Supercritical Geothermal Resources as a Function of Mass and Energy Transport in Subduction Zone

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Our research group is conducting fundamental and engineering studies of “Supercritical Geothermal Development”. Fracture networks and their formation mechanisms would be studied by using petrological and fluid inclusion studies in order to understand the geological model of a supercritical geothermal reservoir. The granite-porphyry system provides useful information for understanding supercritical geothermal reservoirs and EGS technology as novel energy system in subduction zone. Hydrothermal experiments under supercritical conditions were performed by using tri-axial machine. Fracture cloud could be formed and permeability was enhanced in supercritical conditions.
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