甲府盆地の笛吹川氾濫域における河川伏流水の分布
Distribution of river water recharge on floodplain area of Fuefuki River, Kofu Basin.

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The river water recharge is a very important source of groundwater in the Kofu basin (Nakamura et al. 2017). This study was thus focused on identifying the distribution of river water recharge on the floodplain area at the middle stream of the Fuefuki River in Kofu Basin. The stable isotope of oxygen and hydrogen with chloride ion was used to identify the groundwater recharge sources and contribution of river water recharge. The differences and correlations of isotopes in various water bodies were examined to evaluate the groundwater recharge sources. The contribution of recharge sources was calculated on the basis of the result from mass balance analysis of the isotope composition and chloride concentration obtained from the water samples in the floodplain area. The contribution of the river water accounted approximately 30% area within the 500m from Fuefuki River and 50-80% around 1.4-1.8km from Fuefuki River.

Previously, the Fuefuki River was located around 1.3 km north from the current river line whose course was then changed by the large floodplain event at 1907. The current position of Fuefuki River, located in the area of the clay deposit. These geological settings might be the reason affecting the low contributions of river water recharge around the current Fuefuki River side.

Reference:
Nakamura T., Nishida K., Kazama F. (2016) Influence of a dual monsoon system and two sources of groundwater recharge on Kofu basin alluvial fans, Japan. Hydrology Research, 48(4), 1071-1087.

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