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

[M-IS11]tsunami deposit

convener:Tetsuya Shinozaki(Center for Research in Isotopes and Environmental Dynamics (CRiED), University of Tsukuba), Takashi Chiba(Maritime Disaster Prevention Center), Daisuke Ishimura(首都大学東京大学院都市環境科学研究科地理学教室)

Tue. May 22, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe) 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-P13]Paleotsunami history of Choshi City, Chiba prefecture during past three thousand years

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In the area facing to the southern part of Japan Trench, the elucidation of the seismic tsunami history based on the coastal sediment has not been conducted well in comparison with the area of the northern and central parts of Japan Trench. This study investigated tsunami deposits at Kobatake-ike pond (at 11 m elevation) of Choshi City, Chiba prefecture. We detected three sand deposits within the mud and peat layer. Based on multi-proxy analyses (grain size distributions, diatom assemblages, and geochemical markers), sandy deposits were identified as tsunami deposits. Radiocarbon dating revealed that deposits in Kobatake-ike pond record three large tsunami events during past three thousand years; tsunami were probably triggered by the earthquakes at southern part of Japan Trench. Timing of these tsunami events might have been close to the occurrence of tsunamis along the central part of Japan Trench and so spatial-temporal relationship between generation of tsunami events in southern and central parts of Japan Trench should further be investigated.