

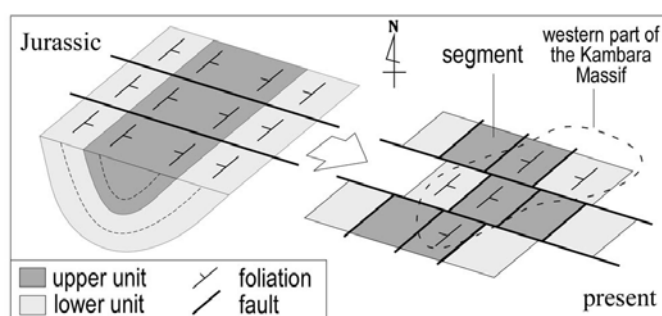
Geological structure of the Ashio Terrane in the western part of the Kambara Massif, Niigata Prefecture, Southwest Japan

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The Ashio Terrane, which is distributed between the Itoigawa-Shizuoka Tectonic Line and the Tanakura Tectonic Line in the Southwest Japan, is composed of a Jurassic accretionary complex. It is discretely distributed to the Ashio Massif, Yamizo Massif, Uonuma Massif, Taisyaku Massif, Kambara Massif, Iide Massif and Asahi Massif by the Cretaceous to Paleogene granite and the Neogene sediments etc. Although an accretion age of the accretionary complex in the Kambara Massif, Iide Massif and Asahi Massif had remained unclear, that of the Kambara Massif recently proved Early Jurassic (Uchino, 2009; Uchino and Hori, 2009). I have studied the detail geological structure, which has remained unclear, in the Kambara Massif by microfossil ages and detail mapping. I discuss the tectonics since Jurassic of the accretionary complex in the Kambara Massif. The accretionary complex in the western part of the Kambara Massif is composed of alternating mudstone and sandstone, greenstone, limestone, chert etc. It shows chaotic facies on the 1/50,000 map scale. It is divided to the clastics-rich lower unit and the greenstone/chert-rich upper unit. The foliation of bedding and scaly cleavage in the accretionary complex indicates northwest to southeast or north-northwest to south-southeast.

The accretionary complex is segmented by the northwest-southeast and northeast-southwest faults since Jurassic. Two segments neighboring in the strike direction sometimes have each different dip. Dips of segments neighboring in a direction perpendicular to the strike correspond with the relation of top-and-bottom structure of the upper/lower units. Therefore the accretionary complex in the west part of the Kambara Massif had originally formed syncline, and blocks corresponding with the "western limb" and the "eastern limb" of the syncline might have been transferred by the strike slip movement since Jurassic to form the present geological structure.



Keywords: Kambara Massif, Ashio Terrane, Early Jurassic, accretionary complex, syncline, tectonics