

Spatial variability of snow chemistry in mountainous area

Motoki Tanaka[1]; Keisuke Suzuki[2]

[1] Environment Science, Shinshu Univ; [2] Dept. Environ. Sci., Shinshu Univ.

The chemical constituents in the winter precipitation in the high mountainous area are the chemical constituents transported from wider areas, so no local emission source from a factory and/or an urban area exists in the neighborhood of the high mountainous area. It is difficult to observe the chemical constituents of precipitation in high mountainous area throughout the year. The concentrations of chemical constituents in snow cover remains the same level as in precipitation until snow melt begin.

Some snow surveys about chemical constituents have been conducted in the high mountainous areas. However, most of these surveys have not been at plurality of points performed within one mountain. The reason for the spatial unevenness of concentrations of chemical constituents in winter precipitation have not been almost elucidated. The purpose of this study is to grasp spatial and temporal variability of chemical constituents in winter precipitation in Mt. Norikura of South part of Japanese Northern Alps and to evidences the process of formation of the chemical constituents in winter precipitation.