

## U-Pb zircon age of low-pressure/high-temperature metamorphic rocks from the Kurosegawa tectonic zone, South-west Japan.

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The Kurosegawa Tectonic Zone distributed from Kyushu to Kanto Mountains, characterized by serpentinite melange. The serpentinite melange contains various types blocks such as sedimentary rocks, granite, high-temperature amphibolite- to granulite-facies rocks and high-pressure/low-temperature metamorphic rocks.

The variation of U-Pb detrital zircon age clusters in pelitic schist from Itsuki area in Kyushu, Toba area in Kii Peninsula, and quartzite from Anan area in Shikoku are mostly similar in each area. These results might indicate that the pelitic schists and the quartzite from three areas were derived from similar hinterland.

Meanwhile, the U-Pb zircon ages of garnet-clinopyroxene granulite from Tsubokinohana area and amphibolite from Hashirimizu area in Kyushu are 447 $\pm$ 3 Ma and 449 $\pm$ 4 Ma, respectively. According to texture and Th/U ratios of analyzed zircon grains, the estimated U-Pb zircon ages from low-pressure/high-temperature metamorphic rocks may indicate protolith ages of these metamorphic rocks. In addition, the U-Pb zircon age of glaucophanite, which represent to form the gabbro, from Engyoji area in Shikoku shows 447 $\pm$ 5 Ma. This U-Pb zircon age may also indicate protolith age. At present, protolith ages of metamorphosed mafic rocks in the Kurosegawa Tectonic Zone are considered to concentrate between the Silurian and the Cambrian.

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