Spatial and Temporal Variation of Snow Chemistry at the Norikura Highlands

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The chemical constituents of winter precipitation in mountainous areas are greatly influenced by the climatic condition. In the Japanese Alps, snowfall is mainly generated at the time of winter monsoon and low pressure system passing along south coast of Japan. During the winter monsoon period, many anthropogenic and earth crust substances from the Asian Continent, and sea salt substances are included in the precipitation. In addition, the precipitation also uptake numbers of anthropogenic substances from the west and central part of Japan at the time of low pressure system.

The aim of this study is to grasp spatial distribution of chemical constituent concentrations in winter precipitation in Japanese Alps and to evidences the process that air mass is transported over a mountain through a change of chemistry of winter precipitation.