

Some of the recent findings in shallow hydrothermal system beneath Ebino Highland adjacent to Iwo-Yama, Kirishima Volcanoes

*Yoshikazu Kikawada¹, Wei Deng¹, Kaishu Seki¹, Megumi Fukai¹

1. Faculty of Science and Technology, Sophia University

Iwo-Yama volcano belonging to the Kirishima Volcanic Complex (the Kirishima Volcanoes) is one of the active volcanoes in Japan. Ebino Highland adjacent to the volcano had been known as a tourist destination with a fumarolic area. In December 2015, fumaroles were found at the crater of Iwo-Yama after twelve year' s absence, and an expansion of thermal and fumarolic activities have been observed around its summit area and Ebino Highland since then. Meanwhile, thermal springs were also found along a stream in the highland. The changes in the water chemistry of those thermal springs seem to be in good accordance with the seismic activity and deformation observed around Iwo-Yama. The fluctuation of the content of dissolved H₂S in the spring water and the atmospheric concentration of H₂S and CO₂ at the water vents suggest that the spring water is an efficient carrier of the volatiles do not dissolve readily in water originated from the hydrothermal reservoirs beneath Ebino Highland.

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