

## Petrochemistry and U-Pb zircon geochronology of felsic rocks from the Kagura complex, south Kitakami Mountains, Japan

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Basement rocks of the South Kitakami belt are distributed in Hayachine to Miyamori area, and is called Hayachine complex. Petrochemistry and U-Pb zircon geochronology were investigated from felsic rocks in the Kagura complex associated with Hayachine complex. U-Pb dating of zircons were carried out using Agilent 7500cx quadrupole inductively coupled plasma mass spectrometer (ICP-MS) with a New Wave Research UP-213 Nd-YAG UV (213 nm) laser ablation system (LA) installed at the Kyushu University (Adachi et al., 2012). Zircon grains from the tonalite define a concordant age of  $494 \pm 4$  Ma ( $n=18$ ) and  $487 \pm 4$  Ma ( $n=26$ ), and from the quartz diorite define a concordant age of  $500 \pm 4$  Ma ( $n=19$ ). These data suggests that age of the Hayachine complex could become older ca. 500Ma. Moreover, granitic activity in early Paleozoic in proto-Japan occurs at ca. 500 Ma and ca. 450 Ma.

Keywords: zircon geochronology, Kitakami Mountains, Cambrian