

Sulfur isotope zoning of dissolved sulfate in the hydrothermal water reservoir at Naruko volcano

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Naruko volcano is located in the northwestern part of Miyagi Prefecture. Detailed geological and geothermal structures are constructed by examining data from drill cores. We found gradual change of geothermal structure along the distribution of hydrothermal water reservoir. Sulfur isotope compositions of dissolved sulfate in hot spring water also change systematically along the hydrothermal water reservoir. Such zonation is most likely formed by microbial sulfate reduction in the reservoir.