

Juxtaposition of the constituents other than Jurassic accretionary complexes in the Kurosegawa Belt

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In Kurosegawa Belt in Kyushu, its constituents other than Jurassic accretionary complexes, such as the Kurosegawa older rocks (pre-silurian basement rocks, and Siluro-Devonian strata), Permian to Cretaceous strata of shallow-sea facies and Permian chaotic rocks, are distributed in three synclines juxtaposed from north to south. These synclines are different from each other in their constituents. Toyohara et al. (1998) pointed out their difference in lithology of Permian strata. Tashiro and Ikeda (1987), Tashiro (1993), Tanaka et al. (1998), etc. recognized two kinds of Cretaceous strata (Monobegawa Group type and Nankai Group type) different from each other in lithology, bivalve fauna and distribution. In addition to these, the three synclines are different in ratio of each constituents. In this presentation, I review the juxtaposition of the constituents of the Kurosegawa Belt in Kyushu, Shikoku and Kii Peninsula and discuss the tectonic evolution of the Kurosegawa Belt.

The juxtaposition and constituents of each syncline in Kyushu are summarized as follows;

1) The northern syncline is characterized by Permian chaotic rocks and overlying Cretaceous strata. The Cretaceous strata include both Monobegawa Group type and Nankai Group type. The Nankai Group type Cretaceous strata in this syncline are called Nakakyushu Group. In Miemchi area, Hauterivian to Barremian Monobegawa Group type strata were replaced with Nakakyushu Group in late Barremian or Aptian age. The northern syncline is generally poor in the Kurosegawa older rocks and Permian to Jurassic shallow-sea strata, although they are thickly intercalated between the Permian chaotic rocks and the Cretaceous strata in Kumagawa area.

2) The central syncline is characterized by wide distribution of Nankai type Cretaceous strata. They can be correlated to typical Nankai Group in Shikoku. This syncline also includes the Kurosegawa older rocks and Permian to Jurassic shallow-sea strata underlying the Nankai Group, but their amount is relatively small.

3) The southern syncline is characterized by wide distribution of Permian to Jurassic shallow-sea strata overlying the Kurosegawa older rocks with no or a little Cretaceous strata of Nankai Group type.

Equivalents of the constituents of these synclines are recognized also in the Kurosegawa Belt in Shikoku and Kii Peninsula, although one or two of them are absent in every area and they do not form syncline except for the central syncline in some areas. In eastern Shikoku, equivalents of the central syncline and the southern syncline are recognized, but the northern syncline is lost. In central Shikoku, equivalents of the northern syncline and the southern syncline exist, whereas the central syncline is absent. In western Kii Peninsula, only the central syncline is recognized,

It is inferred that a relatively large amount of strike-slip displacement exists between the northern syncline and the central and southern synclines, because they belonged to different paleobiogeographic provinces of bivalves in early Early Cretaceous. The width of the Kurosegawa Belt in Shikoku and Kii Peninsula is much smaller than in Kyushu. One reason for this may be also due to strike-slip movements.