[JJ] Evening Poster | M (Multidisciplinary and Interdisciplinary) | M-IS Intersection

[M-IS11]tsunami deposit

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The 2011 off the Pacific coast of Tohoku Earthquake and tsunami have an influence on the development of tsunami deposit research. After the tsunami, a lot of findings have been reported on various research fields. However, identification criteria of the tsunami deposit are not yet established. Moreover, it is still uncertain how to use the tsunami deposit in the risk assessment. In this session, we welcome researches from all aspect of sedimentary records of modern and paleo tsunamis both onshore and offshore, and numerical and experimental modeling studies for risk assessment. In addition, we also welcome other event deposits, such as flooding and storm surge, that they are considered to be important for discrimination of tsunami deposit.

[MIS11-P04]Tsunami deposits recorded around the Lake Jusanko, Tsugaru Peninsula

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Tsunami deposits are interpreted to be formed by traction processes associated with tsunami and are particularly used for marine deposits formed during the “backwash” phase. Such deposits are being used to identify past tsunami events and thereby better constrain estimates of both earthquake and tsunami hazard. 12core samples, taken using the handy geoslicers, collected on coastal land revealed candidates of historic and prehistoric tsunami sands around the Lake Jusanko in the Tsugaru Peninsula, northeast Japan. The deposits mainly consist of massive (sometime laminated), graded sands, peats and muds Two of sand layers at depths of 100-130 cm were regarded as tsunami deposits judging from sedimentary structures, mineral assemblages of sands and grain-size distribution curves. Radiocarbon dating of plant fragments just beneath the tsunami deposits provides an age close to the AD 1741 Oshima-Oki tsunami, which is considered to be due to the submarine debris avalanche of the Oshima-Oshima volcano.