

## Fracture and permeability of crush zone and rock mass in the Active fault survey tunnel penetrating the Mozumi-Sukenobu fault

# Tsuyoshi Nohara [1], Kunio Watanabe [2], Hidemi Tanaka [3], Akimitsu Takebe [4], Mitsugu Yamashita [4], Peiming He [1]

[1] Tono Geoscience Center, JNC, [2] Environmental System, Saitama Univ, [3] Dept. of Geo/Biospheric Sci., Ehime Univ, [4] Mindeco

The Mozumi-Sukenobu Fault(MSF) is ENE-WSW running right lateral strike slip fault which is one of the Atotsugawa Active Fault system. A 500m long tunnel was excavated across the MSF by Active Fault Research Group in Earthquake Frontier Project.in this tunnel, the comprehensive study for clarifying the nature of active fault zone is now proceeding, including analysis of fault rock texture, chemistry and mode of transfer of the fluids within the fault zone, etc. In this paper, we briefly introduce the preliminary result of the texture analysis of crush zone and rock mass, especially focused on that of the fracture system.