

Session 3.10

Extreme events in lake sediments – possibilities and limitations in reconstructing records

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Lake sediments represent excellent archives that can hold high-resolution and continuous records of climate change, environmental evolution, anthropogenic impact and geological events. Detailed, multi-method analysis of lake sediment records can provide key information on short-term weather-induced events (e.g. floods, outbursts floods, dust storms...), on geological hazards (e.g. earthquakes, landslides, tsunamis, volcanic eruptions...) and/or on human activities affecting the lake and its catchment. For this session we call for studies of lacustrine event deposits, both in modern and ancient systems, that focus on i) the multi-method characterization of the event deposits, ii) the discrimination between different types of event deposits, iii) the use of event deposit records for paleoseismology, for paleo-tsunami studies, and for the reconstruction of flood and/or storm history, iv) the analysis of the impact on the lacustrine system following the occurrence of extreme events.