

## A large-scale fold in the Cretaceous Shimanto Supergroup, western Shikoku and its modification

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Large-scale folds are known to occur in some regions of the Cretaceous - Tertiary Shimanto accretionary complex, Southwest Japan (Yanai, 1986 ; Tokunaga, 1992). The formation of the folds has been attributed to the clockwise rotation of Southwest Japan related to the fan-shaped opening of the Sea of Japan, or the oblique subduction of an oceanic plate. The details of the large-scale folds in the Shimanto Belt remain unknown, except for a few cases.

In an attempt to clarify the details of the large-scale structures, geological survey of the Cretaceous Shimanto Supergroup in the Nakatosa - Kubokawa area has been carried out and the relationships between geologic structures and illite crystallinity have been examined.

These investigations led the authors to the following conclusions.

- 1) The studied area is characterized by a large-scale fold with an axis that plunges north steeply.
- 2) An inferred fault extending westward from Yatabe-zaki to Kuroishi demarcates the studied area into northern and southern parts. Illite crystallinity also supports the presence of the inferred fault.
- 3) A north-south trending hinge line and western and eastern wings of the large-scale fold occur in the northern part. On the other hand, the southern part is supposed to be located in the western wing of the fold, and the hinge is inferred to be off the coast of studied area.