Changing of snow chemistry in the Japanese Alps

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Various chemical materials were included in precipitation. Precipitated chemical materials have been stored in the snow layers before the start of snowmelt. Therefore, we get the atmospheric information in winter season from snowpack. We conducted the snow pit study, and the chemistry of snow layer was studied in detail. In this study, we aim to clarify characteristics of snow chemistry in the Japanese Alps. We conducted the sequential snow pit study during winter in Mt. Nisi-hodaka, the Japanese Alps. The snow pits were dug through the entire snowpack. We observed the cross-section of the snow pit to clarify snow conditions, which are snow stratigraphy, temperature, and density of snow. Afterwards we collected the snow samples. The snow samples were melted in a clean room. The pH and electric conductivity and concentrations of major ions were measured. Almost snow samples are acid snow (less than pH 5.62).