

Seminář Katedry fyzické geografie a geoekologie, letní semestr 2019/2020

Geografické kolokvium studentů postgraduálního studia (čtvrtky, 14:50, Věž)

Departmental seminar series, summer term 2019-2020 (Thursday, 14:50, Věž)

20.2. Jan Altman (Institute of Botany, CAS)

Tree rings as high-resolution multiproxy recorders of tropical cyclones

The most prominent trend of the increasing intensity of tropical cyclones over the last few decades was recorded for the western North Pacific and further changes in tropical cyclone activity are projected to occur here. The validity of future tropical cyclone projections is restricted by limitations on the length and quality of observational records and more high-resolution proxy records are needed to investigate the climate forcing of tropical cyclone activity. In my talk, I will present our past and current research dealing with utilization of tree rings as proxy record of past tropical cyclone activity in East Asia, but also West Atlantic. In general, I will show several possible application of tree ring data for detection of past disturbances.

27.2. Kristina Hippe (Freie Universität Berlin)

Landscape evolution and environmental change: New perspectives from the in situ cosmogenic ^{14}C - ^{10}Be chronometer

Cosmogenic ^{14}C produced within quartz has opened up new opportunities in Earth surface sciences and in the study of terrestrial paleoclimate. Quantifying complex surface exposure histories of glacial landscapes has so far been the primary application for in situ ^{14}C analysis. The insensitivity of in situ ^{14}C to surface pre-exposure and its high sensitivity to post-exposure surface shielding has made the ^{14}C - ^{10}Be nuclide pair an excellent tool for unravelling complex glacier chronologies in different glacial environments worldwide. However, beyond glacial settings emerging research on in situ ^{14}C in sedimentary systems highlights the capacity of the ^{14}C - ^{10}Be chronometer to quantify sediment transfer times in fluvial catchments or to constrain past changes in surface erosion rates as well as erosional events.

12.3. 2nd year PhD students

Ondřej Racek
Benjamin Stoker

26.3. 2nd year PhD students

Tereza Dlabáčková
Tomáš Krauskopf
Jitka Kofroňová

2.4. Veronica Tofani (University of Florence)

Within the topic of Landslides and their meteorological conditioning

16.4. John Jansen (Institute of Geophysics, CAS)

Within the topic of Using cosmogenic nuclides in geomorphology

13.5. Kamil Král (VÚKOZ - Silva Tarouca Research Institute)

Within the topic of LiDAR data in forestry and biology research

12.6. 1st year PhD students *starts at 10:00*