

Oceanic plateau accretion in Japan and Far East Russia: Contrast in tectonic setting between Permian and Jurassic

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Greenstones (metabasalts) in the Japanese accretionary complexes are mainly of Permo-Carboniferous and Jurassic-Cretaceous ages. Among the Permian greenstones in the Mino-Tamba Jurassic accretionary complexes, we recently found some HFSE-rich ultramafic lavas (picrite, meimechite, and ferropicrite), which suggest a superplume origin (Ichiyama and Ishiwatari, 2005; *CMP*, 149, 373-; Ichiyama et al., 2006, *Lithos*, in press). We also found that the large-scale greenstone bodies associated with big limestone plateaux show petrologic characteristics comparable to those of the present oceanic plateaux (Koizumi and Ishiwatari, 2006, *Isl. Arc*, 15(1), in press). These greenstones formed in an oceanic environment in Permian, and accreted to the continental margin in Jurassic, more than 100 m.y. after its birth. In contrast, Jurassic greenstone bodies and the associated picrite/meimechite in Mikabu (SW Japan), Sorachi (Hokkaido), Sakhalin and Primorye (E. Russia) formed at or near the trench (subduction zone), and accreted soon after their birth. Some Alaskan-type zone ultramafic plutons are also present in the Jurassic accretionary complexes in Primorye and adjacent NE China (Ishiwatari and Ichiyama, 2004; *Int. Geol. Rev.*, 46, 316-). On the other hand, meimechite is also reported from the Paleogene Mineoka-Setogawa ophiolite in association with boninite, calc-alkali andesite and island-arc tholeiite, suggesting a plume magmatism in a supra-subduction zone environment (Shiraki et al., 2005; *Nagoya J.S.E.S.*, 67, 35-). The Alaskan-type zoned ultramafic plutons associated with picritic lavas and dikes are common among circum-Pacific and Uralian orogenic belts, suggesting mantle plume activities in subduction zones. Although many Jurassic-Cretaceous (and later) oceanic plateaux are present in the contemporary ocean floor, the superplume activities in this period may not have been restricted in the middle of the ocean, but have taken place also in the subduction zones.