

## The sedimentation system and change of mineral composition of the alluvium in the western part of the Echigo Plain

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The Echigo Plain in Niigata Prefecture extends to the Sea of Japan side. The alluvium in the Echigo Plain is constituted by two sedimentation systems of delta system of Shinano River region and barrier system of Agano River region. The Echigo Plain has been formed by the advance of these two different sedimentation systems. In the alluvium of the Agano River region, resedimented volcanoclastic deposits by the pyroclastic flow eruption of Numazawa volcano about 4700 ago can widely confirm it. This resedimented volcanoclastic deposits gave the large effect for the advance of the system of the alluvium (Urabe and Fujimoto, 2007). Including the effect of this resedimented volcanoclastic deposits, the relationship between formation of sedimentation system of the Shinano River region and supply of the sediment was clarified. It was proven that the effect of resedimentation of the Shinano River region was smaller than the Agano River region, judged from the content of amphibole and volcanic glass by the analysis of mineral composition. In comparison with the change of sedimentation system and mineral composition of the alluvium, the each sedimentation system was characterized from the heavy mineral composition. This difference reflects the mineral composition of Shinano River drainage area (two pyroxene rich) and Agano River drainage area (biotite and amphibole rich), and it shows the difference of the supply process of the sandy sediment of the each sedimentation system.