

## Consideration on the distribution of liquefied sites in relation to the micro-topography and land history

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The occurrences of liquefaction damage in the Tone River lowland and Osaki plain induced by the 2011 off the Pacific coast of Tohoku Earthquake were observed and mapped on the basis of field survey and Google Earth images interpretation. The results of GIS analysis and old edition maps which have been published since the Meiji era indicate that a large number of the liquefied sites are located on reclaimed land of former river channels and lakes, and flood plain (backmarsh). In the Tone River lowland, many liquefied sites located on the former river channels and lakes had been reclaimed during 1950 to 1970. We should pay attention to micro-topography and detailed land history in case of mapping the hazard risk of liquefaction damages.

Keywords: liquefaction damage, micro-topography, land history, Tone River lowland, Osaki plain, 2011 off the Pacific coast of Tohoku Earthquake