

## RESEARCH CLINIC

### General information

Supervisor:	Peter Houben
Title of clinic:	Design events (rainfall, flooding) of the Kleinwalser Valley Alps (N Austria)
Number of students:	One.
Major ( <i>if applicable and approved by the Major Convener</i> ):	EES
(Pre)requisites ( <i>if applicable</i> ):	Interest in working with simple statistical methods to analyse timeseries of rainfall and floods, basic GIS skills (ArcGIS)

### Research context

The Breitach stream valley (Kleinwalser Valley, N Austria) and its tributaries are the place of this year's Field Methods class. The course will include an exercise introducing students to basic approaches of natural hazard assessment. Processing and evaluating the underlying time series data is subject of this research clinic.

The research clinic requires the student to work with rainfall and flood records, evaluate the data (magnitude and frequency analysis), implement the data in an ArcGIS project, and reflect on spatial implications with respect to flood generation and impact areas.

### Students' tasks and activities

*Please specify the tasks and activities, timeline, the learning aims and how they are assessed, i.e. what the deliverables will be.*

- (A) Short review paper: Approaches to determine design events used on geosciences and civil engineering; characterization of the study area (2000 words; 4 weeks, ASMT: 25%)
- (B) Data implementation and evaluation (stats and GIS), work protocols, maps, report; ASMT: 50%
- (C) Mid of block4 - end: Evaluation and reflection report (ASMT, 25%)