

Investigation of the groundwater source estimation in Kofu Basin for hydrological model

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The end member mixing analysis using hydrological tracers have been applied to identify the groundwater recharge sources in local area, such as scale of alluvial fan. However, it is difficult to apply to large scale, due to the wide values of temporal and special for the hydrological tracers. Objective of this study is investigating the groundwater recharge identification using hydrological tracers to adapt for the hydrological model for basin scale.

Groundwater samples were collected once a year from November 2010 to October 2012. Altogether 12 river water samples were collected in 2003, 2004 and 2006 from main rivers in Kofu basin. Rain water samples were collected once a month since 2008. All groundwater samples (n=50) are classified into three types based on recharge sources. Among them 20% of groundwater are mainly recharged by river water. Other 50% samples are river water mixed with local precipitation and 25% are river water mixed with mountain groundwater.

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