

Hydrogen and oxygen stable isotopic ratio altitude effect and water quality features on the east coast of Lake Biwa

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Hydrogen and oxygen stable isotope ratios during precipitation show altitude effect. On the other hand, it is said that it has seasonal variation and area difference.

In grasping the flow of water in the basin, the isotopic ratio is useful as a tracer, but grasping the more definite isotopic altitude effect in that area is important in estimating the recharge zone.

In this study, we confirmed the high effect of stable isotope ratio when grasping the flow of groundwater and nutrient salt on the east coast of Lake Biwa.

As a result of carrying out the sampling of the waterside in the Serikawa river basin in July and December 2017, the altitude effect was 0.15 - 0.13 ‰/ 100 m.

At the same time, water out of the correlation line of high efficiency was also confirmed.

The water quality of these water tended to be similar, suggesting the existence of different hydrological processes.

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