

Early Paleozoic zircon U-Pb age for high P/T-type metagabbro from western Tokyo

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The Japanese Islands are composed of the subduction-related orogenic belt which has evolved since the Early Paleozoic. Among them, most parts of the Paleozoic ones have been fragmented through orogenic activities as represented by the Kurosegawa belt which is a discontinuous serpentinite mélange zone with disrupted tectonic blocks. In this presentation, we discuss zircon U-Pb age and trace element analysis for high P/T-type metagabbro from Hinode town in western Tokyo which is considered to be the eastern extreme of the Kurosegawa belt. The zircon grains were obtained from lawsonite vein in the high P/T-type metamorphic rocks which are white, pale purple or pale green in colour and up to 10 cm in width, and some void parts of the vein contain ~3 mm euhedral crystals of lawsonite. The zircons were dated ca. 490-480 Ma (late Cambrian-early Ordovician), which is coeval with ages of similar rocks in the Kurosegawa belt in Kii Peninsula and Kyushu. This result indicates that the high P/T-type metamorphic belt with protolith of early Paleozoic ophiolite existed in the Paleo-Japan arc which had over 1,000 km length from Kyushu to Tokyo region.

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