

Chemical dynamics of snow layers in the Norikura Highlands

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Precipitation includes various chemical substances. Chemical substances within precipitation were preserved in the snowpack during winter. These substances flushed out during the snowmelt season. It exerts great impact on the environment. Therefore, it is very important to examine its deposit and melt. In this study, we aim to clarify the chemical dynamics of snow layers during winter in the Norikura Highlands, Japanese Alps.

We conducted the regularly snow pit study during winter in the Norikura Highlands. The snow pits were dug through flat and open space. We observed the profile of the snow pit to make clear snow conditions, which are snow stratigraphy, snow temperature, and snow density. Then, we collected the snow samples. The snow samples were melted in the clean room. The pH and electric conductivity were measured after filtration. Concentrations of major ions were measured by ion chromatographs. The total ion leads in the snowpack were decreased in snowmelt season.