

HRE031-P03

Room:Convention Hall

Time:May 24 16:15-18:45

Matsushiro district, Nagano, as a natural analogue of leakage of stored CO2 - A preliminary report of follow-up study -

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Mechanical deformation, activation of fractures and leakage of stored CO2 as a consequence of these geomechanical responses caused by the increase in fluid pressure underground are important issues for CO2 geological storage. The issues are particularly important for the deployment of CO2 geological storage in Japan because of the tectonic setting of Japanese Islands as a young, active island arc. We are carrying out studies on CO2 flux and water geochemistry in the Matsushiro district, Nagano, as a natural analogue of CO2 leakage, following up the early study by Tosha et al. (2008). The presentation is a preliminary report we have conducted in the 2010 FY.

Keywords: CO2 geological storage, Leakage, Natural analogue, Matsushiro