

## Seminář Katedry fyzické geografie a geoekologie, zimní semestr 2019/2020

Geografické kolokvium studentů postgraduálního studia (čtvrtek, 14:00)

*Departmental seminar series, winter term 2019-2020 (Thursday, 14:00)*

**Tento semester nejsou semináře ve Věži – místnost je uvedena pro každý jednotlivý seminář**

### 10.10. VG PhD studenti 2.ročník

Ondřej Hotový

Modelling of future effects of changes in snow storages on occurrence and extremity of runoff caused by rain-on-snow events

Helen Dulfer

Reconstructing the central sector of the Cordilleran Ice Sheet through the last glacial cycle

Mariana Correias Gonzales

Outburst flood risk from cyclic ice-damming of the Plomo River, Central Andes (33° S).  
(Visiting PhD student at IRSM, CAS)

Kristýna Vlková

Habitat Connectivity of Large Carnivores in the Carpathians

### 7.11. PR Stefan Hecht (Heidelberg)

Potential of sediment tomography techniques (2D/3D) in geomorphology and geoarchaeology

### 21.11. VG PhD studenti 1.ročník

### 28.11. G2 Natacha Gribenski (University of Bern)

Challenges to understand past glaciation patterns in Central Asia and their paleoclimatic significance

Because of the sensitivity of glacier systems to temperature and precipitation, past changes in glacier geometry have been among the earliest proxies used for paleoclimate reconstructions. Global ice volume reconstructions from deep marine  $\delta O_{18}$  records and sea level reconstructions indicate a clear maximum during MIS 2, conventionally referred as the Last Glacial Maximum (LGM; ~29-19 ka), and matching global temperature minima from polar ice core records.

However, with the advent and accessibility of direct dating techniques and wider geographic coverage of paleoglacial studies, local ice maxima clearly preceding the global LGM are now repeatedly recorded in multiple polar and mountain regions. In particular, glacial reconstructions in Central Asia and Himalayan-Tibetan (CA-HT) orogens indicate that glaciers reach their maxima earlier in the Last Glacial cycle (MIS 5 to 3). It is, however, currently unclear if this emerging picture of out-of-phase Central Asian glaciations reflects the influence of varying distribution of precipitation over this region in the past, is related to dating artefacts, or to significant effects of non-climatic factors on glaciers mass balance (e.g. topography, debris cover, etc.). Here we explore the source of uncertainties, to which extent they may blurry the climate signal from glacial records in CA-HT setting, and the possible solutions to overcome these issues.

### 5.12. PR Jakub Langhammer

Využití bezpilotních technologií v hydrologickém výzkumu

### 12.12. G2 Achim Bräuning (Friedrich-Alexander Universität Erlangen-Nürnberg)

Multi-parameter tree-ring analyses for analyzing monsoon history and palaeoclimate on the Tibetan plateau

The Tibetan plateau is one of the most sensitive regions for climate change. Tree rings provide useful proxies to reconstruct past climate conditions and to evaluate forest ecosystem responses to ongoing climate change. However, different wood parameters show different seasonal responses to climate that may be combined in a useful way to better explain the variations of temperature and moisture and their interactions. The lecture introduces climate correlations of tree-ring width, wood density, and stable carbon and oxygen isotopes to climate and discusses their relation to the long-term variability of the Asian monsoon system and related changes in landscape dynamics.

### 9.1. G2 John Jansen (GFÚ AVČR)

Using cosmogenic nuclides in geomorphology