Geologic structure and age of the Jurassic accretionary complexes in the Kuzumaki-Kamaishi Belt, Northern Kitakami Massif

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The Jurassic accretionary complexes in the Miyako district of the Kuzumaki-KamaishiBelt (KKB) is composed of some tectno-stratigraphic units. They are distributed in three zones, the Eastern, Middle to Northwestern, Southwestern zones, each of which has different geologic structure.

The Eastern zone is composed of mudstone dominant unit with chert slab, bedded chert unit with limestone conglomerate and basaltic rocks, melange unit. These units dip steeply to the west and bounded by fault.

The Middle to Northwestern zone is composed of clastic unit, and sandstone and chert unit. These units are bounded by low-angle thrust and characterized low-angle structure. Forming some open folds, which strike NNW-SSE.

The Southwestern zone is bounded on the Middle to Northwestern zone by linear fault. It consists of sheared mudstone with volcanic rock, chert, and sandstone slabs.

Radiolarian fossils found from the manganese nodules in the mudstone indicate that the age of the accretionary of these units is of early Middle Jurassic. Compared with Akka-Tanohata Belt (ATB), KKB comprises slightly older accretionary complexes than those of ATB.