Geology of boundary area between Chichibu-Shimanto Belts- Sea mount chain subduction and after that-

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Sambosan Belt is distributed more than 1000 m long along the Butsuzo Tectonic line, which is divided Chichibu and Shimanto Belts. The Sambosan Belt had been identified accreted seamount chain (eg. Matsuoka, 1992).

Here we focus distribution, stratigraphy and structural evidence of the Sambosan Belt. We study all area of the Tokushima prefecture more than 60 km long. Especially we focus four area to do detailed mapping, structural analysis.

(Butsuzo Tectonic line) At first, we distinguish Butsuzo Tectonic line, because, distribution and structural analysis of this line is very uncertain in this area. Based on the detailed structural analysis, the Butsuzo Tectonic line formed this belt has top-to-the south thrust which formed brittle-ductile transition deformation.

(Sambosan Belt) The Sambosan Belt distributed two areas. One is Western Tokushima area which is formed more than 40 km long and 5 km wide. Second is Eastern Tokushima area, which is formed 20 km long and 3km wide. This distribution might be identified as accreted material from the seamount.

The Sambosan Belt contains basalt, limestone (Triassic), chert (Triassic- Jurassic), and chert breccia. Especially chert breccia contains many Sambosan origin material and detrital material. It suggests this belt formed in the trench, when seamount reached subduction zone. Distribution of this breccia might be identified seamounts environments.

After accretion, the chert breccia bearing the Sambosan Belt origin rock redeposited in the trench, and accreted during Hauterivian to Aptian age to form early Shimanto Belt.

(Deformation) There are three deformation identified in this area. D1 is imbricated ductile deformation in the basalt. It suggest top to south thrusting. D2 is right-lateral strike-slip deformation. D3 is the Butsuzo Tectonic line, which is identified as top-to the south thrust event. D1 deformation might be important to recognized the seamount accretion process.