## KIYOTA LAB.

## [Challenge of Geo-disaster Mitigation]

Department of Fundamental Engineering

Geo-disaster Mitigation Engineering

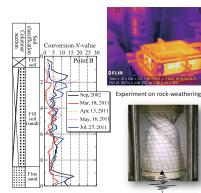
School of Engineering

Department of Civil Engineering

https://www.gdm.iis.u-tokyo.ac.jp/index.html/

## Earthquake-induced Geo-disaster

Earthquake-induced damage to infrastructure is closely related to geotechnical and geological factors. The 2011 Tohoku Earthquake caused a massive tsunami, and a large number of coastal levees constructed of geomaterials were destroyed. The 2016 Kumamoto Earthquake caused a large number of landslides over a large extent of the area in the middle of Kyushu, Japan. The 2018 Hokkaido Earthquake caused severe liquefaction-induced damage in the residential area. KIYOTA laboratory is working for mitigation measures of such geo-disasters based on field survey, in-situ and laboratory tests, and numerical simulation.





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

Field investigation and laboratory test on liquefaction problem









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

