

## Identification of groundwater recharge on Midaigawa-alluvial fan

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In this study, the hydrogen and oxygen stable isotopes (D and <sup>18</sup>O) and chemical compositions of water were employed to the estimation of contribution ratios of groundwater recharge sources in western Kofu basin of central Japan. The study area is Midaigawa alluvial fan, which is formed by Raised-bed River discharged from the mountain watershed.

The groundwater collected from 25 deep wells (100~300m) in June-2010, November-2011 and November-2012. Those wells were located on Midaigawa alluvial fan and adjacent mountain. The precipitation and main river water also collected from this area. End-member mixing analysis using isotope value and chloride concentration revealed spatial variation in the contribution ratios for various groundwater sources. This presentation will be focus on groundwater recharge from mountain area to alluvial fan.

Keywords: Groundwater recharge, Alluvial fan, Stable isotopes, End-member mixing analysis