

## Geotectonic history of the Kamikoshiki Island, Kagoshima Prefecture (part 2)

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Kamikoshiki Island in southwest Kyushu has Cretaceous to Tertiary sedimentary sequences; Himenoura and Kamikoshiki groups. This area is the key location to recognize the tectonic history between continental margin and Island arc.

The Kamikoshikijima Group unconformably overlies the Himenoura Group. The entire thickness of two groups reaches approximately 2500m. The Himenoura Group contains conglomerate, thick sandstone with cross bed and black shale. This had been situation offshore environment.

The Kamikoshikijima Group is divided into two formations, Nakakoshiki and Segami Formation. The Nakakoshiki Formation contains quartzose sandstone, greenish siltstone and red mudstone. It is identified as fluvial sediment. The Segami Formation mainly consists of siltstone and mudstone with some sandstone. It is identified as shallow marine or lacustrine sediment. 14Ma granodioritic and quartz porphyritic intrusive rocks mainly occur in the northern part of this island.

Three deformations and one intrusive event are identified in this area; 1) Unconformable deformation with tilting of the Himenoura Group (D1: 65-49Ma), 2) Activity of WNW-trending normal fault (F2-a) (D2: 36-13Ma), 3) Intruding of igneous rocks at 14Ma, and 4) Activity of NNE-trending normal fault (F3) with horizontal reactivation of F2-a (F2-b) (D3: 13-0Ma). We propose that D2 event is related to subduction of Pacific plate to southwest Japan and D3 event is related to rifting event of Okinawa trough.