Seasonal Variability of Stable Isotopes in Precipitation and Spring Water around Mt Kimpo, Kumamoto, southwestern Japan

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Supplementary Material

Table S1. Number and name of sampling sites, sampling altitudes, annual mean isotopic composition, and slope and intercept of the Local Meteoric Water Lines (LMWLs) in (a) Six precipitation sites and (b) Twelve spring water sites. Precipitation amount from 26 June 2012 to 5 September 2013 at 6 sites are also shown in (a). Spatial average of isotopic composition at 6 precipitation sites and 12 spring water sites are also shown in (a) and (b), respectively. Annual mean isotopic composition and the LMWL of (a) precipitation and (b) spring water are calculated by weighted average by precipitation amount and by arithmetic average, respectively. Recharge altitude for spring water was estimated based on the isotopic lapse rate for δ2H in (b).



Table S2. (a) Monthly and annual mean values of precipitation amount and isotopic composition in precipitation. Precipitation amount and air temperature observed at the Taimei meteorological station are also shown. (b) Monthly and annual mean isotopic composition in spring water. Spatial averages of all sampling sites are also shown in (a) and (b); the shaded area indicates cold months.





Table S3. Monthly and annual values in slope and intercept of the LMWLs, slope and correlation coefficient (*r*) of altitude and amount effects for (a) precipitation and (b) spring water. Red values indicate above the statistical significant level; shaded area indicates cold months.

