Quaternary. He demonstrates that the marine regression during glacial periods strongly affects burial processes of neritic carbonate and particulate organic matter as well as benthic denitrification. This triggered a cascade of interconnected responses of the earth system which had a strong impact on the chemical and isotopic composition of seawater and the CO₂ content of the atmosphere. Prof. Sanjeev Gupta (Imperial College London) describes the adventures of NASA’s car sized rover, Curiosity, which has been exploring the surface of Gale crater on Mars for over 2 years in the most complicated planetary exploration mission ever undertaken. The explorations of the rover as well as its latest findings are discussed. This mobile laboratory is studying the geology and chemistry of rocks on Mars to determine if the Red Planet could ever have been habitable for life.

*On behalf of the organizing committee,
Leander Franz*

Location



Internet Access at Venue:

login: geo-2015

pass word: Swiss-20-21

Host institutions

Department of Environmental Sciences of the University of Basel

Patronage

Platform Geosciences of the Swiss Academy of Sciences, SCNAT

Patronage

Federal Office of Topography (swisstopo)

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)

National Research Programme “Sustainable Use of Soil as a Resource” (NRP 68)

Swiss Association of Energy Geoscientists (SASEG)

Swiss Commission on Atmospheric Chemistry and Physics (ACP)

Swiss Commission for Phenology and Seasonality (CPS)

Swiss Commission for Remote Sensing (SCRS)

Swiss Committee for Stratigraphy (Platform Geosciences/SCNAT)

Swiss Gemmological Society (SGG-SSG)

Swiss Geodetic Commission (SGC)

Swiss Geological Society (SGG/SGS)

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 Paleontological Society (SPG/SPS)

Swiss Snow, Ice and Permafrost Society (SIP)

Swiss Society for Hydrology and Limnology (SGHL / SSSL)

Swiss Society for Quaternary Research (CH-QUAT)

Swiss Society of Mineralogy and Petrology (SMPG / SSMP)

Swiss Soil Science Society (SSSS)

Swiss Tectonics Studies Group (Swiss Geological Society)

Abstracts can be downloaded at:

<http://geoscience-meeting.ch/sgm2015/downloads/>

Local Committee

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Joelle Glanzmann
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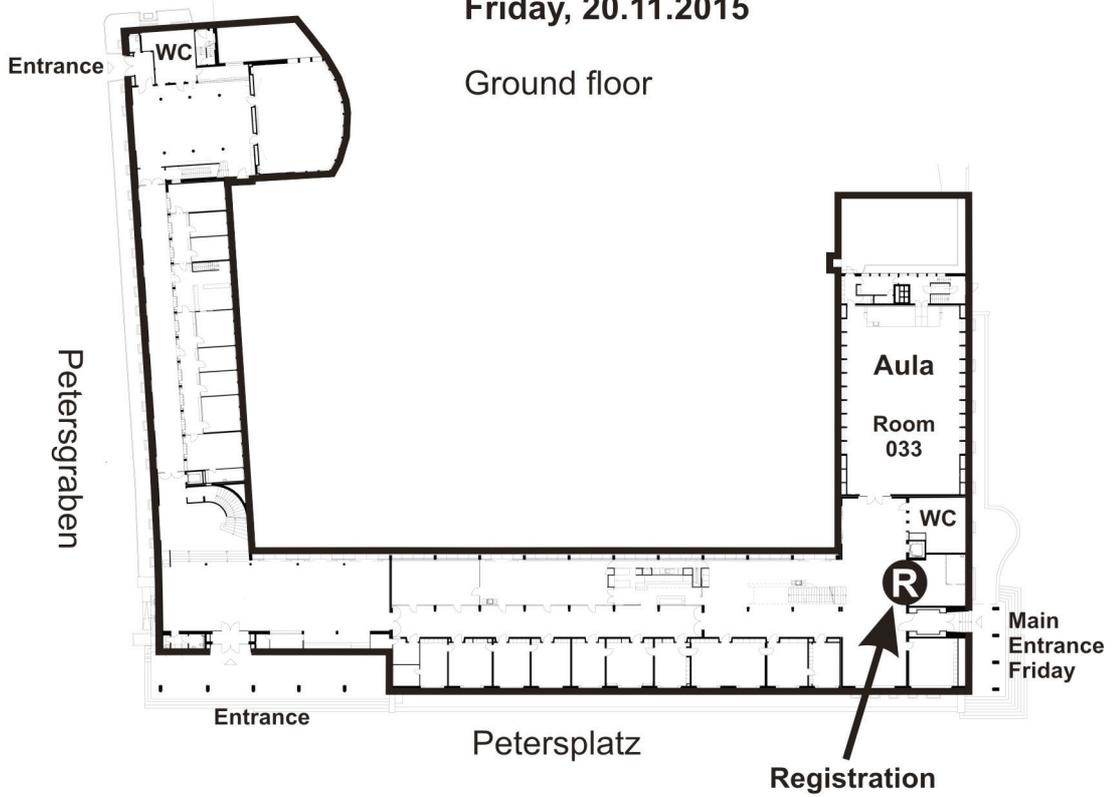
IUGS
IUGG
Naturhistorisches Museum Basel
SSEF
Uni Basel
Departement Umweltwissenschaften

Lecture rooms and poster locations (P)

Kollegienhaus, Petersplatz 1, 4003 Basel

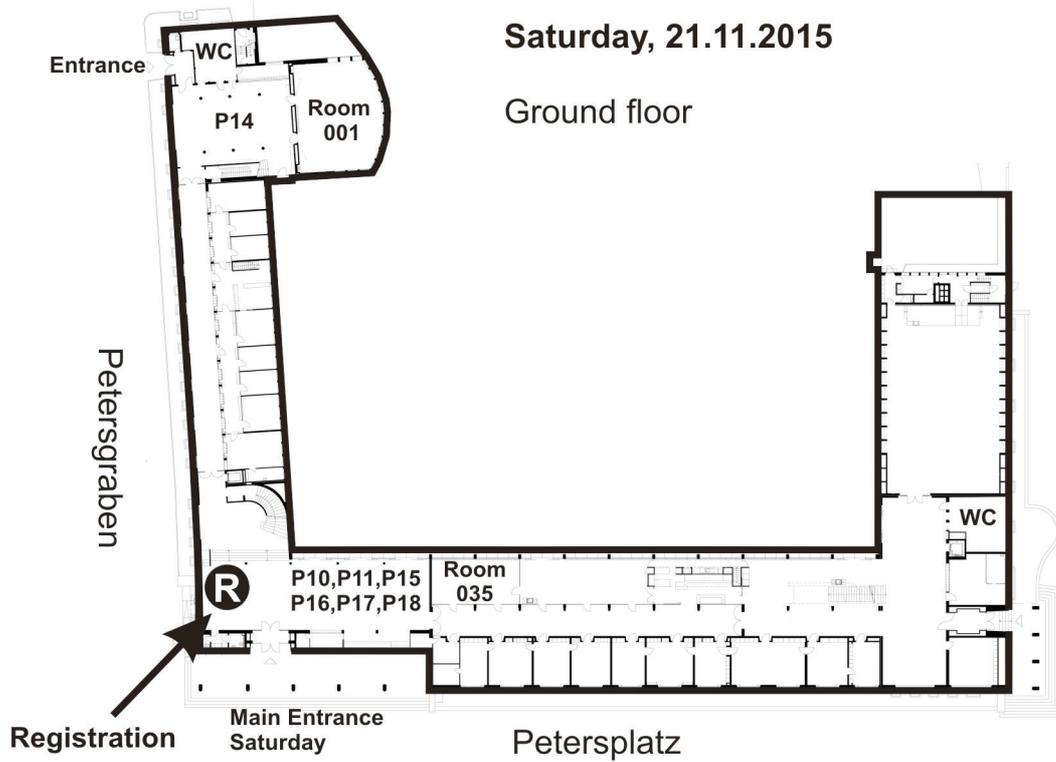
Friday, 20.11.2015

Ground floor



Saturday, 21.11.2015

Ground floor

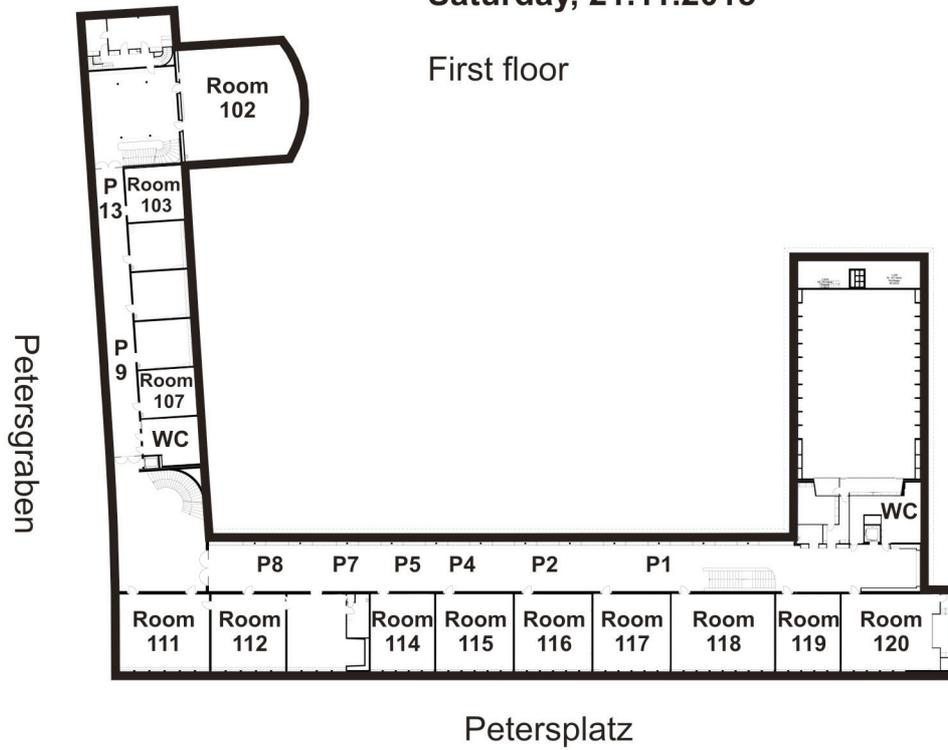


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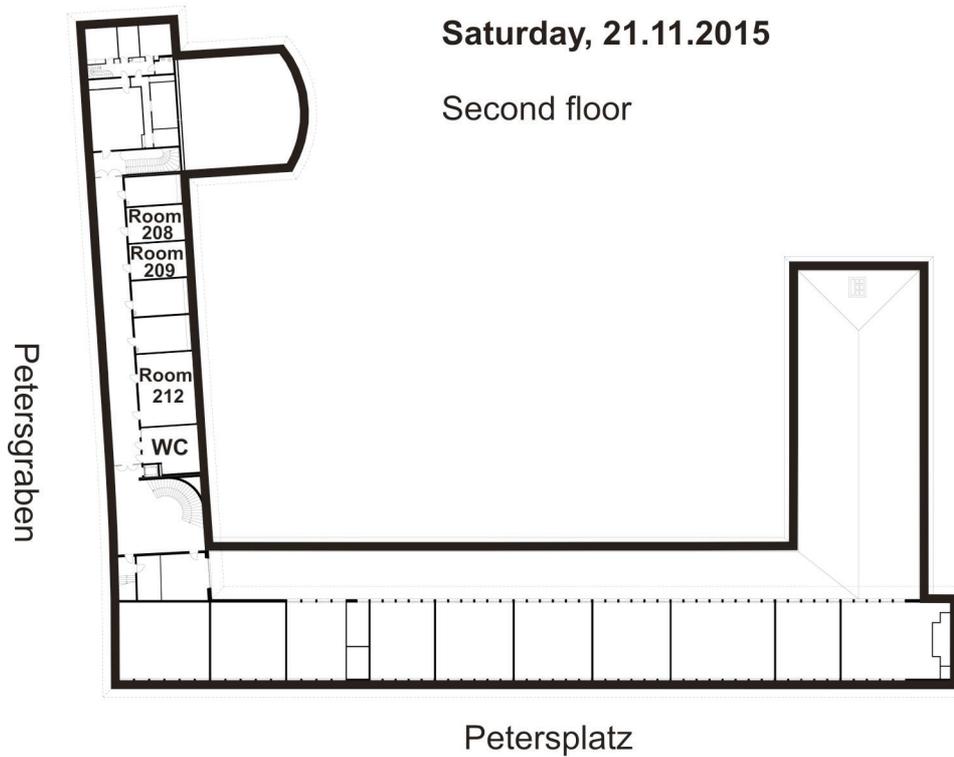
Saturday, 21.11.2015

First floor



Saturday, 21.11.2015

Second floor



Plenary Session, “Modelling the Earth”

Friday November 20th

Aula (Room 033), Kollegienhaus, Petersplatz 1, Basel

13:30 – 13:50	Opening of the symposium by: - the Dean of Research of the Faculty of Sciences - the President of the SGM 2015	Moritz Lehmann Leander Franz
13:50 – 14:35	Mysteries of the deep Earth: structure, dynamics and long-term evolution	Paul Tackley
14:35 – 15:20	Climate models: The window to the climate future	Gian-Kasper Plattner
15:20 – 15:40	<i>Coffee Break</i>	
15:40 – 16:25	Effects of eustatic sea-level change on atmospheric pCO ₂ and seawater composition of the late Quaternary	Klaus Wallmann
16:25 – 17:10	The Martian adventures of <i>Curiosity</i>	Sanjeev Gupta <i>Joint SNC-IUGG & SNC-IUGS Union Lecture</i>
17:10 – 17:30	<i>Coffee Break</i>	
17:30 – 18:15	- Communications Platform Geosciences - Presentation SGM 2016 in Geneva - CHGEOL Award	Werner Eugster Sébastien Castellort Michael Schnellmann
18:15 – 21:00	<i>Swiss Geoscience Party for registered participants</i>	

Symposium Sessions, Saturday November 21st

University of Basel, Kollegienhaus, Petersplatz 1, Basel

1. Structural Geology, Tectonics and Geodynamics *Room 120*
2. Mineralogy, Petrology, Geochemistry *Room 102*
3. Gemmology *Room 212*
4. Palaeontology *Room 114*
5. Stratigraphy *Room 111*
6. Geophysics and Rockphysics (cancelled)
7. Geothermal Energy, CO2 Sequestration and Shale Gas *Room 001*
8. Geomorphology *Room 112*
9. Quaternary Environments: Landscapes, Climate, Ecosystems, Human Activity
During the Past 2.6 Million Years *Room 115*
10. Cryospheric Sciences *Room 118*
11. Hydrology, Limnology and Hydrogeology *Room 116*
12. Temperature and Density Influenced Flow and Transport of Groundwater and
Coupled Hydraulic Processes (cancelled)
13. The International Year of Soils: Open Session on Soil Security *Room 103*
14. Biogeochemistry of Aquatic and Terrestrial Realms *Room 117*
15. Atmospheric Processes and Interactions with the Biosphere *Room 119*
16. Phenology and Seasonality *Room 209*
17. Earth Observation Addressing Key Earth System Processes *Room 208*
18. Geoscience and Geoinformation – From Data Acquisition to Modelling and
Visualisation *Room 035*

Session 1: Structural Geology, Tectonics and Geodynamics

Room 120

Convenors: Guido Schreurs, Neil Mancktelow, Paul Tackley

<i>Chair: Paul Tackley</i>		
09:00 – 09:15	Houlié N., Woessner J., Rothacher M., Giardini D.	Strain rate and stress field of Switzerland
09:15 – 09:30	Zwaan F., Schreurs G.	Effects of transtension and inherited structures on continental rift interaction in 4D analogue models
09:30 – 09:45	Peters M., Herwegh M., Poulet T., Regenauer-Lieb K., Veveakis M.	Boudinage and folding as the same energy bifurcation of elasto-visco-plastic rocks
09:45 – 10:00	Frehner M. (<i>2015 Paul Niggli Medalist – Invited talk</i>)	3D fold growth in transpression
10:00 – 11:30	<i>Morning Poster Session with coffee</i>	
<i>Chair: Guido Schreurs</i>		
11:30 – 11:45	Lechmann A.K., Burg J.-P., Faridi M.	Late Miocene to Quaternary volcanism in NW Iran Azerbaijan: new geochemical and geochronological data
11:45 – 12:00	Sørensen K., Korstgård J.A., Glassley W.E.	A Nagssugtoqidian (W Greenland) crustal profile
12:00 – 12:15	Hovakimyan S., Moritz R., Tayan R., Harutyunyan M., Rezeau H.	Structural controls, metal distribution and fluid characteristics of the giant Tertiary Kadjaran porphyry Cu-Mo deposit, Tethys metallogenic belt, Armenia, Lesser Caucasus
12:15 – 14:00	<i>Lunch</i>	
<i>Chair: Jean-Luc Epard</i>		
14:00 – 14:15	Belgrano T., Herwegh M., Berger A.	Brittle reactivation of a mylonitic shear zone network: Inherited controls on fault geometry, architecture and hydrothermal activity
14:15 – 14:30	Dielforder A., Berger A., Herwegh M.	The accretion of foreland basin deposits and its effect on early orogenic processes: insights from the north-central European Alps, Switzerland
14:30 – 14:45	Fabbri S.C., Herwegh M., Schlunegger F., Volken S., Möri A., Hübscher Ch., Weiss B.J., Schmelzbach C., Horstmeyer H., Anselmetti F. S.	Neotectonic Fault Structures, Sedimentary Infill and Bedrock Topography of Lake Thun
14:45 – 15:00	Masson H., Steck A.	The Maggia-Sambuco nappe : stratigraphy, correlations and tectonic consequences (Central Alps)
15:00 – 16:00	<i>Afternoon Poster Session with coffee</i>	

Posters Session 1:
between Rooms 116 and 118

P 1.1	Abednego M., Blascheck P., Mosar J., Nussbaum C., Joswig M., Bossart P.	Focal Mechanism Analysis of Seismic Events from Microseismic Monitoring in Mont Terri Rock Laboratory, St-Ursanne (JU) : A Workflow
P 1.2	Aliyev F., Kangarli T., Mosar J.	Analysis of earthquakes focal zones in relation to tectonic structures of the Greater Caucasus (Azerbaijan)
P 1.3	Akçar N., Yavuz V., Ivy-Ochs S., Nyffenegger F., Fredin O., Schlunegger F.	Rearward landsliding in sensitive clays: February 2011 massive failures at the Çöllolar coalfield, eastern Turkey
P 1.4	Beaussier S., Gerya T., Burg J.P.	Lateral change in subduction polarity: Insight from 3D thermo-mechanical numerical modeling
P 1.5	Buchs N., Epard J.-L.	The Nidar Ophiolite and its surrounding units in the Indus Suture Zone (NW Himalaya, India): new field data and interpretations
P 1.6	Cioldi S., Moulas E., Tajcmanová L., Burg J.-P.	Duration of inverted metamorphic sequence formation across the Himalayan Main Central Thrust (MCT), Sikkim
P 1.7	Duretz T., Mohn G., Schenker F.L., Schmalholz S.M.	Multi-layer lithospheric extension: implications for Mesozoic rifting in the Alps
P 1.8	Duretz T., Schmalholz S. M.	Multi-layer extension: implications for the development of ductile shear zones
P 1.9	Gamkrelidze I., Koiava K., Mosar J.	Geological Structure of Georgia and Geodynamic Evolution of the Caucasus
P 1.10	Giuntoli F., Manzotti P., Engi M., Ballèvre M.	Structural and metamorphic subdivision of the central Sesia Zone (Aosta Valley, Italy)
P 1.11	Gruber M., Sommaruga A., Mosar J.	Evidence for Liassic to Dogger synsedimentary normal faulting in the Western Swiss Molasse Basin based on seismic interpretation
P 1.12	Guerit L., Dominguez S., Malavieille J., Castelltort S.	Deformation of an experimental drainage network in oblique collision
P 1.13	Humair F., Bauville A., Jean-Epard L., Schmalholz S.	Numerical investigation of the transition between folding and thrusting: applications to the Swiss Jura and Canadian Foothills foreland fold-and-thrust belts
P 1.14	Jaquet Y., Schmalholz S., Duretz T.	Formation of necking zones during lithospheric rifting
P 1.15	Kelevitz K., Houlié N., Giardini D., Rothacher M.	Mapping the subsurface with seismic and GPS data
P 1.16	Kilian R., Morales L., Peters M.	Rheology during high temperature granular flow – inferences from microstructures
P 1.17	Lu Gang, Winkler W., Willett S., von Quadt A., Fellin M.G., Rahn M., Brack P.	Cenozoic volcanoclastic signatures in sandstones of the Central and Southern Alps: their age, derivation and geodynamic significance – A project layout

P 1.18	Madritsch H., Naef H., Heuberger S., Meier B.	Tectonics of northern Switzerland's Permo-Carboniferous Trough as inferable from revised and densified 2D-seismic reflection data
P 1.19	Magott R., Fabbri O., Fournier M.	Shallow interplate seismicity vs. intraplate Wadati-Benioff zone intermediate-depth seismicity: Insights from a structural analysis of Alpine high-pressure ophiolite-hosted pseudotachylytes (Corsica, France)
P 1.20	Mandal S.K., Fellin M.G., Burg J.-P., Maden C.	Phanerozoic surface history of southern Peninsular India from apatite (U-Th-Sm)/He data
P 1.21	Mauvilly J., Koiava K., Irakli Gamkrelidze Mosar J.	Tectonics in the Greater Caucasus: a N-S section along the Georgian Military Road – Georgia
P 1.22	Schmitt N., Grassi R., Miller S.A., Perrochet L., Valley B., Mosar J.	Fault anatomy of the La Sarraz strike-slip fault system
P 1.23	Normand R., Simpson G., Bahroudi A.	Extreme surface uplift rates revealed by late quaternary marine terraces in the Iranian Makran
P 1.24	Richter B., Stünitz H., Heilbronner R.	Stresses and pressures at the quartz-coesite transition in deformation experiments
P 1.25	Schenker F.L., Ambrosi C., Scapoza C., Castelletti C., Maino M.	Preliminary results of the Swiss National Map, sheet Osogna (no. 1293,1:25'000)
P 1.26	Schmid T., Frehner M.	Parasitic folds with wrong vergence: How asymmetries can be inherited
P 1.27	Thielmann M.	Thermal localization in a heterogeneous lithosphere
P 1.28	von Däniken P., Frehner M.	3D fold geometry at Panixer pass
P 1.29	Wex S., Mancktelow N., Hawemann F., Camacho A., Pennacchioni G.	Inverted localization of deformation in the “dry” middle crust across the Woodroffe Thrust, Central Australia
P 1.30	El Hadj Youcef Brahim, Mohamed Chadi, Rami Djeffa	About the Autochthony of Constantinois Neritic Shelf (NE Algeria)

Session 2: Mineralogy, Petrology, Geochemistry

Room 102

Convenors: Sébastien Pilet, Bernard Grobéty, Eric Reusser

09:00 – 09:15	Roggero D., Pilet S., Müntener O.	<i>Chair: Bernard Grobéty</i> Geochemical and petrological evidence for a link between the Cenozoic calc-alkaline and alkaline volcanism in north-western Sardinia, Italy
09:15 – 09:30	Rezeau H., Moritz R., Wotzlaw J-F., Tayan R., Ulianov A., Stern R.A.	Batholith construction over 30 million years in the Lesser Caucasus: temporal and geochemical constraints
09:30 – 09:45	Martenot F., Bouvier A.S., Baumgartner L., Caricchi L., Schaltegger U.	Apatite volatile and trace element variations : a new tool to study geochemical and petrogenetic processes in the calc-alkaline Adamello batholith
09:45 – 10:00	<i>Manzini M., Bouvier A.-S., Baumgartner L., Rose-Koga E., Schiano P., Shimizu N.</i>	Oxygen isotopes variation in melt inclusions from MORB samples
10:00 – 11:00	<i>Morning Poster Session with coffee</i>	
		<i>Chair: Robert Moritz</i>
11:00 – 11:15	Dolejs D., Spillar V.	Creating a pluton, from crystal nucleus to the entire intrusion
11:15 – 11:30	Hartung E., Caricchi, L., Floess D., Wallis S., Harayama, S.	Takidani Granodiorite: Insights into a young magma chamber
11:30 – 11:45	Tajčmanová L., Moulas, E., Vrijmoed J., Podladchikov Y.	Can grain-scale pressure variations provide direct constraints on rheology?
11:45 – 12:00	Zhong X., Vrijmoed J., Tajcmanova L., Moulas E.	On coupling of viscous relaxation and chemical diffusion under grain scale pressure variation
12:00 – 13:30	<i>Lunch</i>	
		<i>Chair: Eric Reusser</i>
13:30 – 13:45	Ellis B., Szymanowski D., Troch J., Bachmann O., Wotzlaw J.F., Guillong M., Bindeman I., Schmitt A.	Post-caldera volcanism at the Heise volcanic field: implications for petrogenetic models
13:45 – 14:00	Balashova A., Mattsson H.B., Hirt A.M., Almqvist B.S.G.	The evolution of the Oldoinyo Lengai volcano and the origin of the Lake Natron Footprint Tuff (northern Tanzania)

14:00 – 14:15	Bergemann C., Gnos E., Berger A., Whitehouse M., Walter F., Bojar H.-P.	Hydrothermal monazite records Eo-Alpine retrograde evolution in the Eastern Alps
14:15 – 14:30	Burn M.	Implications of allanite – monazite – zircon age data for Permian magmatism in the Southern Alps
14:30 – 14:45	Kunz B.E., Regis D., Manzotti P., von Niederhäusern B., Burn M., Giuntoli F., Engi M.	Pre-Alpine and pre-rifting crustal evolution of continental fragments in the Western Alps
14:45 – 15:00	Mullis J., Felix H., Proce M., Wolf M., Vennemann T., Franz L., de Capitani C., Antognini M., Bucher K.	Fluid evolutions and their significance in the Lötschberg and Gotthard base tunnels, Switzerland
15:00 – 16:00	<i>Afternoon Poster Session with coffee</i>	
15:30 – 15:45	Davies J.H.F.L., Schaltegger U., Baresel B., Bouvier A.-S., Baumgartner L.P.	Identifying and understanding Pb loss in baddeleyite
15:45 – 16:00	Stern W.B.	Phosphate: a neglected clue to technology and systematics of ancient glass
16:00 – 16:15	Siron G., Baumgartner L., Bodner R.	What does chlorine content in biotite say about the metamorphic fluids: Case studies from the Torres del Paine and Western Adamello contact aureoles
16:15 – 16:30	Giuntoli F., Lanari P., Kunz B., Burn M., Engi M.	Garnet growth and resorption as a tracer of Alpine HP-rehydration of Permian granulite: a case study in the Sesia Zone (NW Alps)
16:30 – 16:45	Bellver-Baca M.T., Chiaradia M.	RAFC processes and temporal factors favouring porphyry mineralisation in high Sr/Y magmas
16:45 – 17:00	Lavoie J., Moritz R., Popkhadze N., Spangenberg J., Ulyanov A., Chiaradia M.	The Late Cretaceous Beqtakari prospect : evidence for subaerial epithermal mineralization in the Bolnisi mining district, Georgia, Lesser Caucasus

Posters Session 2:
between Rooms 115 and 116

P 2.1	Arbiol C., Kouzmanov K., Dini A., Wälle M.	Major and trace element geochemistry of a distal Fe skarn – Torre di Rio, Elba Island (Italy): Insights from hedenbergite, epidote and ilvaite LA-ICP-MS analyses
P 2.2	Rottier B., Kouzmanov K., Bouvier A.-S., Wälle M., Fontboté L.	Shallow porphyry stockwork veining at Cerro de Pasco: constrains from fluid inclusions, in-situ oxygen isotope and trace element analysis by SIMS and LA-ICP-MS
P 2.3	Bovay T., Kouzmanov K., Dini A., Wälle M., Vassileva R., Gerdjikov I.	Distal johannsenite-hedenbergite skarns at Madan, Bulgaria and their link to Pb-Zn mineralization: constraints from trace element analyses in skarn silicates
P 2.4	Casanova V., Kouzmanov K., Bouvier A.-S. , Fontboté L., Baumgartner L.	Tracing hydrothermal fluid evolution in the epithermal deposit of Colquijirca: insights from in-situ oxygen and trace element analyses in quartz
P 2.5	Chatzipanagiotou Ch.	Genetic relationships between spatially associated arsenide and sulphide magmatic ores from the Carratraca Ultramafic Massif (Málaga, south Spain)
P 2.6	Fekete Sz., Weis P., Driesner T., Heinrich C.A., Baumgartner L., Bouvier A-S.	High resolution, in situ 18O analyses of quartz from the Yankee Lode tin deposit (Mole Granite, Australia)
P 2.7	Karadima N., Kouzmanov K., Dini A., Wälle M., Spangenberg J., Poté J.	Sulfur isotopes and trace element analyses of ore and gangue minerals from the Rio Marina Fe-deposit, Elba Island: implications for formation mechanism and fluid sources
P 2.8	Botter C., Grobéty B.	SEM/EDS and TEM/EDS analyses of volcanic particles sampled above the surface of the Erta'Ale lava lake, Danakil depression, Ethiopia, using a remotely-controlled self-closing sampler
P 2.9	Malvoisin B., Mazzini A., Miller S.A.	Temperature record in clasts expelled from the LUSI mud eruption (Indonesia): evidence for large scale hydrothermal activity
P 2.10	Régnier A., Caricchi L., Londoño J.M., Mendez R.A.	Petrological evolution and pre-eruptive conditions of a highly explosive volcano showing signs of unrest: Cerro Machin, Colombia (Master project)
P 2.11	Ricchi E., Caricchi L., Bindeman I., Wotzlaw J.	The generation and architecture of crustal rhyolitic reservoirs: insights from the Kilgore Tuff eruption
P 2.12	Scrignari M., Pioli L., Caricchi L., Andronico D.	Driving mechanisms of 1651 and 2002 eruptions at Etna volcano (Italy)
P 2.13	Tamagnone Cosmelli E.	Petrography and geochemistry of Cusin and Cubilche volcanic complexes (Interandean Valley, Ecuador)
P 2.14	Wanke M., Ellis B.S., Bachmann O., Guillong M., Clynnne M.A.	Plutonic xenoliths from Mount St. Helens – a window into the magma plumbing system

P 2.15	Didier A., Putlitz B., Baumgartner L., Bouvier A.S.	New calibration for $\delta^{18}\text{O}$ analysis of monazite by SIMS
P 2.16	Schaltegger U., Wotzlaw J.- F., Ovtcharova M., Schoene B., Davies J.H.F.L., Baresel B.	Limits of precision and reproducibility in high-precision isotope-dilution U/Pb geochronology
P 2.17	Schmid R., De Capitani C., Franz L., Rahn M.	Semi-quantitative Raman spectroscopy on fluor-hydroxyapatite serial solid solutions
P 2.18	Seitz S., Putlitz B. , Baumgartner L., Escrig S., Meibom A., Bouvier A-S., Vennemann T.	NanoSIMS study on quartz phenocrysts
P 2.19	Ulianov A., Müntener O., Schaltegger U., Bussy F.	Detection in LA-ICPMS: Construction and performance evolution of decision rules
P 2.20	Naumenko-Dèzes M.O., Bouman C., Nägler Th.F., Mezger K., Villa I.M.	High accuracy analysis of the whole range of Ca natural isotopes by TIMS
P 2.21	Bach N., Kouzmanov K., Caricchi L., Dini A., Wälle M.	Compositional variations of peritectic garnet in peraluminous leucogranite sills from Elba Island (Italy): Implications for crustal melt generation processes
P 2.22	d'Abzac F.-X., Davies J., Schaltegger U.	The Silicon isotope composition of zircons: a tracer for magma evolution ?
P 2.23	Sliwinski J., Zimmerer M., Guillong M., Bachmann O., Lipman P.	Zircon U-Pb Age Distributions in Cogenetic Crystal-Rich Dacitic and Crystal-Poor Rhyolitic Members of Zoned Ignimbrites in the Southern Rocky Mountains by Chemical Abrasion Inductively- Coupled-Plasma Mass Spectrometry (CA-LA-ICP-MS)
P 2.24	Hirsiger C., Bussy F., Epard J.-L., Masson H., Steck A., Ulianov A.	The Lower Permian Alpigia magmatic complex and its country rock (Upper Maggia Valley, Central Alps): petrology, geochronology and structural position
P 2.25	Proce M., Mullis J., Franz L., Antognini M.	Fluid investigation on T-max and retrograde inclusions in quartz from the Southern part of the Gotthard base tunnel, Central Alps
P 2.26	Wolf M., Mullis J., Pettke T., Franz L., Vennemann T.	Retrograde fluid-geochemical evolution and mass transfer: an example from the Gotthard Base Tunnel
P 2.27	Pazhakhzadeh L., Ebrahimi Nasrabadi Kh., GHaemi F., Darvishi khatooni J.	The genesis of fluorite in the Koh-sefid region of Sarakhs, Iran
P 2.28	Dörner E.L., Leander F., Rüdiger K.	Petrographic and microtectonic investigation of the metamorphic rocks of the Wehratal
P 2.29	Kuster A., Franz L., Wetzel A.	Investigations of gravels from the Klemmbach based on sedimentological and petrographic methods

P 2.30	Lafay R., Baumgartner L.-P., Schwartz S.S., Montes- Hernandez G., Vennemann T.	The Ophicalcites of the Chenaillet Complex, (Western Alps, France): a fossil hydrothermal system?
P 2.31	Luisier C., Baumgartner L., Putlitz B., Vennemann T., Schmalholz S.	The Origin of Whiteschist in the Monte Rosa Nappe (Western Alps)
P 2.32	Süssenberger A. & Schmidt S.T.	Clay minerals as geo-thermometer under low grade metamorphic conditions: a comparative study based on chemistry/crystallinity variations of illite and chlorite and Raman spectroscopy on carbonaceous material
P 2.33	Pandey O.P., Mezger K., Upadhyay D., Villa I.M.	Evolution of Earth's Archean crust: insights into Singhbhum craton, eastern India
P 2.34	El Korh A., Deloule E., Luais B., Boiron M.C., Vigier N., Bastian L.	Lithium behaviour and isotopic fractionation in high-pressure metabasites (Ile de Groix, France): a coupled LA-ICPMS, MC-ICPMS and SIMS study

Session 3: Gemmology

Room 212

Convenors: Michael S. Krzemnicki, Laurent E. Cartier

10:00 – 11:00	<i>Morning Poster Session with coffee</i>	
		<i>Session Chair: Michael Krzemnicki</i>
11:00 – 11:15	Elmaleh E., Schmidt S.T., Karampelas S., Galster F.	Characterization of sapphires from Madagascar, Sri Lanka, Tanzania and Burma
11:15 – 11:30	Hanser C.	Spectroscopic study of Co-bearing spinel from Luc Yen (Vietnam)
11:30 – 11:45	Balmer W., Krzemnicki M.S.	Be-detection by FTIR on corundum: a preliminary report
11:45 – 12:00	Cartier L.E., Meyer J.B., Krzemnicki M.S.	Origin and species determination of organic gems: DNA fingerprinting as a novel method in gemmology
12:00 – 14:00	<i>Lunch</i>	
		<i>Chair: Laurent Cartier</i>
14:00 – 14:15	Hänni H.A.	Microscopic study of inclusions in gemstones
14:15 – 14:30	Kiefert L., Schollenbruch K., Xu W.	Natural green amber from Ethiopia
14:30 – 14:45	Zhou W., Dzikowski T.	Species identification and treatment detection in dark coloured pearls
14:45 – 15:00	Krzemnicki M.S., Revol V., Hanser C., Cartier L.E., Hänni H.A.	X-ray phase contrast and X-ray scattering images of pearls
15:00 – 15:15	Dzikowski T.J., Cempírek J., Groat L.A., Dipple G.M., Giuliani G.	Origin of gem corundum in calcite marble: The Revelstoke occurrence in the Canadian Cordillera of British Columbia
14:45 – 15:00	Masson H., Steck A.	The Maggia Sambuco nappe : stratigraphy, correlations and tectonic consequences (Central Alps)
15:00 – 16:00	<i>Afternoon Poster Session with coffee</i>	

Session 4: Palaeontology

Room 114

Convenors: Christian Klug, Torsten Scheyer, Lionel Cavin

9.00 – 9.15	Meyer, C.A., Thüning, S., Wizevich, M., Thüning, B., Marty, D.	<i>Chair: Christian Meyer</i> The Norian and Rhaetian dinosaur tracks of eastern Switzerland in the light of sequence stratigraphy
9.15 – 9.30	Marty D., Stevens K.A., Ernst S., Paratte G., Lovis C., Cattin M., Hug W.A., Meyer C.A.	Processing and analysis with ‘Cadence Toolset’ of Late Jurassic dinosaur track data systematically acquired during ten years of excavations prior to construction of Highway A16, NW Switzerland
9.30 – 9.45	Joyce W.G., Rabi M.	A Revised Global Biogeography of Turtles
9.45 – 10.00	Schaefer K., Hug W.A., Billon-Bruyat J.-P.	Catalogues of the palaeontological heritage from the A16 – Transjurane highway (Canton of Jura): example of the Mesozoic marine crocodylians
10.00 – 10.15	Foth C., Hedrick B.P., Ezcurra M.D.	Ontogenetic variation and heterochronic processes in the cranial evolution of early saurischians
10:15 – 11:15	<i>Morning Poster Session with coffee</i>	
		<i>Chair: Damien Becker</i>
11.15 – 11.30	Martini P., Costeur L., Schmid P., Jagher R., Le Tensorer J.-M.	The diversity of Pleistocene Camelidae in El Kowm, Syria: craniodental remains
11.30 – 11.45	Mennecart B., Costeur L.	A new approach to determine the phylogenetic relevance of the bony labyrinth: the case of the Cervid lineage
11.45 – 12.00	Costeur L., Mennecart B., Schmutz S., Métais G.	Palaeomeryx (Mammalia, Artiodactyla) and the giraffes, data from the ear region
11:45 – 12:00	Zhong X., Vrijmoed J., Tajcmanova L., Moulas E.	On coupling of viscous relaxation and chemical diffusion under grain scale pressure variation
12.00 – 12.15	Aguirre-Fernández G., Jost J.	Re-evaluation of the fossil cetaceans from Switzerland
12:15 – 14:00	<i>Lunch</i>	
		<i>Chair: Christian Klug</i>
14.00 – 14.15	Leder R.M.	Morphometric analysis of teeth of fossil and recent carcharhinid selachians

14.15 – 14.30	Frey L., Rücklin M., Kindlimann R., Klug C.	Alpha diversity and palaeoecology of a Late Devonian Fossilagerstätte from Morocco and its exceptionally preserved fish fauna
14.30 – 14.45	Tajika A., Klug C.	Intraspecific variation of volumetric growth trajectories in nautilids and ammonites
14.45 – 15.00	Peybernes C., Chablais J., Martini R.	Evolution and paleobiogeography of reef biota in the Panthalassa domain during the Late Triassic: insights from reef limestone of the Sambosan Accretionary Complex, Japan
10:15 – 11:15	<i>Afternoon Poster Session with coffee</i>	
		<i>Chair: Lionel Cavin</i>
16.00 – 16.15	Klug C., Frey L., Rücklin M.	A Famennian Fossilagerstätte in the eastern Anti-Atlas of Morocco: its fauna and taphonomy
16.15 – 16.30	Meyer C.A., Wetzell A.	The Late Triassic bonebed of Niederschönthal (Norian, Knollenmergel, Füllinsdorf BL) – Amanz Gressly's dinosaur locality revisited
16.30 – 17.00	Meyer, C. & KSPA	Paleoprize

Posters Session 4: in front of Room 115

P 4.1	Eva A. Bischof	Fossil echinoids of the St. Ursanne Formation in the Swiss Jura Mountains
P 4.2	Mennecart B., Pirkenseer C.M.	Study of the microfauna from the Falun (Langhian, France): preliminary data on the Ostracoda

Session 5: Stratigraphy

Room 111

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

9:00 – 9:20	Baresel B., Bucher H., Brosse M., Bagerphour B., Schaltegger U.	<i>Chair: A. Morard & R. Burkhalter</i> Ultra-high precision dating of mass extinction events: a combined zircon geochronology, apatite tephrochronology, and Bayesian age modelling approach of the Permian-Triassic boundary extinction
9:20 – 9:40	Pietsch J., Wetzel A., Jordan P.	A lithostratigraphic scheme for Schinznach Formation (Upper Muschelkalk of northern Switzerland)
9:40 – 10:00	Jordan P., Bläsi H.R., Pietsch J., Deplazes G.	Subdivision of Late Triassic Klettgau-Formation of Northern Switzerland
10:00 – 11:10	<i>Morning Poster Session with coffee</i>	
11:00 – 11:20	Schöllhorn I., Adatte T., Föllmi K. B.	Sedimentological, climatic and environmental changes during the Early Jurassic (Hettangian-Pliensbachian) on the northern Tethyan margin (Switzerland)
11:20 – 11:40	Fantasia A., Föllmi K.B., Adatte T., Spangenberg J.E., Montero-Serrano J.-C.	The Early Toarcian Oceanic Anoxic Event: Insight from the Posidonia Shale across a Swiss transect
11:40 – 12:00	Pictet A., Delamette M., Matrimon B., Mojon P.-O., Föllmi K.B., Adatte T., Spangenberg J.	The Perte-du-Rhône Formation, a new formation name for lowermost Aptian to lowermost Cenomanian marls and glauconitic sandstones of the Jura Mountains (France and Switzerland)
11:45 – 12:00	Zhong X., Vrijmoed J., Tajcmanova L., Moulas E.	On coupling of viscous relaxation and chemical diffusion under grain scale pressure variation
12:00 – 14:00	<i>Lunch</i>	
14:00 – 14:20	Chen C., Castellort S., Guerit L., Paola C., Forman B.	Sedimentary signatures of the Paleocene-Eocene Thermal Maximum (PETM) in the South-Pyrenean foreland basin, Spain

14:20 – 14:40	Pirkenseer C., Rauber G.	Consolidation of lithostratigraphic units for the Cenozoic in the northern Jura
14:40 – 15:00	Morard A., Baland P.	Transposition of the new harmonised lithostratigraphic master legend into the digital datasets of the Geological Atlas of Switzerland – concept and consequences

Posters Session 5: in front of Room 114

P 5.1	Abasaghi F., Darvishi Khatooni J.	Sequence stratigraphy of Sarvak formation in Kupal oil field, Iran
P 5.2	Bieri L., Brack P., Bernasconi S.M.	A new tool applied to an old problem – correlation of Middle Triassic basin sediments using stable isotope stratigraphy
P 5.3	Castelltort S., Adatte T., Khozyem H., Thibault N., Brunet M.-F., Chiaradia M., Spangenberg J.	Stratigraphic framework and tectono-climatic implications of Upper Cretaceous to Neogene successions of the western Afghan-Tajik depression, Uzbekistan
P 5.4	Honegger L., Castelltort S., Clark J., Adatte T., Puigdefàbregas C., Dykstra M., Fildani A., Spangenberg J.	Continental-Marine correlations and climate signals in the Palaeogene foreland of the South Pyrenees
P 5.5	Hunger G., Ventra D., Moscarriello A., Veiga G.	Sedimentary responses to tectonic and climatic forcing: a high-resolution, integrated sedimentological-geochemical study in terrestrial foreland deposits (Mendoza, Argentina)
P 5.6	Koiava K., Mosar J., Gvartadze T., Kvaliashvili L., Mauvilly J.	Late Triassic Calcareous Nannoplankton from Georgia and New Age of Moshevani Suite (Caucasus)
P 5.7	Laziz O., Benabbas C., Boularak M.	Cretaceous environments and diagenetic events of neritic platform, Constantine mounts (North East of Algeria)
P 5.8	Perret M., Segvic B., Castelltort S., Clark J., Puigdefàbregas C., Fildani A.	Propagation of detrital signals in the source-to-sink systems of the Tremp-Graus-Ainsa basins, Southern Pyrenean Foreland Basin, Spain
P 5.9	Tahmasebi K., Darvishi Khatooni J., Mahari R.	Facies, Depositional Environment of Oligocene deposits in anarak area, Esfahan

Session 6: Geophysics and Rockphysics (cancelled)

Session 7: Geothermal Energy, CO₂ Sequestration and Shale Gas

Room 001

Convenors: Lyesse Laloui, Larryn Diamond, Paul Bossart

09:00 – 09:20	Zingg O., Meier P.	<i>Chair: Larryn Diamond</i> Developpement of a new EGS concept for Switzerland: the Haute-Sorne pilot project (JU)
09:20 – 09:35	Valley B., Evans K. F.	Stress magnitudes estimate from borehole failure at the Basel EGS reservoir
09:35 – 09:50	Deb R., Jenny P.	Numerical Modeling of Fluid Injection Induced Shear Failure in Fractured Reservoir
09:50 – 10:05	Violay M., Madonna C., Burg J.-P.	Brittle versus ductile deformation as the main control of the deep fluid circulation in continental crust
10:05 – 11:00	<i>Morning Poster Session with coffee</i>	
		<i>Chair: Peter Burri</i>
11:00 – 11:15	Wanner C., Eichinger F., Jahrfeld T., Diamond L.W.	Assessing the formation of large amounts of calcite scaling in geothermal wells in southern Germany
11:15 – 11:30	Rusillon E., Moscariello A.	The Kimmeridgian Reef Complex: a potential geothermal reservoir in the Greater Geneva Basin
11:30 – 11:45	Clerc N., Moscariello A., Renard P.	Structural Characterization of the Geneva Basin from 2D Seismic Reflection Data for Future Geothermal Resource Development
11:45 – 12:00	Aschwanden L., Adams A., Diamond L.W., Mazurek M.	Porosity and permeability of the Muschelkalk carbonate aquifer in the Swiss Molasse Basin and their relevance to geothermal energy and gas storage
12.00 – 12.15		Discussion of morning sessions
12. 15 - 14.00	<i>Lunch</i>	
		<i>Chair: Lyesse Laloui</i>
14:00 – 14:15	Burri, P.	Unconventional hydrocarbons – opportunities and challenges (and the increasing role of geology)
14:15 – 14:30	Makhnenko R., Mylnikov D., Laloui L.	Effect of liquid and supercritical CO ₂ injection on petrophysical properties of rock

14:30 – 14:45	Manceau J.-C., Tremosa J., Lerouge C., Audigane P., Nussbaum C.	Well integrity evolution under chemical (CO ₂), temperature and pressure stresses, Mont Terri underground rock laboratory
14:45 – 15:00	Li C., Laloui L.	Caprock and surface deformation induced by carbon dioxide injection
15:00 – 15:15	Nussbaum C., Valley B., Guglielmi Y.	In-situ clay faults slip hydro-mechanical characterization (FS experiment), Mont Terri underground rock laboratory
15:15 – 16:00	<i>Afternoon Poster Session with coffee</i>	
		<i>Chair: Paul Bossart</i>
16:00 – 16:15	Sutra, M., Spada, M., Burgherr, P.	Geothermal stimulation fluids: risky chemicals?
16:15 – 16:30	Obermann A., Kraft T., Wiemer S.	Potential of ambient seismic noise techniques to monitor injection induced subsurface changes at the St. Gallen geothermal site.
16:30 – 16:45	Vilarrasa V., Bustarret G., Laloui L.	Early Low Permeability Fault Detection Method to Avoid Felt Induced Seismicity in Geologic Carbon Storage and Wastewater Disposal
16:45 – 17:00		Discussion of afternoon sessions

Posters Session 7: *between Rooms 112 and 114*

P 7.1	Thien B., Kosakowski G., Kulik D.A.	Fluid-rock interactions in Icelandic hydrothermal systems
P 7.2	Scott S., Driesner T., Weis P.	The Thermal Structure of High-Enthalpy Geothermal Systems
P 7.3	Jansen G., Galvan B., Miller S.A.	Towards high resolution modeling of deep geothermal reservoirs on heterogeneous architectures
P 7.4	Vogler D., Settgast R., Amann F., Bayer P., Elsworth D.	Experimental and Numerical Study of Permeability in Heterogeneous Fractures
P 7.5	Ziegler M., Valley B., Evans K.F.	Fault orientations inferred from analysis of a microseismic cluster dataset of the Basel EGS reservoir agree well with borehole fracture data
P 7.6	Preisig G., Negro F.	Enhancement of permeability in geothermal reservoirs: the example of the Salanfe lake – Val d'Illeiez geothermal area
P 7.7	Egli D., Herwegh M., Berger A., Belgrano T.	Structural observations from drill cores of the Grimsel hydrothermal breccia

P 7.8	Moulas E., Madonna C.	Perm-Fit: a new program to estimate permeability at high P-T conditions
P 7.9	Mauri G., Marguet L., Jansen G., Olivier R., Marti U., Baumberger R., Allenbach R., Kuhn P., Altwegg P., Miller S.A.	Gravity prospection in region of La Broye
P 7.10	Adams A., Aschwanden L., Diamond L.W.	Porosity Enhancing Multi-event Dolomitization in the Upper Muschelkalk of the Swiss Molasse Basin: Implications for CO ₂ Storage and Geothermal Energy
P 7.11	Šegvić B., Moscariello A., Arbiol González C., Vacaturo G., Lehu R., D'Odorico A., Limeres A.C., Bernhardt C., Ancheta A., Morettini E.	Reservoir quality prediction based on clay minerals and zeolites distribution: new insights from the pyroclastic-rich Bajo Barreal Formation, Argentina
P 7.12	Zanoni G., Šegvić B., Moscariello A., Tranchet L.	Reservoir geology, mineralogy and geochemistry of the Dentale and Gamba Formations (Early Cretaceous, Gabon): new insights both at regional and pore scale.
P 7.13	Müller M.H., Epting J., Huggenberger P.	Combining approaches of monitoring and modelling groundwater temperatures to investigate the subsurface urban heat island of Basel, Switzerland
P 7.14	Chenaker H., Houha B.	Hydrogeochemistry and Geothermometry of Thermal Groundwater of North-Eastern Algeria
P 7.15	Do Couto D., Šegvić B, Moscariello A.	Petrography and geochemistry of the Lower Jurassic shale in the southwestern Molasse Basin
P 7.16	Jaeggi D., Nussbaum C., Bossart P.	Overcoring of a CO ₂ – injection borehole and sampling procedure
P 7.17	Orellana F., Violay M.	Frictional properties of Opalinus Clay
P 7.18	Schweinar K., Busch A., Bertier P., Stanjek H.	Pore space characteristics of Opalinus Clay – Insights from USANS/SANS experiments
P 7.19	Alt-Epping P., Diamond L.W.	Coupled models of fluid-rock interaction induced by CO ₂ injection into the U. Muschelkalk aquifer in N-Switzerland – code benchmarking and quantifying chemical trapping capacity
P 7.20	Parmigiani A., Huber C., Bachmann O.	Lattice Boltzmann pore-scale calculations of buoyant non-wetting fluids in heterogeneous porous media
P 7.21	Rinaldi A. P., Karvounis D., Urpi L., Dublanchet P.	Fluid flow and induced seismicity affected by asperities distribution during geothermal exploitation
P 7.22	Urpi L., Rinaldi A.P.	Thermo-hydraulic-mechanical simulation of fluid-injection activity and associated fault reactivation with complex rheology.
P 7.23	Räss L., Omlin S., Licul A., Podladchikov Y., Herman F.	Efficient development of memory bounded geo-applications to scale on modern supercomputers

P 7.24	Poonoosamy J., Kosakowski G., Van Loon L.R., Mäder U.	A numerical and experimental reactive transport benchmark investigating the coupling between density driven flow, solute transport and chemical reactions
P 7.25	Caspari E., Milani M., Rubino J.G., Müller T.M., Quintal B., Holliger K.	Numerical upscaling of seismic characteristics of fractured media
P 7.26	Mallet C., Quintal B., Caspari E. & Holliger K.	Seismic energy dissipation due to wave-induced fluid flow in fractured network: comparison of laboratory data from creep tests with numerical simulations
P 7.27	Shih P.-J. R., Fehner M.	Laboratory evidence for Krauklis wave resonance in fractures
P 7.28	Chapman S., Tisato N., Quintal B., Holliger K.	Laboratory measurements of seismic attenuation of partially saturated Berea sandstone for a range of confining pressures

Session 8: Modelling in Geomorphology

Room 112

Convenors: C. Graf, I. Gärtner-Roer, N. Kuhn, R. Delaloye, M. Keiler, C. Scapozza, J. Müller, C. Levy, F. Herman, S. Castellort, B. Staub

09:00 – 09:15	Costa A., Molnar P., Schlunegger F., Stutenbecker L., Lane S.N., Bakker M.	<i>Chair: Sebastien Castellort</i> The relation between suspended sediment loads and climate in a regulated Alpine catchment.
09:15 – 09:30	Scapozza C., Castelletti C., Arrigo S., Ambrosi C.	The future from the past: numerical modeling of potential landslides triggering based on their historical evolution on the upper Cassarate catchment
09:30 – 09:45	Vouillamoz N., Ottowitz D., Santoyo J.C., Joswig M., Mosar J.	Nanoseismic monitoring of landslides induced seismic events (slidequakes): New case study at the Pechgraben landslide – Upper Austria
9:45 – 11:15	<i>Morning Poster Session with coffee</i>	
		<i>Chair: Cristian Scapozza</i>
11:15 – 11:30	Lehmann B., Valla P.G., King G. & Herman F.	OSL-surface exposure dating as a tool to constrain post-LGM glacier fluctuations in the Western Alps
11:30 – 11:45	Valla P.G., Herman F., Simon-Labric T., Braun J., Shuster D.L., Reiners P.W., Fellin M.G., Champagnac J.-D. & Baumgartner L.P.	Time-transgressive latitudinal impact of glaciations on mountain erosion since the Late Miocene
11:45 – 12:00	Lambert R., King G.E., Herman F., Valla P.G.	Investigating K-feldspar luminescence thermochronometry for application in the Mont Blanc massif
12:00 – 14:00	<i>Lunch</i>	

Posters Session 8:

in front of Room 112

	Ambrosi C., Scapozza C.,	
P 8.1	Lifa I., Heimgartner M., Spataro A., Cannata M.	Sustainable erosion control using Wood Wool
P 8.2	Darvishi khatooni, J.	Distribution of lead in Khuzestan plain sediments, Iran
P 8.3	Dufresne A., Prager C., Bösmeier A.S.	Morphology and emplacement processes of a large carbonate rockslide – rock avalanche (Tschirgant, Austria)
P 8.4	Jalilian T., Darvishi Khatooni J.	Karst Process in Bistoon of Kermanshah Province

P 8.6	Micheletti N., Lane S.N., Lambiel C.	Coupling aerial imagery, hydropower intakes data and climatic indicators to investigate the changing climate effects on geomorphic dynamics of high mountain environments
P 8.7	Prudat B., Bloemertz L., Kuhn N.J.	Ehenge: marginalized soil with high water use efficiency
P 8.8	Silva T.A., Girardclos S., Loizeau J.L.	How much sediment is stored in the Rhone delta, canyon and fan system (Lake Geneva, Switzerland/France) since 1889?
P 8.9	Valla P.G., Lajeunesse E., Delunel R., Gayer E., Allemand P., Delacourt C.	Orographic precipitations and landscape evolution in Basse Terre Island, Guadeloupe archipelago (Lesser Antilles Arc)
P 8.10	Winterberg S., Willett S.	Dynamic reorganisation of Alpine river catchments analysed with χ -mapping

Session 9: Quaternary Environments: Landscapes, Climate, Ecosystems, Human Activity During the Past 2.6 Million Years

Room 115

Convenors: Philippe Rentzel, Christine Pümpin

		<i>Chair: Susan Ivy-Ochs</i>
09:00	Welcome – Philippe Rentzel	
09:05 – 09:25	Antolín F., Balbo A., Colonese A., Huchet J.-B., López O., Jacomet S., Manganelli G., Palomo A., Piqué R., Terradas X., Zanchetta G.	An interdisciplinary approach to site formation processes through profile sampling at the Neolithic lakeshore settlement of La Draga (Banyoles, Spain)
09:25 – 09:45	Wuscher P., Koehler H., Moine O., Bachellerie F., Basoge F., Griselin S., Schneider N., Boës E., Diemer S., Sévêque N.	Palaeolithic in the plaine of Alsace and in the Vosgian foreland: state of art, taphonomy and landscape-use archaeology
09:45 – 10:05	Thew N., Furrer H.	A new deposit dating from the Eemian Interglacial at Niederweningen (Zürich) and the associated mollusc faunas
10:05 – 10:20	<i>Overhead Poster Presentation in the conference room: P 9.1 – P 9.10</i>	
10:20 – 11:00	<i>Morning Poster Session with coffee</i>	
11:00 – 11:15	Wanner C., Eichinger F., Jahrfeld T., Diamond L.W.	Assessing the formation of large amounts of calcite scaling in geothermal wells in southern Germany
11:00 – 11:20	Brönnimann D., Rentzel P., Sedlmeier J., Wick L., Marti R.	Late Glacial and early Holocene soil formation and morphogenetic processes in Dittingen – Schachletetal (canton Basle-Land, Switzerland)
11:20 – 11:40	Diaz N., Dietrich F., King G., Valla P., Sebag D., Herman F., Verrecchia E.P.	Reconstructing 20 ka of history using multi-dating on pedogenic carbonate nodules
11:40 – 12:00	Rodrigues L., Lombardo U., Veit H.	Linking soil properties and pre-Columbian agricultural strategies in the Bolivian Lowlands
12:00 – 12:15	<i>Overhead Poster Presentation in the conference room: P 9.11 – P 9.21</i>	
12:15 – 13:30	<i>Lunch</i>	
		<i>Chair: Naki Akçar</i>
13:30 – 13:50	Grischott R., Kober F., Hippe K., Lupker M., Ivy-Ochs S., Hajdas I., Christl M.	Climate control on alpine denudation in the Holocene – Clues from two converse datasets of paleo-CWDR
13:50 – 14:10	Wirsig C., Ivy-Ochs S., Reitner J., Christl M., Vockenhuber C., Bichler M., Reindl M.	Quantifying subglacial erosion rates at Goldbergkees, Hohe Tauern (Austria) with cosmogenic ¹⁰ Be and ³⁶ Cl

14:10 – 14:30	Ziehmer M.M., Nicolussi K., Schlüchter C., Leuenberger M.	Novel Insights from Multi-Millennial Tree Ring Isotope Records of the Early and Mid- Holocene
14:30 – 14:50	Litty C., Schlunegger F.	Controls on pebbles size and shape in streams of the Swiss Alps
14:50 – 15:30	<i>Afternoon Poster Session with coffee</i>	
		<i>Chair: Naki Akçar</i>
15:30 – 15:50	Vogel H., Russell J.M., Bijaksana S., Crowe S., Fowle D., Haffner D., King J., Marwoto R., Melles M., von Rintelen T., Stevenson J., Watkinson I. & the TDP science team	The Lake Towuti Drilling Project: A new, ~1 million year record of Quaternary climate and ecosystem dynamics from the Indo-Pacific
15:50 – 16:10	Steiner B., Ismail-Meyer K., Heitz- Weniger A., Gross E., Akeret Ö., Antolin F., Schären G., Jacomet S., Rentzel P.	Transdisciplinary study of waterlogged archaeological deposits: the example of the lakeshore settlement of Zug-Riedmatt (Switzerland)
16:10 – 16:30	Vattioni S., Hajdas I., Strasser M., Grischott R., Sormaz T.	Lake level reconstruction of Lake Sils, Engadine valley

Posters Session 9:

between Room 103 and 107

P 9.1	Kalbe, J., Pümpin, C., Jagher, R.	Nadaouiyeh Ain Askar – Mid-Pleistocene Palaeocology in a Spring fed Wetland of El Kowm Oasis in the Central Syrian Desert.
P 9.2	Wegmüller F., Koehler H., Pümpin C., Wuscher P., Sévêque N.	New results of excavations at the Middle Palaeolithic site of Mutzig- Rain (Alsace, France)
P 9.3	Kuhlemann, J. , Ivy-Ochs, S., Anselmetti, F., Glotzbach, C., Rahn, M.	Tracing a glacial 2.5 Ma profile from Corsica
P 9.4	Claude A., Akçar N., Ivy- Ochs S., Schlunegger F., Kubik P.W., Christl M., Vockenhuber C., Rahn M., Dehnert A., Schlüchter C.	Long-term bedrock incision rates in the northern Swiss Alpine Foreland inferred from reconstructed Deckenschotter chronologies
P 9.5	Reber R., Schlunegger F.	Confluence area of the Aare and the Valais Paleoglacier Lobes
P 9.6	Märki L., Cogez A., Herman F.	Glacial erosion and dust transport to the Southern Ocean : coupling between erosion on climate

P 9.7	Hippe K., Fontana A., Hajdas I., Ivy-Ochs, I.	Reconstructing Alpine glacier activity during 50-20 ka BP by high-resolution radiocarbon dating of the Cormor alluvial megafan (Tagliamento glacier, NE Italy)
P 9.8	Luetscher M., Ivy-Ochs S., Hof M.	Reconstructing the last deglaciation at Sieben Hengste, Switzerland
P 9.9	Boxleitner M., Maisch M., Walthard P., Ivy Ochs S., Brandova D., Egli M.	Lateglacial and Holocene glacier development and landscape evolution in Meiental, Uri (CH)
P 9.10	Wüthrich L., Hepp J., Schäfer I.K., Lutz S., Sirocko F., Zech M., Zech R.	A Late Glacial / Early Holocene climate reconstruction using stable isotopes in biomarkers from the Gemündener Maar, Germany
P 9.11	Ivy-Ochs S., Martin S., Campedel P., Viganò A., Alberti S., Rigo M., Vockenhuber C.	Age and geomorphology of the Marocche (Trentino, Italy)
P 9.12	Kronig O., Ivy Ochs S., Hajdas I., Christl M., Schlüchter C.	Late Holocene evolution of the Triftjgletscher constrained with ¹⁰ Be exposure and radiocarbon dating
P 9.13	Aksay S., Ivy-Ochs S., Hippe K., Grämiger L., Vockenhuber C.	The geomorphological evolution of a landscape in a tectonically active region: The Sennwald Landslide
P 9.14	Mozafari Amiri N., Sümer Ö., Tikhomirov D., Özkaymak Ç., Uzel B., Ivy-Ochs S., Vockenhuber Ch., Sözbilir H., Akçar N.	Holocene destructive seismic periods in Western Anatolia: pace tracking beyond historical data
P 9.15	Strupler M., Anselmetti F.S., Hilbe M., Fleischmann T., Kopf A.J., Strasser M.	Geotechnical properties of submerged slopes in Lake Zurich and the influence of their spatial variability on slope stability
P 9.16	Darvishi Khatooni J.	Reconstruction of sedimentary environments, climate and water level change of Urmia lake in the Holocene
P 9.17	Haghipour N., Eglinton T., McIntyre C., Hunziker D., Darvishi Khatooni J., Mohammadi A.	Paleo-climate and paleo-environment reconstruction based on a high-resolution, multi-proxy record from Lake Urmia (NW Iran)
P 9.18	Hunziker D., Vasconcelos C.	Paleohydrology, paleoenvironment and biomineralization in Lagoa Pitanguinha, Rio de Janeiro, Brazil
P 9.19	Haas M., Zech R., Szidat S., Salazar G., Bliedtner M.	Radiocarbon dating of leaf waxes in the Kurtak loess paleosol sequence, Central Siberia
P 9.20	Schäfer I.K., Schweri L.I., Tananaev N., Zech R.	Leaf wax patterns and compound specific isotope analyses in a permafrost section near Igarka, Northern Siberia
P 9.21	Ismaylova L.	Scientific-Methodological Approaches Of Revelation Of Landscape-Recreation Potential Of Mountain Geosystems (On example of Southern slopes of the Greater Caucasus)

Session 10: Cryospheric Sciences

Room 118

Convenors: M. Schwikowski, A. Bauder, M. Lüthi, J. Alean, M. Heggli, J. Nötzli

9:00 – 9:15	Becker P., Jouvet G., Seguinot J., Funk M.	<i>Chair: Matthias Huss</i> Glacier extent and climate conditions in the Alps at the Last Glacial Maximum: A glaciological modelling approach
9:15 – 9:30	H. Machguth, H.H. Thomsen, A. Weidick, J. Abermann, A.P. Ahlstrøm, M.L. Andersen, S.B. Andersen, D. van As, R.J. Braithwaite, A.A. Bjørk, J. Box, C.E. Bøggild, M. Citterio, P. Clement, W. Colgan, R.S. Fausto, K. Gleie, B. Hasholt, B. Hynek, N.T. Knudsen, S.H. Larsen, S.H. Mernild, H. Oerter, O.B. Olesen, K. Steffen, M. Stober, S. Sugiyama, R.S. van de Wal	Old data in help of modern science; restoring Greenland's melt history
9:30 – 9:45	Licul A., Herman F., Podladchikov Y., Räss L., Omlin S.	Full Stokes glacier modeling on graphic cards
9:45 – 10:00	Rastner P., Mölg N., Bolch T., Pau F.	A new glacier inventory for the Pamir-Karakoram region
10:00 – 11:00	<i>Poster Session I with coffee</i>	
11:00 – 11:15	Preiswerk L.E., Anandakrishnan S., Beutel J., Burkett P.G., Dalban Canassy P., Funk M., Limpach P., Marchetti E., Meier L., Neyer F., Walter F.	<i>Chair: Jeannette Nötzli</i> Monitoring unstable parts in the ice covered Weissmies northwest face
11:15 – 11:30	Mazzotti G., Moeser D., Jonas T.	Modelling snow cover below coniferous canopies: The effect of snow interception
11:30 – 11:45	Simioni S., Sidler R., Dual J., Schweizer J.	Measuring and modeling wave propagation and weak layer failure due to explosive loading in snow
11:45 – 12:00	Dal Farra A., Schwikowski M.	Effect of particulate matter on the albedo of alpine glaciers
12:00 – 14:00	<i>Lunch</i>	
	Special Session “40 year anniversary of ice core drilling on Colle Gnifetti”	<i>Chairs: Margit Schwikowski, Martin Hoelzle</i>
14:00 – 14:10	Fischer H. (solicited)	In memoriam Dietmar Wagenbach

14:10 – 14:25	Gäggeler H.W. (solicited)	Historic Reminiscences that led to the Colle Gnifetti ice core program and accompanying atmospheric studies
14:25 – 14:40	Haeberli W. (solicited)	A temperate-cold debate and the initiation of ice core drilling/glaciology research on Colle Gnifetti
14:40 – 15:05	Bohleber P. (solicited)	Long-term atmospheric temperature and mineral dust variability recorded in the Colle Gnifetti multi core array
15:05 – 15:40	Poster Session II with coffee	
	Special Session “40 year anniversary of ice core drilling on Colle Gnifetti”	<i>Chairs: Martin Hoelzle, Margit Schwikowski</i>
15:40 – 16:05	Schwikowski M. (solicited)	European pollution history recorded in Colle Gnifetti ice cores
16:05 – 16:20	Hoelzle M. (solicited)	Three decades of englacial temperature measurements on Colle Gnifetti, Monte Rosa
16:20 – 16:35	Lüthi M.P. (solicited)	Colle Gnifetti: challenges of modeling the ice flow
16:35 – 16:45		<i>SEP Young Scientist Award Ceremony</i>
16:45 – 17:00	Gindraux S., Proksch M.	APECS Association of Polar Early Career Scientists

Posters Session 10: in front of Room 035

Session I

P 10.1	Bosson J.-B., Capt M., Fischer M., Micheletti N., Lane S., Lambiel C.	Internal structure, dynamics and genesis of a small heavily debris-covered glacier system (Tsarmin Glacier; Arolla, VS)
P 10.2	Delaney I., Weidmann Y., Huss M	Erosion Rates and Processes in a Glacier's Forefield Over a 28 Year Period
P 10.3	Dizerens C., Hüsler F., Wunderle S.	Webcam imagery rectification and snow classification – potential for complementing satellite-derived snow maps over Switzerland
P 10.4	Gaume J., van Herwijnen A., Chambon G., Schweizer J.	Dynamic crack propagation in weak snowpack layers: from field experiments to discrete element modeling
P 10.5	Gindraux S., Farinotti D., Fischer M., Bösch R.	Accuracy assessment of UAV photogrammetry on Alpine glaciers

P 10.6	Kronenberg M., Barandun M., Hoelzle M., Huss M., Farinotti D., Azisov E., Usubaliev R., Gafurov A., Petrakov D., Kääh A.	Mass balance reconstruction for Glacier No. 354, Tien Shan, from 2003 to 2014
P 10.7	Licciulli C., Bohleber P., Wagenbach D., Eisen O., Gagliardini O., Hoelzle M.	Supplementing ice core time series at Colle Gnifetti with a 3D full Stokes ice flow model using Elmer/Ice
P 10.8	Lucas C., Hajnsek I., Bühler Y., Marino A.	Observation of snow properties and avalanches with new polarimetric and interferometric ground radar
P 10.9	H. Machguth, M. MacFerrin, D. van As, J. E. Box, C. Charalampidis, W. Colgan, R. S. Fausto, H.A.J. Meijer, E. Mosley-Thompson, R.S.W. van de Wal	Successive and intense melt rapidly decreases Greenland meltwater retention in firn
P 10.10	Nötzli J., Delaloye R., Phillips M. & the PERMOS Scientific Committee	First results from PERMOS after the hot summer 2015
P 10.11	Paul F.	Fifty years of glacier surges in the central Karakoram
P 10.12	Proksch M., Löwe H., Schneebeli M.	A local calibration approach to derive snow structural parameters from SnowMicroPen measurements.
P 10.13	Ragetli S., Bolch T., Immerzeel W., Pellicciotti F.	Glacier changes in a Nepalese catchment and hydrological impacts
P 10.14	Seguinot J., Bauder A., Funk M., Jouvét G., Limpach P., Neyer F., Ryser C., Sugiyama S. and Weidmann Y.	Measurements of ice dynamical properties of Bowdoin Glacier, Northwest Greenland
P 10.15	Tilg A.-M., Marty C., Klein G.	An automatic algorithm for validating snow depth measurements of IMIS stations
P 10.16	Vielí A., Lüthi M., Moreau L., Joughin I., Reisser M., Mercenier R., Rohner C.	Long-term dynamics and forcing of a tidewater outlet glacier in West Greenland
P 10.17	Werder M., Huss M.	Towards the volumes of all the glaciers in the world 2.0
P 10.18	Azisov E., Kronenberg M., Barandun M., Hoelzle M., Usubaliev R.	Glacier Monitoring on Golubin Glacier since 2011

Session II

P 10.19	Avak S.E., Birrer M., Wälle M., Bartels-Rausch T., Schwikowski M., Eichler A.	Development of a Cryocell for High-Resolution Trace Element Analysis of Ice Cores Using LA-ICP-MS
P 10.20	Bartels-Rausch T., Orlando F., Huthwelker T., Waldner A., Ammann M.	The nature of frozen salt solutions: A new in-situ XPS approach
P 10.21	Edebeli J., Ammann M., Eichler A., Schneebeli M., Bartels-Rausch T.	Temperature dependence of ozone loss by reaction with NaBr-films in coated-wall flow-tubes
P 10.22	Hoffmann H., Greilich S., Schock M., Stricker P., May B., Bohleber P., Wagenbach D.	Organic carbon investigations at ice cores from Colle Gnifetti – lessons learned and future challenges
P 10.23	Stopelli E., Conen F., Zimmermann L., Morris C.E., Alewell C.	Ice nuclei and the landscape-precipitation feedbacks: an example from the Arctic environment
P 10.24	Uglietti C., Zapf A., Jenk T., Szidat S., Salazar G., Hardy D.R., Schwikowski M.	The debate on the basal age of Kilimanjaro's plateau glaciers
P 10.25	Waldner A., Orlando F., Birrer M., Ammann M., Huthwelker T., Bartels-Rausch T.	Acidic trace gas adsorption on ice: XPS analysis with the new NAPP experimental cell at SLS
P 10.26	Osmont D., Sigl M., Schmidely L., Wendl I., Isaksson E., Schwikowski M.	A 250-year black carbon record from the Lomonosovfonna ice core, Svalbard

Session 11: Hydrology, Limnology and Hydrogeology

Room 116

Convenors: Ole Rössler, B. Schädler, T. Jonas, M. Sinreich, M. Zappa

9:00 – 9:20	Philipp Brunner	<i>Chair: Michael Sinreich</i> Keynote: Bridging the conceptual gaps between hydrology and hydrogeology
9:20 – 9:35	Khayrat K., Jenny P.	A Multi-Scale Pore Network Model for Two-Phase Flow In Porous Media
9:35 – 9:50	Wanner P., Hunkeler D., Parker B., Chapman S., Aravena R.	Applying Compound-Specific Isotope Analysis (CSIA) to identify biodegradation of chlorinated hydrocarbons in low permeability sediments
9:50 – 10:05	Traber D., Gmünder C.	Hydrodynamic model of deep flow systems in Northern Switzerland
10:05 – 10:20	Schilling O.S., Brunner P., Hunkeler D., Gerber C., Purtschert R., Kipfer R.	Using multiple isotopic tracers to measure the influence of groundwater abstraction on groundwater-surface water interactions in the Emmental
10:20 – 11:00	<i>Morning Poster Session with coffee</i>	
11:00 – 11:20	Alfred Wüest	<i>Chair: Beat Oertli (to be confirmed)</i> Keynote: Potentials and limits of three dimensional modelling in lakes
11:20 – 11:35	Vennemann T.W., Spangenberg J.E., Sprecher L., Khanh Ngo T.M.	The carbon cycle of Lake Geneva during late-summer stratification
11:35 – 11:50	Tron S., Perona P., Gorla L., Schwarz M., Laio F., Ridolfi L.	Analytical model to predict the root profile in fluvial ecosystems: experimental validation and GUI
11:50 – 12:05	Molnar P., Dzubakova K., Pfäffli M., Pellicano R., Fatichi S., Burlando P.	Monitoring riparian vegetation water stress in the Maggia River, Switzerland
12:05 – 12:40	<i>Lunch</i>	
12:40 – 13:40	General Assembly of the Swiss Society for Hydrology and Limnology SGHL	<i>Chair: Beat Oertli</i>
13:40 – 14:20	Hydrobiology-Limnology Award	<i>Chair: Reinhard Bachofen</i> <i>Chair: Massimiliano Zappa</i>
14:25 – 14:45	Dieter Rickenmann	Keynote: Possible impact of climate change on brown trout (<i>Salmo trutta fario</i>) recruitment
14:45 – 15:00	Speich M., Scherstjanoi M., Zappa M., Lischke H.	FORHYCS – A distributed ecohydrological model for assessing global change impact on forests and water resources

15:00 – 15:15	Niayifar A., Perona P.	Efficient ecologic and economic operational rules for dammed systems by means of nondominated sorting genetic algorithm II
15:15 – 15:30	Griessinger N., Jonas T., Seibert J.	The value of snow data assimilation for hydrological modelling in alpine catchments
15:30 – 16:00	<i>Afternoon Poster Session with coffee</i>	

Posters Session 11: *in front of Room 035*

P 11.1	Diem S., Masset O., Poppei J.	Using natural tracers for transport model calibration
P 11.2	Gianni G., Richon J., Vogel A., Perrochet P., Brunner P.	Identification of Transience in Streambed Hydraulic Conductivity
P 11.3	Käser D.H., Hunkeler D.	Rethinking the role of alluvial groundwater in sustaining mountain baseflow: a mesoscale study based on continuous measurements of fluxes and storage
P 11.4	Schneeberger R., Waber H.N., Mäder U.K., Kober F., Herwegh M.	Hydrogeology at Grimsel Test Site: hydrochemistry and flow paths
P 11.5	Benoit L., Mariethoz G.	High resolution rain gauges for fine scale temporal rain intensity monitoring
P 11.6	Carlier C., Cochand F., Wirth S., Staudinger M., Seibert J., Stölzle M., Stahl K., Weiler M., Hunkeler D., Brunner P.	Hydrogeological and topographic controls on watershed vulnerability to droughts
P 11.7	de Palézieux L., Löw S., Zwahlen P.	Mountain slope hydrogeology in deep-seated gravitational slope deformations near Poschiavo, CH
P 11.8	Dib I., Chettah W., Dib H., Hamed Y.	Risque de contamination des eaux souterraines par les nutriments et qualité hydrochimique : cas de la plaine Gadaine-Ain Yaghout (Nord-Est de Batna), Algerie
P 11.9	Kerrou J., Negro F.	The influence of faults on groundwater flow and mass transport dynamics in the area of Neuchâtel
P 11.10	Pera S., Bronzini S., Molignani P.	Assessing surface water contribution to groundwater recharge: An example from Traversagna Valley, Ticino.
P 11.11	Santos A.C., Schaepli B., Portela M.M., Manso P., Schleiss A., Rinaldo A.	Characterization of flow duration curves in Switzerland
P 11.12	Weber, S., Wanner, C., Wersin, P.	Temporal and spatial analysis of the redox plume in the groundwater at Aarberg, Switzerland

P 11.13	Zermatten M.-A., Bruner P., Renard P.	The influence of aquifer heterogeneity on drawdown and transmissivity estimation
P 11.14	Werthmüller S., Surbeck H., Ryser R.	Airborne exploration of anomalous high uranium contents in water and soil in the region of the "Lyssbach" – Canton of Bern
P 11.15	Kaveh Firouz A., Burg J.-P.	Geomorphological analysis of the drainage system along the North Tabriz Fault

Session 12: Temperature and Density Influenced Flow and Transport of Groundwater and Coupled Hydraulic Processes (cancelled)

Session 13: The International Year of Soils: open session on soil security

Room 103

Convenors: Nikolaus J. Kuhn, Stéphane Burgos, Emmanuel Frossard, Frank Hagedorn, Elena Havlicek, Jens Leifeld, Pascal Walther, Andreas Papritz, Urs Steiger

9:00 – 9:15	Frossard E.	<i>Chair: Nikolaus J. Kuhn</i> The role of soil for humans and the environment
9:15 – 9:30	Arata L., Meusburger K., Alewell C.	Soil erosion assessment in Swiss mountainous areas using fallout radionuclides (¹³⁷ Cs, ²³⁹⁺²⁴⁰ Pu)
9:30 – 09:45	Bader C., Leifeld J., Müller M., Schulin R.	Assessing the carbon sequestration potential of Miscanthus cropping on managed organic soils
09:45 – 10:00	Studer M.S., Gonzalez Dominguez B.R., Niklaus P. A., Abiven S.	Effect of climate change on plant-soil-atmosphere carbon cycling: plant vs. soil organic matter derived CO ₂ effluxes
10:00 – 11:00	<i>Morning Poster Session with coffee</i>	
11:00 – 11:15	Gosheva S., Müller M., Walthert L., Zimmermann S., Niklaus P., Beatriz R., Domínguez G., Abiven S., Hagedorn F.	<i>Chair: Jens Leifeld</i> SOM storage and pool distribution along climatic and altitudinal gradients in Swiss forest soils
11:15 – 11:30	van der Voort T.S., Zell C., McIntyre C., Hagedorn F., Fisher L., Eglinton T.	Insights into soil organic matter stability using temporal, fraction- and compound-specific radiocarbon analysis
11:30 – 11:45	Menichetti L., Leifeld J., Kätterer T.	Exploring mean residence time and distribution of SOC pools in a long term experiment in Switzerland through explicit radiocarbon model structures
11:45 – 12:00	Solly E.F., Brunner I., Herzog C., Schöning I., Schrupf M., Fritz H.S., Susan E.T., Hagedorn F.,	Unravelling the “real age” of tree fine roots
12:00 – 14:00	<i>Lunch</i>	

Posters Session 13:

in front of Room 103

P 13.1	Kuhn N.J., Hu Y., Bloemertz L., Xiao L., He J., Li H., Greenwood P.	Conservation tillage and sustainable intensification of agriculture: regional vs. global benefits analysis
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P 13.2	González Domínguez B.R., Studer M., Niklaus P., Abiven S.	Losses of organic carbon from Swiss forest soils in relation to climate, soil properties and landscape characteristics
P 13.3	Tresch S.	Soil quality indicators of urban gardens in Zurich

Session 14: Biogeochemistry of Aquatic and Terrestrial Realms

Room 117

Convenors: Helge Niemann, Jakob Zopfi, Moritz Lehmann, Franz Conen, Katrin Meusburger, Christine Alewell

09:00 – 09:15	Wiggenhauser M., Wilcke W., Bigalke M., Imseng M., Müller M., Rehkämper M., Murphy K., Kreissig K., Frossard E.	Isotopic fractionation of Cd in agricultural soil-plant systems
09:15 – 09:30	Bigalke M., Kusonwiriawong C., Abgottspon F., Wilcke W.	Fate of Cu in flooded soils: a stable isotope approach
09:30 – 09:45	Le Faucheur S., Freiburghaus A., Dranguet P., Slaveykova V.I.	Mercury impacts towards periphyton
09:45 – 10:00	Müller B.	Interaction between the Bacterium <i>Pseudomonas fluorescens</i> strain CHA0, its genetic derivatives and vermiculite: Effects on chemical, mineralogical and mechanical properties of vermiculite
10:00 – 11:00	<i>Morning Poster Session with coffee</i>	
11:00 – 11:15	Birkholz A., Meusburger K., Schindler Wildhaber Y., Mabit L., Alewell C.	Apportionment of sediment sources in a small river of the Swiss plateau using CSIA of plant wax lipids
11:15 – 11:30	Auderset A., Martinez-Garcia A., Haug G., Eglinton T., Tiedemann R.	Early Pliocene Sea Surface Temperature Reconstruction in the North Atlantic
11:30 – 11:45	Weber Y., Sinninghe Damsté J.S., Schubert C.J., Gilli A., Lehmann M.F., Niemann H.	Potential and constrains of lipid-based paleothermometry in lake sediments: New insights on the sources of branched GDGTs
11:45 – 12:00	Spangenberg J.E., Schweizer M., Zufferey V.	Molecular and isotopic changes in leaf lipids of plants living under abiotic stress conditions – implications for organic geochemical proxies
12:00 – 14:00	<i>Lunch</i>	
14:00 – 14:15	Nelson D.B., Kahmen A.	Exploring the links between plant waters and leaf wax isotopes from a European sample network
14:15 – 14:30	Steinle L., Maltby J., Engbersen N., Zopfi J., Bange H., Kock A., Lehmann M., Treude T., Niemann H.	Environmental controls on aerobic methane oxidation in coastal waters (SW-Baltic Sea)
14:30 – 14:45	Lehmann M.F., Simona M., Wyss S., Bles J., Frame C.H., Niemann H., Veronesi M., Zopfi, J.	Powering up the “bio-geochemical engine”: The impact of exceptional mixing events on fixed-nitrogen and methane turnover in a deep meromictic lake
14:45 – 15:00	Huang J.-H., Jia B., Tang Y., Tian L., Franz L., Alewell C.	Impact of fish farming on phosphorus in reservoir sediments

15:00 – 15:15	Morlock, M., Vogel, H., Nigg, V., Russell, J.M., Bijaksana, S. & the TDP science team	Erosion intensity and element cycling under changing hydroclimatic conditions during the past ~60 kyr BP in the catchment of tropical Lake Towuti, Indonesia
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15:15 – 16:00 ***Afternoon Poster Session with coffee***

Posters Session 14:

in front of Room 001

P 14.1	Schomburg A., Guenat C., Brunner P., Verrecchia E. P., Le Bayon R.-C.	Applicability of Rock-Eval pyrolysis to quantify ecosystem engineers' impact on soil structure formation in a carbonate- rich pre-alpine floodplain
P 14.2	Stern B., Giglio E., Vogel H., Anselmetti F., Lovas R., Niemann H., Lehmann M. F.	Eutrophication and re-oligotrophication of Lake Sempach over the last 150 years: Assessing the impact on calcium carbonate nucleation and redox-sensitive metals in the sediments
P 14.3	Naeher S., Huguet A., Roose- Amsaleg C.L., Laverman A.M., Fosse C., Lehmann M.F., Derenne S., Zopfi J.	Geochemical constraints on anaerobic ammonium oxidation (anammox) in a riparian zone of the Seine Estuary
P 14.4	Su G., Niemann H., Zopfi J., Lehmann M.F.	Potential role of nitrate, iron and manganese reduction during anaerobic methane oxidation in lacustrine sediments
P 14.5	Moinecourt C., Dranguet P., Zonta R., Slaveykova V.I., Le Faucheur S.	Response of periphyton communities to metals, including Hg, in the lagoon of Venice.
P 14.6	Richner D., Niemann H., Steinle L., von Deimling J.S., Urban P., Hoffmann J., Schmidt M., Treude T., Lehmann M.F.	Short-term variations of methane and methanotrophic activity in a coastal inlet (Eckernförde Bay, Germany)
P 14.7	Blattmann T., Wen K., Li J., Zhao Y., Zhang Y., Wacker L., Michael Plötze., Liu Z., Eglinton T.	Tracing Pathways of Organic Matter Transport in the Modern South China Sea
P 14.8	Nigg V., Vogel H., Morlock M., Anselmetti F., Russell J.M., Bijaksana, S.	Understanding grain-size effects on element geochemistry and mineralogy in sedimentary records from Lake Towuti, Sulawesi, Indonesia
P 14.9	Ladd S.N., Dubois N., Schubert C.	Sedimentary abundance and isotopic composition of algal lipid biomarkers in lakes of variable Phosphorous concentration in central Switzerland
P 14.10	Freymond C.V., Kündig N., Peterse F., Buggle B., Giosan L., Filip F., Eglinton T.I.	From source to sink – biomarker transport along the Danube River
P 14.11	Tischer J., Zopfi J., Frame C.H., Lehmann M.F.	Nitrogen cycling and N ₂ O production in the water column of the ferruginous meromictic Lake La Cruz (Spain)

P 14.12	Ley M., Lehmann M., Niklaus P., Frey B., Kuhn T., Luster J.	Microhabitat effects on N ₂ O emissions from floodplain soils under controlled conditions
P 14.13	Kalvelage T., Normandeau C., Li W., Wallace D.W.R.	A time series of nitrogen speciation and nitrogen isotope fractionation during nitrification in a eutrophic coastal embayment
P 14.14	Frame C., Lau E., Nolan J., Goepfert T., Lehmann M.F.,	Acidification enhances N ₂ O production by aquatic ammonia oxidizing microorganisms
P 14.15	Cojean A., Zopfi J., Robertson E., Thamdrup B., Lehmann M.F.	Estimation of O ₂ influence on benthic nitrogen cycling in the south basin of Lake Lugano, Switzerland

Session 15: Atmospheric Processes and Interactions with the Biosphere

Room 119

Convenors: Christof Ammann, Stefan Brönnimann, Lutz Merbold, Peter Waldner

<i>Chair: Christof Ammann</i>		
09:00 – 09:15	Zscheischler J., Blanken P., Bohrer G., Clark K., Desai A., Fatichi S., Hollinger D., Keenan T., Novick K.A., Wolf S., Seneviratne S.I.	Short-term weather variability is an important control of interannual variability in carbon and water fluxes in temperate forests
09:15 – 09:30	Hörtnagl L., Bahn M., Buchmann N., Dias-Pinez E., Eugster W., Kiese R., Klumpp K., Ladreiter-Knauss T., Wohlfahrt G., Zeeman M., Merbold L.	Management influence on GHG fluxes over Central European grasslands
09:30 – 09:45	Felber R., Neftel A., Ammann C.	The importance of organic carbon fluxes for the determination of a pasture carbon budget
09:45 – 10:00	Merbold L., Decock C., Hoertnagl L., Fuchs K., Eugster W.	No memory effects of restoration on N ₂ O exchange above an intensively managed grassland in Switzerland
10:00 – 10:15	Juszk I., Iturrate-Garcia M., Schaepman-Strub G.	Influence of Arctic tundra vegetation on radiation and soil fluxes
10:15 – 11:00	<i>Morning Poster Session with coffee</i>	
<i>Chair: Lutz Merbold</i>		
11:00 – 11:15	Osterwalder S., Sommar J., Riedi J., Huang J.-H., Åkerblom, S., Nilsson M.B., Bishop K., Alewell C.	Elemental mercury evasion from contaminated and background soils in Switzerland and Sweden
11:15 – 11:30	Reimann S., Vollmer M.K., Schoenenberger F., Henne S., Brunner D. & Emmenegger L.	New halogenated greenhouse gases in the atmosphere: from anesthetics to mobile air conditioning
11:30 – 11:45	Klein G., Vitasse Y., Filippa G., Marty C., Rixen C., Rebetez M.,	Spatiotemporal patterns of snowmelt dates in the Swiss Alps shown by a new data processing method
11:45 – 12:00	Davin E., Maisonnave E., Seneviratne S.,	Evaluation of a Regional Climate Model with improved land surface processes representation
12:00 – 12:15	Oney B., Gruber N., Henne S., Leuenberger M., Emmenegger L., Brunner D.,	Determining the regional biospheric signal in CO ₂ measurements using CO as a quantitative tracer for anthropogenic CO ₂
12:15 – 13:30	<i>Lunch</i>	
<i>Chair: Stefan Brönnimann</i>		
13:30 – 14:00	(tbd)	ACP Award Talk + Ceremony

14:00 – 14:15	Mystakidis S., Davin L.E, Gruber N. & Seneviratne I.S.	Hydrological and biogeochemical constraints on carbon cycle projections
14:15 – 14:30	Zink K., Berchet A., Brunner D., Emmenegger L.	Simulating air pollution on the city scale
14:30 – 14:45	Aebi Ch., Gröbner J., Kämpfer N., Vuilleumier L.	Cloud radiative effect depending on cloud type and cloud fraction at three sites in Switzerland
14:45 – 15:00	Pfister C.	500 years of weather data for surfing
15:00 – 15:15	Eugster M.	Global Precipitation Measurement (GPM): An example of how NASA brings current research into classrooms
15:15 – 16:00	<i>Afternoon Poster Session with coffee</i>	

Posters Session 15: *in front of Room 035*

P 15.1	Buri A., Cianfrani C., Pradervand J-N., Guisan A.	Predicting plant distribution in an heterogeneous Alpine landscape: does soil matter?
P 15.2	Ghiggi G., Mariethoz G., Berne A.	A Multiple Point Statistics Approach to Combine Weather Radar and Rain-Gauge Data
P 15.3	Paul S., Ammann C., Alewell C., Leifeld J.	CO ₂ and CH ₄ exchange of a degrading fen, Seeland, Switzerland

Session 16: Phenology and Seasonality

Room 209

Convenors: Martine Rebetez, Christian Rixen, This Rutishauser

09:30 – 09:45	Vuffray Z., Deléglise C., Amaudruz M., Jeangros B., Mosimann E., Meisser M.	<i>Chair: Martine Rebetez</i> Evolving phenology of semi-natural meadows in the western part of Switzerland
09:45 – 10:00	Mazzoleni S., Carteni F., Giannino F., Basile B., Gianni Pezzatti B., Conedera M.,	A new process-based approach to model plant phenology based on carbon allocation
10:00 – 10:30	Körner C., Basler D., Hoch G., Kollas C., Lenz A., Randin C., Vitasse Y., Zimmermann N.	Phenology helps explaining the low temperature range limits of temperate tree species
10:30 – 11:00	<i>Morning Poster Session with coffee</i>	
		<i>Chair: Martine Rebetez</i>
11:00 – 11:15	D'Odorico, P., Buchmann N.	Land Surface Phenology – A good surrogate for photosynthesis seasonality?
11:15 – 11:30	Basler D.	Linking mixed temperate forest canopy closure to remote sensing phenology
11:30 – 11:45	Prevéy J.S., Rixen C., Hollister R., Henry G., Welker J., Molau U., Hoyer T., Bjorkman A., Cannone N., Cooper E., Elberling B., Elmendorf S., Fosaa A., Jónsdóttir I.S., Klanderud K., Kopp C., Levesque E., Mauritz M., Myers-Smith I., Natali S., Oberbauer S., Post E., Rumpf S., Schmidt N.M., Schuur T., Semenchuk P., Troxler T., Vellend M., Wahren H., Wipf S..	The temporal niches of Arctic and alpine plants help explain phenological responses to climate warming
11:45 – 12:00	Eugster M.	Seasons in my region (SIMR)
12:00 – 12:15		Preisverleihung 5. Schweizer Wettbewerb für Phänologie und Saisonalität
12:15 – 14:00	<i>Lunch</i>	
		<i>Chair: This Rutishauser</i>
14:00-14:30	CPS members	Meeting Commission for Phenology and Seasonality

Posters Session 16:

in front of Room 035

- P. 16.1 Rutishauser T., Brönnimann S.,
Rebetez M., Eugster W. and
project collaborators Climate impact science with citizens. First results of the
«OpenNature.ch» project

Session 17: Earth Observation Addressing Key Earth System processes

Room 208

Convenors: Stefan Wunderle, Mathias Kneubühler, Brigitte Buchmann, Alain Geiger

<i>Chair: Stefan Wunderle, Brigitte Buchmann, Mathias Kneubühler, Alain Geiger</i>		
9:00 – 9:15	Böhler J.E., Kneubühler M., Tuia D., Schaepman M.E.	Improved land cover assessment in agriculture with optical remote sensing data
9:15 – 9:30	Meusbürger K., Alewell C.	Estimating vegetation parameters in an alpine catchment by means of WorldView-2 imagery
9:30 – 9:45	Wingate V.R., Phinn S.R., Scarth P., Kuhn N.	Mapping decadal land cover changes in the woodlands of north eastern Namibia using the Landsat satellite archive (1975-2014)
9:45 – 10:00	Milani G., Tonolla D., Robinson C., Kneubuehler M., Doering M., Schaepman M.	Classification of habitat diversity in two floodplains using UAVs
10:10 – 11:00	<i>Morning Poster Session with coffee</i>	
11:00 – 11:15	Baffelli S., Frey O., Hajnsek I.	Observing the Bisgletscher with Ku-band differential radar interferometry
11:15 – 11:30	Kuhlmann G., Hueni A., Damm A., Emmenegger L., Brunner D.,	High-resolution remote sensing of NO ₂ maps over Zurich with the Airborne Prism Experiment (APEX): new results
11:30 – 11:45	Gian Lieberherr, Michael Riffler, Stefan Wunderle	Lake Surface Water Temperature: Performance of split-window coefficients – a sensitivity analysis
11:45 – 12:00	Lohmann H.	Satellite images: The Weissenstein anticline is younger than the Jura foldbelt
12:00 – 14:00	<i>Lunch</i>	

Posters Session 17:

in front of Room 035

P 17.1	Bur P., Lieberherr G., Wunderle S.	Lake surface water temperatures derived from Landsat 8
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Session 18: Geoscience and Geoinformation – From Data Acquisition to Modelling and Visualisation

Room 035

Convenors: Nils Oesterling, Adrian Wiget, Massimiliano Cannata, Michael Sinreich

<i>Chair: Massimiliano Cannata</i>		
09:20 – 09:40	Brentini M., Favre S., Giuliani G., Lehman A., Moscariello A.	Information System for subsurface geological data: Overview of the situation in Europe
09:40 – 10:00	Brodhag S.H., Oesterling N., Baumberger R.	Data Management Strategy Based on Harmonised Data Models – An Example from Switzerland
10:00 – 11:00	<i>Morning Poster Session with coffee</i>	
<i>Chair: Nils Oesterling</i>		
11:00 – 11:20	Composto S., Bollinger D., Ingensand J., Patthey P., Eyholzer R., Heeb C.	An analysis of deer habitat on the Swiss Plateau
11:20 – 11:40	Schmidt S., Meusburger K., Panagos P., Alewell C.	Seasonal variability of rainfall erosivity across Europe and Switzerland
11:40 – 12:00	Preisig G., Gischig V., Eberhardt E., Hungr O.	Hydromechanical versus seismic fatigue in progressive failure of deep-seated landslides
12:00 – 14:00	<i>Lunch</i>	
<i>Chair: Adrian Wiget</i>		
14:00 – 14:20	Marti U.	Gravity field modeling in Switzerland
14:20 – 14:40	Baumberger R., Herwegh M., Kissling E.	Derivation and verification of a structural 3D model of the Haslital (Aar massif, Switzerland) from remote sensing and field data
14:40 – 15:00	Baumeler A., Reber D., Sinreich M.	Der digitale hydrogeologische Datensatz 1:100000 als Teil einer massstabs-übergreifenden Raumdatenhaltung: Anforderungen und Potential
15:00 – 16:00	<i>Afternoon Poster Session with coffee</i>	
<i>Chair: Michael Sinreich</i>		
16:00 – 16:20	Cannata M., Colombo M., Antonovic M., Cardoso M., Delucchi A., Gianocca G., Brovelli M.	I CAMMINI DELLA REGINA – Open Source based tools for preserving and culturally exploring historical traffic routes
16:20 – 16:40	Leder R.M.	iDigBio vs. FOSSIL? Closing the gap and franking private fossil resources into professional databases

Posters Session 18:

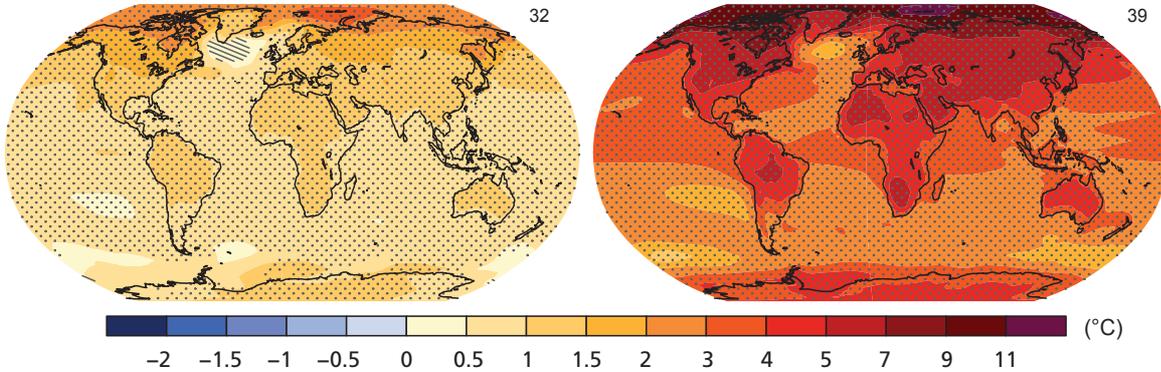
in front of Room 035

P 18.1	Zheng L., May D., Gerya T.	Deformation enhanced fluid distribution in the subduction interface: numerical modelling
P 18.2	Spataro A., Hoffmann M.	Long range laserscanning for the Gneiss quarries survey

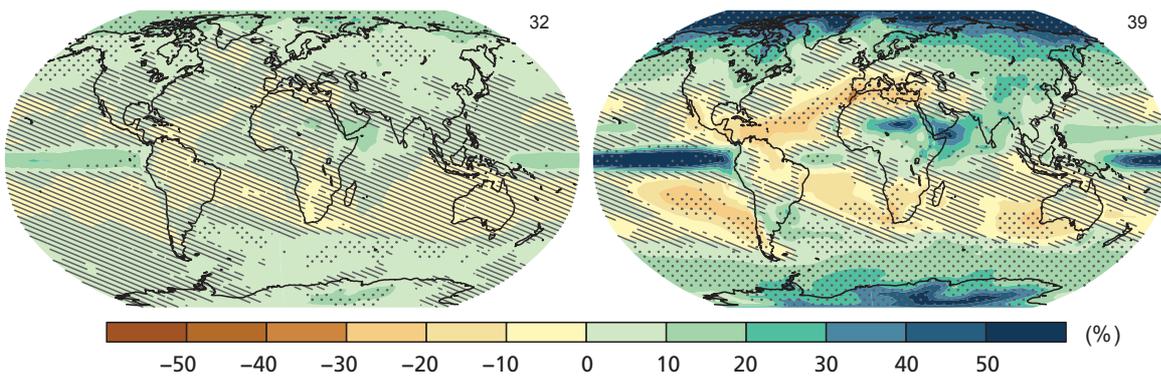
RCP 2.6

RCP 8.5

(a) Change in average surface temperature (1986–2005 to 2081–2100)



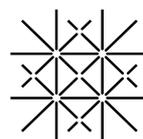
(b) Change in average precipitation (1986–2005 to 2081–2100)

**Legend for cover pictures:**

The cover pictures are details of the figure above showing projected temperature and precipitation changes by the end of the 21st century under a strong climate mitigation scenario (left) and a business-as-usual scenario (right): Coupled Model Intercomparison Project Phase 5 (CMIP5) multi-model mean projections (i.e., the average of the model projections available) for the 2081–2100 period under the RCP2.6 (left) and RCP8.5 (right) scenarios for (a) change in annual mean surface temperature and (b) change in annual mean precipitation, in percentages. Changes are shown relative to the 1986–2005 period. The number of CMIP5 models used to calculate the multi-model mean is indicated in the upper right corner of each panel. Stippling (dots) indicates regions where the projected change is large compared to natural internal variability (i.e., greater than two standard deviations of internal variability in 20-year means) and where at least 90% of the models agree on the sign of change. Hatching (diagonal lines) indicates regions where the projected change is small compared to natural internal variability (i.e., less than one standard deviation of natural internal variability in 20-year means). (Source: Adapted from Figure SPM.8 of IPCC, 2013: Summary for Policymakers. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1–30, doi:10.1017/CBO9781107415324.004.)

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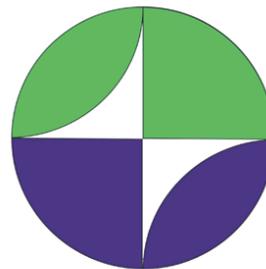
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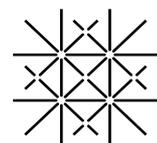
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