Chemical reaction of organic matter during an earthquake at the Taiwan Chelungpu fault

Tetsuro Hirono[1]; Kiyokazu OOHASHI[2]; Yohei Hamada[3]; TCDP Hole-B Research Group[4]

[1] Osaka Univ.; [2] Grad. Sch. Sci., Hiroshima Univ.; [3] Earth and SpaceScience, Osaka Univ.; [4] -

Raman spectroscopy yields information on the molecular structure of the analyzed material, and can detect the structural order of carbonaceous material. Its spectroscopic feature is often parameterized by the relative intensities of the so-called D (disordered) band around 1355 cm-1 and G (graphite) band around 1581 cm-1, and the intensity ratio ID/IG generally decreases with graphitization depending on temperature. For heat detection in the Taiwan Chelungpu fault, we performed the raman spectroscopy, and present the preliminary result.