

On the water quality of groundwater in Takada Plain, Niigata Prefecture Japan (3rd)

Yoshinori Sato[1]; Takashi Takahashi[2]; Mika Tomita[2]; Takahiro Tsutsumi[2]; Akihiko Inamura[3]

[1] Soc. Sci., Joetsu Univ. of Ed.; [2] none; [3] GSJ, AIST

We have investigated the water quality and stable isotope ratio of hydrogen and oxygen of the groundwater in the southern part of Takada plain, Niigata Prefecture. Water quality of a shallow aquifer is Na Mg-HCO₃ type, and that of deep aquifer is Ca-HCO₃ SO₄ type. It is estimated that a large value of SO₄ is caused by a volcanic activity. In the region near the plain, the groundwater quality type is Na-HCO₃, and nearby the Yasiro river, that is also Na-HCO₃. Water quality of Yasiro river is Ca-SO₄, and there is an obvious difference to that of Bessho river. It is considered that the difference reflects the recharge area. The small values of the stable isotope of hydrogen and oxygen show that the recharge area of groundwater is a highland.