

## **EXHUMATION TECTONICS OF HIGH PRESSURE SCHIST BELTS IN SW JAPAN: TWO CONTRASTING AGE-TEMPERATURE-STRUCTURE RELATIONS**

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In SW Japan, which is a typical Pacific (Miyashiro) type orogenic belt, the continuous oceanward growth of accretionary complexes from Permian to Tertiary time, and the episodic exhumation of high pressure schists, have been well documented on the basis of recent and advanced geology and geochronology. The boundary between Kula and Pacific plates was a ridge which had subducted underneath SW Japan in Cretaceous, suggesting that the exhumation of the Sanbagawa schist belt was triggered off by the ridge subduction. Observed are the two contrasting age - temperature - structure relations between western side and eastern side areas in both the Sanbagawa (Cretaceous) and the Suo (Triassic) schist belts. In the western side, K-Ar phengite ages are positively correlated with metamorphic grade and the highest grade zone occurs in upper or middle parts of apparent stratigraphic succession. In the eastern side, the ages are younger in higher grade metamorphic rocks which occur in lower part of apparent stratigraphic succession. These relations are due to the different tectonic features that the duration from beginning of exhumation of metamorphic rocks to apparent resetting of phengite K-Ar system was significantly different between the two metamorphic sequences; greatly longer in the western side than the eastern side. The oblique ridge subduction offered significant difference for exhumation timing of the high pressure metamorphics and the above mentioned different tectonic features between the two areas.