KIYOTA LAB.

[Challenge of Geo-disaster Mitigation]

Department of Fundamental Engineering

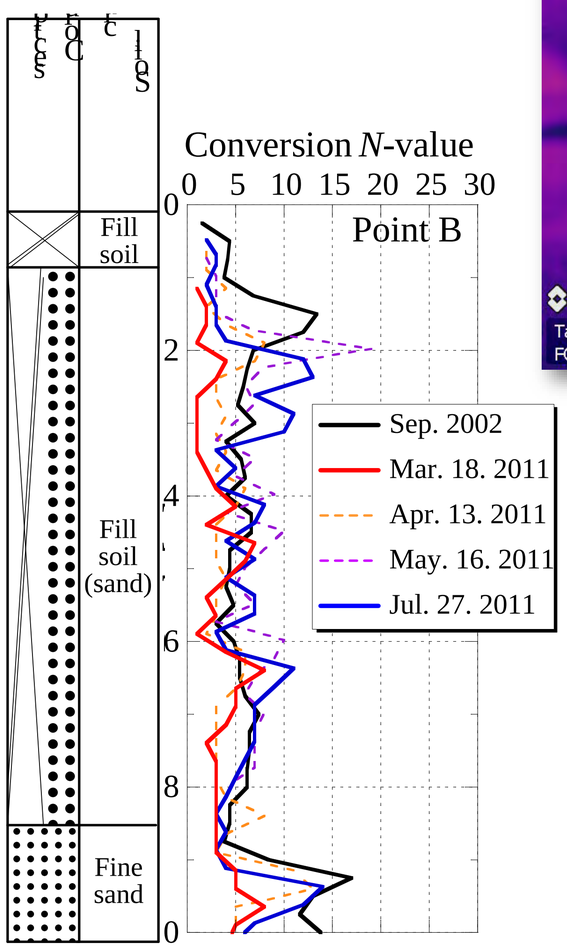
Geo-disaster Mitigation Engineering

Department of Civil Engineering

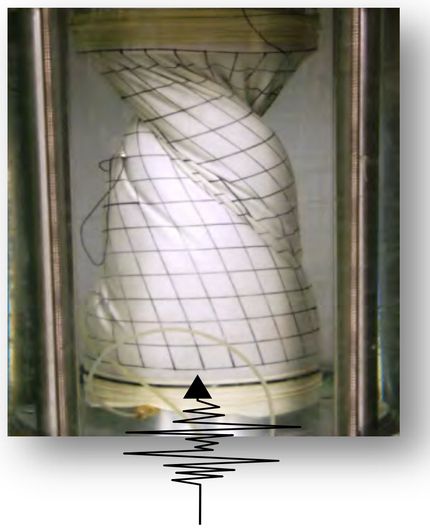
http://www.gdm.iis.u-tokyo.ac.jp/index_e.html

Earthquake-induced Geo-disaster

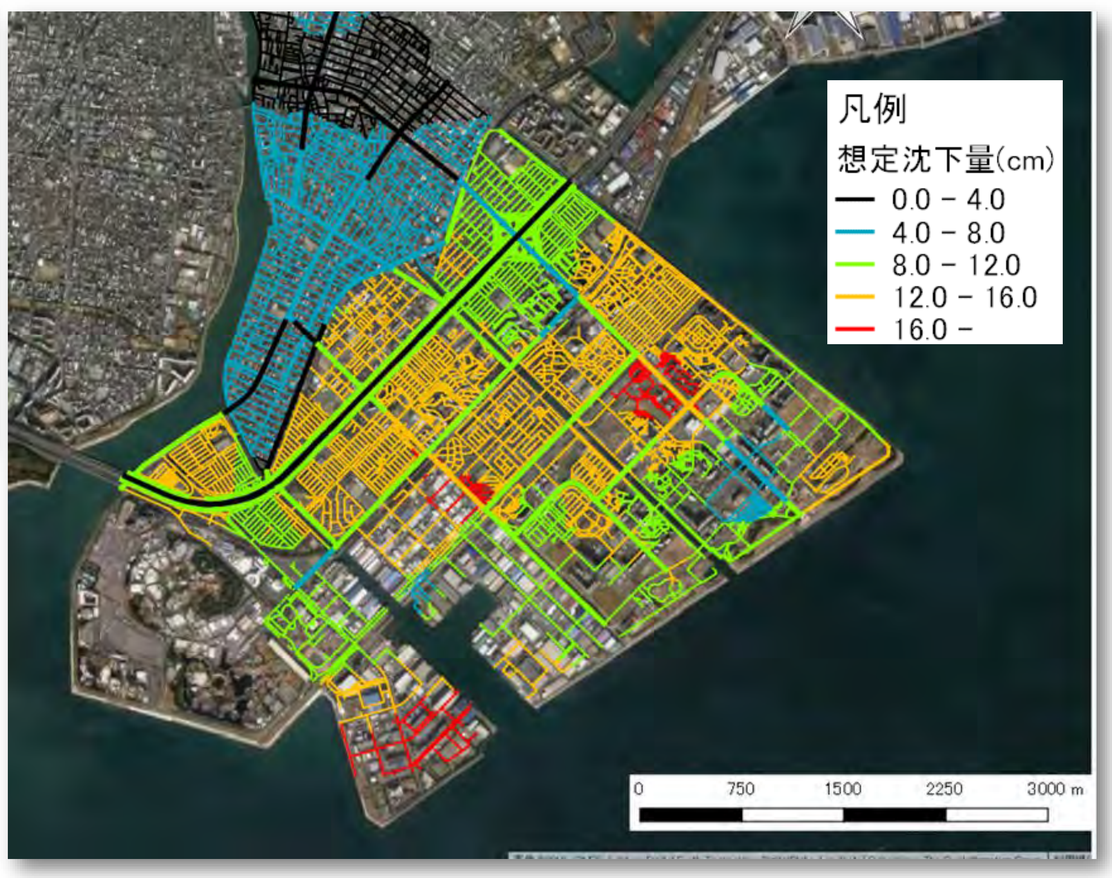
Earthquake-induced damage to infrastructure is closely related to the geotechnical and geological factors. The 2011 Tohoku Earthquake caused massive tsunami, and a large number of coastal levees which were constructed of geomaterials was destroyed. High ratio of occurrence of liquefaction was found in the Tokyo Bay area and downstream basin of Tone-River which would be linked to the soft subsurface ground and reclamation site. The 2016 Kumamoto Earthquake caused a large number of landslides over a large extent of area in the middle of Kyushu, Japan. KIYOTA laboratory is working for mitigation measure of such geo-disasters based on field survey, in-situ and laboratory tests and numerical simulation.



Experiment on rock-weathering

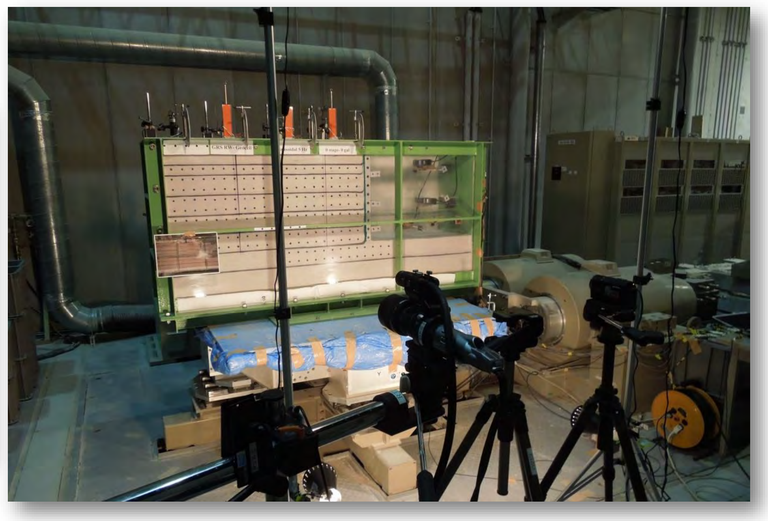


Field investigation and laboratory test on liquefaction problem



Newly-developed liquefaction hazard map for road network in Urayasu City

Field survey after geo-disaster



Pull-out test and shaking table model test on newly developed Geo-cell reinforced retaining wall