

## Analysis for deformation structures, mineral composition, and elemental composition in the Atera fault

KATO, Naoki<sup>1\*</sup> ; HIRONO, Tetsuro<sup>1</sup> ; ISHIKAWA, Tsuyoshi<sup>2</sup> ; KAMEDA, Jun<sup>3</sup> ; OHTANI, Tomoyuki<sup>4</sup>

<sup>1</sup>Department of Earth and Space Science, Graduate School of Science, Osaka University, <sup>2</sup>Kochi Institute for Core Sample Research, Japan Agency for Marine-Earth Science and Technology, <sup>3</sup>Department of Natural History Sciences, Graduate School of Science, Hokkaido University, <sup>4</sup>Department of Civil Engineering, Gifu University

The Atera fault is an active fault extended 70 km along southern — central Gifu Prefecture, Japan, which is considered to slip at 1586 Tensho earthquake based on the field outcrop and trenching survey by previous researches. However, the seismic slip behavior along the fault has been understood. In this study, we performed the field observation on the Tase outcrop of the Atera fault, microscopic observation, X-ray diffraction, trace element analysis by using ICP-MS for investigating the deformation structure, mineral assemblage, and geochemical anomaly in the Atera fault. We will present their preliminary results.

Keywords: Active fault, Fault gouge, Trace element