

## Deformation process of the Miocene Misaki assemblage at Cape Muroto, Shikoku, Japan

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We report the geologic structure of the Misaki assemblage, which constitutes part of the youngest portion of the Shimanto accretionary complex, Shikoku, Japan. It is interesting to compare the deformation process of this strata with that of the present Nankai accretionary complex. We divided the Misaki assemblage into ten lithofacies, and described lithologic map and geologic cross section of the study area.

The northern part of the study area consists mainly of hemipelagic calcareous mudstone and deformed sandstone and mudstone. In contrast, the southern part of the study area consists of folded turbidite and conglomerate. These strata dip to the west more than 70° and are intruded by Miocene igneous rocks. Many minor faults are observed in the study area.

These lithologic and structural data suggests a deformation process of the Misaki assemblage as follows: (1) deposition of ocean plate stratigraphy, (2) offscraping by frontal thrusts, (3) intrusion of igneous rocks along one of the thrusts, and (4) tilting of the whole strata.

Keywords: accretionary complex, Shimanto belt, Muroto, fault