Oral | Symbol H (Human Geosciences) | H-SC Social Earth Sciences & Civil/Urban System Sciences

[H-SC25_30AM1]Human environment and disaster risk

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Wed. Apr 30, 2014 9:00 AM - 10:45 AM 421 (4F)

This session discusses disaster risks being inherent in the natural and human environment, which sometimes happen to appear at a disaster, from the viewpoint of not only natural sciences but also social and human sciences. Examples of discussion subjects are as follows: uncertainty of forecasting disaster and problems of huge disaster with low frequency that raised from the 2011 Tohoku earthquake, the methodology for improving hazard maps, national recovery plans considering probable changes or sustainability of the society, international cooperation for disaster mitigation, problems of active faults or liquefaction, adjusting disaster mitigation plan to the regional characteristics, technical development for supporting disaster prevention, education for the disaster mitigation.

10:15 AM - 10:30 AM

[HSC25-P06_PG]Liquefaction occurrence ratio and geomorphic conditions in the inland area caused by the Great East Japan Earthquake

3-min talk in an oral session

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Keywords:liquefaction, geomorphic classification, former river channel and pond, landfill age, 2011 off the Pacific coast of Tohoku Earthquake

The area ratio of liquefied sites in the inland area caused by the 2011 off the Pacific coast of Tohoku Earthquake was estimated from the field survey and Google Earth images interpretation. In the Tone River lowland, the occurrence of liquefaction concentrated in the former river channel and pond, and the area ratio of liquefied sites is about 23%. The ground consisting of younger landfill age is more susceptible to liquefaction than that created by the older ones. Area ratio of Liquefied sites in the Tone River lowland is larger than the Osaki plain, Miyagi Prefecture. In the Osaki plain, the area of former river channels and ponds buried by loose sandy soils is less than the Tone River lowland.

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