

KIYOTA LAB.

Challenge of Geo-disaster Mitigation



Department of Fundamental Engineering

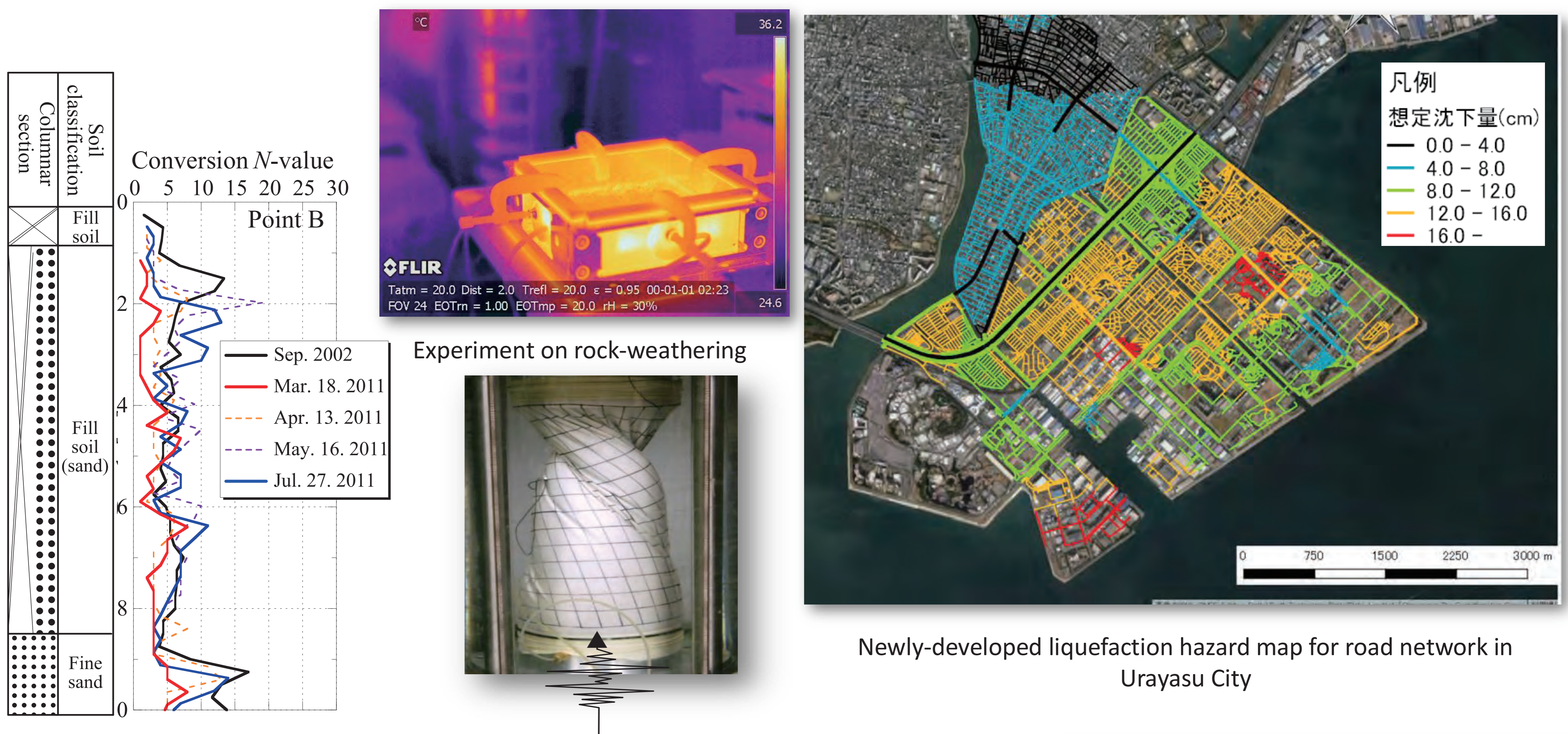
Geo-disaster Mitigation Engineering

Department of Civil Engineering, Graduate school of Engineering

<http://www.gdm.iis.u-tokyo.ac.jp/>

Earthquake-induced Geo-disaster

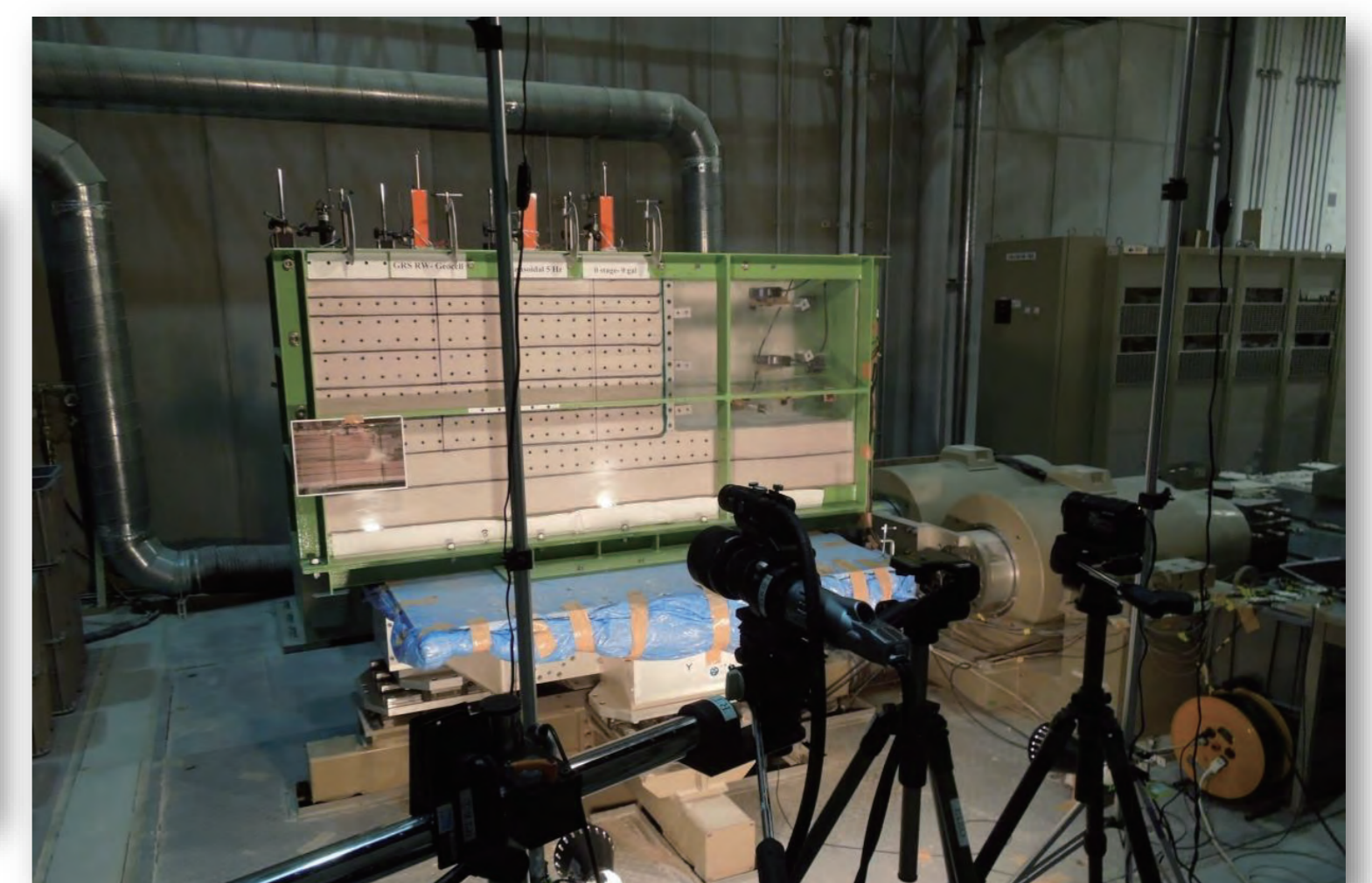
Earthquake-induced damage to infrastructure is closely related to geotechnical and geological factors. For example, the 2024 Noto Peninsula Earthquake produced widespread liquefaction and co-seismic landslides that crippled ports and roads, while the 2023 Turkey–Syria Earthquakes generated surface ruptures, liquefaction, and slope collapses that undermined building foundations and lifelines. Kiyota laboratory is working to mitigate such geo-disasters based on field surveys, in-situ and laboratory tests, and numerical simulations.



Field investigation and laboratory test on liquefaction problem



Field survey after geo-disaster



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