

## Structural position of the Akiyoshi Limestone in the Permian accretionary complex of the Akiyoshi Belt, Southwest Japan

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Akiyoshi Limestone of the Akiyoshi Belt yields well preserved fusulinids, and its detailed stratigraphy and geological structure have been studied nearly for 100 years. The characteristic feature is the overturned structure of the limestone beds. The mechanism of the overturned structure has been discussed as the Akiyoshi Orogeny, but recently the limestone collapse model has been widely accepted. However, the limestone collapse model in the Japan Trench has some problems. Daiichi Kashima Seamount on the Pacific Plate has collapsed in the trench. However, the collapsed materials are never accreted into the continental margin along the Japan Trench, where the tectonic erosion occur. On the other hand, in the Nankai Trough, which is the accretionary boundary along the Southwest Japan, seamounts never collapse at the trench. As the hard seamount advances by pushing away the soft accretionary prism, and the accretionary wedge is deformed instead.

The most probable case is the limestone part on the seamount offscraping in the deep part of the accretionary wedge. After the offscraping, the limestone fragment moved upward, and appeared at the outer forearc high. The limestone fragment collapses and accumulates into forearc basin and/or trench slope basin. The purpose of this study is to reveal the accretionary process of the Akiyoshi limestone, which was offscraped from the top of the seamount and incorporated into the accretionary prism in the Permian period. Present analog of the Permian accretionary complex of the Akiyoshi Belt is the accretionary prism formed along the Java Trench near the Sulawesi Island, western Indonesia. In the presentation, new tectonic model of Akiyoshi limestone is proposed using analog of the Java accretionary wedge.

Keywords: Akiyoshi, Limestone, Permian, accretionary complex