General Theme 3
3.2

Lake sediments are natural sediment traps within the human habitat and continuously record climate change, environmental evolution and anthropogenic impacts. High resolution analyses of lake sediments provide suitable records of short-term weather-induced events (e.g. floods, outbursts, dust storms…), geological hazards (e.g. earthquakes, volcanic eruptions…) and/or human activities affecting the catchment and the shores (e.g., slope failure caused by construction works…). This session aims at identification, discrimination and quantification of all kinds of extreme event deposits (e.g. mass-movements, turbidites, hyperpycnites, tephra layers…) and subsequent rapid changes observed in lake sediment records. It focuses either on the interplay between natural and anthropogenic factors on the generation of such events or on the long-term impact they may have on the aquatic biota and/or the physico-chemical properties of the water column. This includes the full range of methodological approaches that deal with long extreme event records using multi-proxy studies, on-site monitoring calibration and modeling.