

Two different types of accretion tectonics in Japan and Indonesia

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Japanese accretionary complexes that developed in the Permian, Jurassic, Cretaceous to Paleogene and Neogene have a common structure that youngs oceanward and/or tectonically downwards. These accretionary complexes are composed of various rock types derived from Ocean Plate Stratigraphy (OPS), which records the travel history of an oceanic plate from its "birth" at a mid-oceanic ridge to its "death" at a trench. OPS commonly comprises an upwards tectonic succession of pillow basalt, limestone, chert, siliceous shale, and detrital turbidite. Blueschists and eclogites provide evidence of subduction to high-pressure depths in subduction zones and exhumation in extruded wedges or channels, and they are distinctive components of subduction-accretion complexes.

The Cretaceous accretionary complexes of Indonesian are also composed of rocks derived from OPS as well as Japanese ones. They are also associated with high-pressure metamorphic rocks, such as blueschist and eclogite. The lithological association of the accretionary complexes of Indonesia is similar to the one of Japan. However, the tectonic history is different each other. In this paper, two different types of accretionary history between Japan and Indonesia will be discussed based on the stratigraphical and lithological evidences.