



## 18th Swiss Global Change Day

### List of Posters

# Atmosphere / Hydrosphere

#### 01 Atmosphere / Hydrosphere

**Climatology of cloud (radiative) parameters at two stations in Switzerland using hemispherical sky-cameras**

Aebi Christine (PMOD / WRC)

#### 02 Atmosphere / Hydrosphere

**Extreme flood event in the Southern Alps in 1868:  
Historical reconstruction and numerical simulation**

Moritz Bandhauer (Universität Bern, Oeschger Centre)

#### 03 Atmosphere / Hydrosphere

**Estimation of the fossil-fuel component in atmospheric CO<sub>2</sub> based on radiocarbon measurements at the Beromünster tall tower, Switzerland**

Tesfaye Berhanu (Universität Bern)

#### 04 Atmosphere / Hydrosphere

**Cloud Effect on Temperature Profiles from Microwave Radiometry**

Leonie Bernet (Universität Bern)

#### 05 Atmosphere / Hydrosphere

**Bias correction of multi-variate indices: Heat stress in Switzerland**

Ana Casanueva (MeteoSchweiz)

#### 06 Atmosphere / Hydrosphere

tba

Holger Czerwenka (Meteotest)

#### 07 Atmosphere / Hydrosphere

**Assessing stability of the SAM teleconnections and implications for SAM reconstructions over the past Millennium**

Christoph Dätwyler (Universität Bern)

#### 08 Atmosphere / Hydrosphere

**Synoptic Circulation Patterns and Mesoscale Features Associated with Local Extreme Precipitation in Switzerland**

Lorenzo Di Marco (Universität Bern, Oeschger Centre)

#### 09 Atmosphere / Hydrosphere

**Tracking N<sub>2</sub>O Source Processes Above and Intensively Managed Grassland Based on In-Situ Analysis of Ambient N<sub>2</sub>O Isotopic Composition**

Erkan Ibraim (EMPA)

#### 10 Atmosphere / Hydrosphere

**Impact of Global Warming on the Snowpack Seasonality at High Elevation in the Swiss Alps**

Geoffrey Klein (Université de Neuchâtel)

#### 11 Atmosphere / Hydrosphere

**Short-term stratospheric ozone fluctuations observed by GROMOS at Bern**

Lorena Moreira (Universität Bern)

12 Atmosphere / Hydrosphere

**Human Influence on the Runoff Regime and Runoff Extremes of the River Thur**

Regula Mülchi (Universität Bern, MRI)

13 Atmosphere / Hydrosphere

**Recurving north Atlantic tropical cyclones: Downstream development of heavy precipitation events**

Roman Pohorsky (Universität Bern)

14 Atmosphere / Hydrosphere

**Diurnal variation in middle atmospheric ozone by ground based microwave radiometry at Ny-Alesund**

Franziska Schranz (Universität Bern)

15 Atmosphere / Hydrosphere

**A 6000-year history of forest fires and climate from an ice core in Mongolia**

Michael Sigl (Paul Scherrer Institut)

16 Atmosphere / Hydrosphere

**Block detection and European heat waves**

Leonie Villiger (Universität Bern)

17 Atmosphere / Hydrosphere

**Regional amplification of extreme temperatures strongly controlled by soil moisture-temperature feedbacks**

Martha Vogel (ETH Zürich)

18 Atmosphere / Hydrosphere

**Impact of Climate Change on the Climatology of VB Cyclones**

Martina Messmer (Universität Bern)

19 Atmosphere / Hydrosphere

**Quantifying spatio-temporal variations of soil moisture control on the surface energy balance**

Clemens Schwingshackl (ETH Zürich)

20 Atmosphere / Hydrosphere

**Bias-correction for precipitation over the Alps during present-day control**

Patricio Velásquez (University of Bern, Oeschger Centre)

21 Atmosphere / Hydrosphere

**Modeling carbon and  $\delta^{13}\text{C}$  in the coupled atmosphere-ocean-land-sediment-geosphere system-geosphere system on glacial/interglacial timescales**

Aurich Jeltsch-Thömmes (University of Bern, Oeschger Centre)

22 Atmosphere / Hydrosphere

**Natural and anthropogenic-forced variability in oceanic oxygen: results from an Earth System Model simulation over the last millennium and the 21st century**

Angélique Hameau (University of Bern, Oeschger Centre)

23 Atmosphere / Hydrosphere

**Mean ocean temperature evolution in the past 40k years from ice core noble gas thermometry**

Daniel Baggenstos (Universität Bern)

24 Atmosphere / Hydrosphere

**Spatio-Temporal Representativeness of Ground-Based Downward Solar Radiation Measurements**

Matthias Schwarz (ETH Zürich)

25 Atmosphere / Hydrosphere

**tba**

Céline Aymon (Universität Bern, Oeschger Centre)

26 Atmosphere / Hydrosphere

**Integrated Carbon Observation System Switzerland**

Susanne Burri (ETH Zürich)

27 Atmosphere / Hydrosphere

**Modeling Corals under Global Warming and Ocean Acidification**

Disa Güven (ETH Zürich)

28 Atmosphere / Hydrosphere

**"Best practices" pour la création ou la restauration de mares et étangs alpins**

Andrea Finger-Stich (Haute Ecole Spécialisée de Suisse Occidentale)

29 Atmosphere / Hydrosphere

**Numerical investigation with a coupled single-column lake-atmosphere model: An application to Western Switzerland**

Stéphane Goyette (Université de Genève)

30 Atmosphere / Hydrosphere

**Quasi 18-hour wave activity in ground-based observed mesospheric H<sub>2</sub>O over Bern**

Martin Laier (Universität Bern)

31 Atmosphere / Hydrosphere

**Long range offshore transport of organic carbon from the Canary Upwelling System to the open North Atlantic**

Elisa Lovecchio (ETH Zürich)

32 Atmosphere / Hydrosphere

**tba**

Patrik Pfister (Universität Bern)

33 Atmosphere / Hydrosphere

**tba**

Damiano Righetti (ETH Zürich)

34 Atmosphere / Hydrosphere

**tba**

Simon Christian Scherrer (MeteoSchweiz)

35 Atmosphere / Hydrosphere

**tba**

Jochen Schmitt (Universität Bern)

36 Atmosphere / Hydrosphere

**Flood history in lake sediments from SW Ecuador of the past two millennia: El Niño or not?**

Tobias Schneider (University of Bern, Oeschger Centre)

37 Atmosphere / Hydrosphere

**Thunderstorms and Rain Showers in a Continental-Scale Convection-Resolving Climate Simulation**

David Leutwyler (ETH Zürich)

# Geosphere / Biosphere

- 01 Geosphere / Biosphere  
**Extinction Dynamics of Mountainous Species under Climate Change**  
Giezendanner Jonathan (EPFL)
- 02 Geosphere / Biosphere  
**Controlling factors of soil organic carbon storage (SOC) in Swiss forest soils – the impact of land-use history, climate and soil chemistry**  
Gosheva Sia (WSL)
- 03 Geosphere / Biosphere  
**The climate history of Lake Trasimeno (central Italy) during Late Glacial-Holocene transition revealed from ostracod assemblages**  
Marta Marchegiano (Université de Genève)
- 04 Geosphere / Biosphere  
**Carbon limitation: facts or fiction? A case about alpine plants**  
Möhl Patrick (University of Basel)
- 05 Geosphere / Biosphere  
**The influence of snow cover duration on alpine plant phenology**  
Maria Vorkauf (Universität Bern)
- 06 Geosphere / Biosphere  
**Shaded trees save their carbon**  
Weber Raphael (University of Basel)
- 07 Geosphere / Biosphere  
**Controlling factors of Southern Ocean Coccolithophore Biogeography**  
Nissen Cara (ETH Zurich)
- 08 Geosphere / Biosphere  
**tba**  
Danilo Bolliger
- 09 Geosphere / Biosphere  
**tba**  
Sabrina Caneva
- 10 Geosphere / Biosphere  
**Projected climate change impacts on mountain forests in the Simmental, Swiss Alps**  
Christoph Schwörer (Universität Bern)
- 11 Geosphere / Biosphere  
**tba**  
Ojeda Perez
- 12 Geosphere / Biosphere  
**It's all about scale! The interaction between disturbances and tree species diversity at different spatial scales**  
Laura Schuler (ETZ Zürich)
- 13 Geosphere / Biosphere  
**Sedimentary record of the Naleshwar Lake (Maharastra, India): a witness of climate change and influence of human activity during the last 100 years**  
Dorota Czerski (Scuola Universitaria Professionale della Svizzera Italiana)
- 14 Geosphere / Biosphere  
**Stem diameter variations in mature individuals of six European forest tree species reflect the water status at treetop**  
Lars Dietrich (Universität Basel)

15 Geosphere / Biosphere

**Lithosphere strain rate and stress field orientations across the Alpine front**

Nicholas Houlié (ETH Zürich)

16 Geosphere / Biosphere

**Assessment of the climate sensitivity of natural hazard processes**

Peter Mani (geo7 AG)

17 Geosphere / Biosphere

**tba**

Davnah Payne (GMBA)

18 Geosphere / Biosphere

**Runaway warming or multimeter sea-level rise?**

Dorota Retelska

19 Geosphere / Biosphere

**Char-up & Decarbonize!**

**The potential multi-role of biochar - reducing climate change and increasing resilience of soils**

Martin Schmid (Ökozentrum Langenbruck)

20 Geosphere / Biosphere

**Constraining a DGVD with observations**

Sebastian Lienert (Universität Bern)

# Human Dimension / Sustainability

## 01 Human Dimensions / Sustainability

**New risks: Potential supply interruptions and stakeholder views on the growth of renewable electricity in Switzerland**

Paula Diaz Redondo (ETH Zürich)

## 02 Human Dimensions / Sustainability

**Consumption versus Production Based Accounting of CO<sub>2</sub> Emissions**

Sebastian Mader (Universität Bern)

## 03 Human Dimensions / Sustainability

**The visual narrative of climate change**

Rosemarie McMahon (ETH Zürich)

## 04 Human Dimensions / Sustainability

**Meltdown at the Nuclear Ballot**

**Voting Behavior and Opinion Shifts in Swiss Energy Politics**

Adrian Rinscheid (Universität St. Gallen)

## 05 Human Dimensions / Sustainability

**Assessment of Future Social Vulnerability to Climate Change in Sub-Saharan Africa**

Guillaume Rohat (Université de Genève)

## 06 Human Dimensions / Sustainability

**Evaluation of heat-related mortality and adaptation measures in Switzerland**

Martina S. Ragettli, Martin Röösli (Schweizerisches Tropen- und Public Health-Institute)

## 07 Human Dimensions / Sustainability

**Capacity building in support of the WMO Regional Training Center in Peru**

Stefanie Gubler (MeteoSchweiz)

## 08 Human Dimensions / Sustainability

**tba**

(MeteoSchweiz)

## 09 Human Dimensions / Sustainability

**Ausstellungsplakat 'Wasser unser'**

Barbara Keller (Alpines Museum)

## 10 Human Dimensions / Sustainability

**tba**

Maurice Skelton (ETH Zürich)

## 11 Human Dimensions / Sustainability

**tba**

Stefan Pfenninger (ETH Zürich)

# Organizations

01 Organisationen

**Science et Cité**

Jenny Flück (Science et Cité)

02 Organisationen

**Projekt CH2018**

Andreas Fischer (MeteoSchweiz)

03 Organisationen

**MeteoSwiss**

Erika Kienast (MeteoSchweiz)

04 Organisationen

**Past Global Changes**

Lucien von Gunten (PAGES IPO)

05 Organisationen

**Swiss Polar Research**

Grégoire Hauser (EDA)