

## The chemical characteristics of spring water in Kamikochi at the Japanese Alps

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There are much spring waters in the Azusa River which flows through Kamikochi. These spring waters form the branch of the Azusa River. Spring water shows the characteristics reflecting an underground water flow. Therefore, in order to understand the water cycle of Kamikochi, it is important to understand the formation mechanism of spring water. The purpose of this study is to clarify the characteristics of spring water which forms the branch of Azusa River in Kamikochi. We set up the thermometer in five places of a basin for the measuring of spring and river water temperature. The water samples were collected in water temperature measuring site and Azusa River from July 2011. The pH, electric conductivity, major ions, and stable isotope of water were analyzed with the pH meter, conductivity meter, ion chromatographs, and isotope mass spectrometer, respectively. In addition,  $\text{HCO}_3^-$  concentration was measured using the sulfuric acid titration method. At many observation points, the temperatures of spring water showed seasonal change. However, only one site did not have change of water temperature through a whole year.