

V170-006

Room: 201A

Time: May 27 10:15-10:30

Hypogene acid alteration at the Unzen jigoku steaming ground, Nagasaki, Japan

Sachihiko Taguchi[1]; Yumi Kubo[1]; Soichiro Yoshii[2]; Yoshinobu Motomura[3]; Hitoshi Chiba[4]

[1] Earth System Science, Fukuoka Univ.; [2] Earth System Science, Fukuoka Univ.; [3] Dept. Earth & Planetary Sciences, Kyushu Univ.; [4] Dept. of Earth Sci., Okayama Univ.

Acid altered rocks are dominant in the Unzen jigoku steaming ground. Among them, vuggy silica with quartz are dominant at the old-Hachiman jigoku, which is a less steaming place among the jigokus. Forming temperature estimated from mineral paragenesis and fluid inclusions suggest that acid volcanic fluid contributed to the formation of such acid altered rocks. After the formation of the silicified rock, it was eroded and exposed to the surface within 200-300ka. This is a rapid erosion rate, suggesting a relation to the formation of collapsed scars distributed near the steaming ground.