

On stable isotope ratios of water in the Fuefuki River,
Yamanashi Prefecture, Japan

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This study is carried out to make clear the changes in stable isotope ratios of water of the Fuefuki River. The Fuefuki River is originating from the Kanto mountainous district located in the northeastern part of Yamanashi Prefecture, and it flows along the south-eastern edge of the Kofu basin.

The results of the analysis are as follows.

At the upper reaches of the Fuefuki River, the values δD are influenced by "the altitude effect of rainfall", and at the down reaches area, the values δD are gradually become larger, i.e. heavier than the water of the upper reaches. δD of the water in the bottom of Kofu basin, downstream area of the Fuefuki River, is more heavier than that of upper reach of the river, However, between St.3 and St.4, and between St.6 and St.7, the values of δD at the downstream points are smaller.

These changes is not possible to explain by altitude effect, and the authors pointed out that there are two type of inflow to the Fuefuki River, one is tributary stream with high mountain basin area, and the other is groundwater discharge to the Fuefuki River near the outlet area of the Kofu basin.

Keywords: Fuefuki River, stable isotopes, rivers recharge