

Isotope tracing for mountain groundwater recharges in volcanic and non-volcanic mountains

*Takashi Nakamura¹, sano anna¹, Kei Nishida¹

1. International Research Center for River Basin Environment, University of YAMANASHI

To identify the characteristics of mountain groundwater recharges on different mountains, deep groundwater was collected from two mountain-plain area on the volcanic and non-volcanic area at Kofu Basin during 2011 to 2013 and 2018. Hydrogen and oxygen stable isotope values of groundwater samples increased slightly with decreasing altitudes in foot of volcanic mountain which suggested occurrence of groundwater recharge in the large area from the gradual-slope of the volcanic mountain, while the steep non-volcanic mountain groundwater flow was confirmed from foot of mountain to plain area. The results revealed topography of the mountain watershed as one of the important factor for groundwater recharges and flow characteristics.

Keywords: water isotope, mountain groundwater, volcanic mountain, non-volcanic mountain