

Records of hydrothermal activity in groundwater in Hontsuka volcano area, Aso

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The three small hills of Honzuka, Kitazuka, and Ashzuka in Aso caldera are called Hontsuka volcano and was active after the last caldera eruption of Aso 4. Groundwater containing ferrous ion is widely distributed from the central part to the southwest of Aso Valley where Honzuka volcano is located. It is called *Akamizu* (red water) type groundwater, and the main dissolved components are Ca and SO₄ and the acidity and water temperature are relatively high compared to groundwaters in other areas of Aso volcano. In this study, we investigated isotope geochemical survey of groundwater in and around Hontsuka volcano, and we will report the origin of groundwater water quality and an obtained record of hydrothermal activity in this presentation.

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