

Estimation of recharge elevation and residence time for springs in Mt. Yotei

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Mt Yotei is a stratovolcano located on southwestern part of the Hokkaido. 17 springs with flow rate over 20 L/s distribute on the foot of the volcano body. We used the multi tracer method to estimate the recharge elevation and the residence time for the springs. Water samples were collected from 14 springs at August 2013, and were measured in stable isotope, Tritium, CFCs and SF₆. In this presentation, we discuss the relationships between the scale of groundwater flow system and the hydrogeology of volcano body, based on the recharge elevation and the residence time for springs.

Keywords: Mt. Yotei, spring, recharge elevation, residence time, transient tracer