

## Weathered cracks and crack-filling clay veins in the 1800m drilling cores across the Nojima Fault zone

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Many weathered cracks and crack-filling clay veins were found in the 1800m drilling core excavated across the Nojima fault from the top to the bottom. The X-ray powder diffraction analyses show that the crack-filling clay veins consist mainly of carbonate and clay minerals. It was reported that there were some distinct changes in the groundwater level and the chemical compositions of the groundwater in the Nojima fault zone before and after the 1995 Kobe earthquake (e.g. Sato and Takahashi, 1997). These observational results indicate that the weathered cracks and the crack-filling veins were formed by the flowing of the oxygen- and calcium-rich superficial water down to the deep fault zone related with the coseismic faulting.