Jurassic accretionary complex of the Ashio Terrane in the Suhara region, Niigata Prefecture, central Japan

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The Jurassic accretionary complex of the Ashio Terrane in the Suhara region of Niigata Prefecture, central Japan, is divided into three tectonostratigraphic units; the Oshirakawa, the Kuromatagawa and the Kami-gongendoyama Complexes in structurally ascending order, based on lithologic association and geologic age.

The Oshirakawa Complex consists of melange-type rocks and slabs of chert, limestone, basaltic rocks and sandstone ranging from 50 to 300 m in thickness. The Kuromatagawa Complex is composed mainly of coherent sequences of interbedded sandstone and shale, and slabs of chert and basaltic rocks ranging from 300 to 500 m and over in thickness. The Kami-gongendoyama Complex is characterized by melange-type rocks and slabs of chert ranging from 300 to 500 m and over in thickness. According to radiolarian fossils obtained from shale, the accretionary age of the Oshirakawa Complex indicates middle Early Jurassic, and those of the Kuromatagawa and Kami-gongendoyama Complex ranges from Middle to Late Jurassic. Considering the lithologic association and geologic age, the Oshirakawa, the Kuromatagawa and Kami-gongendoyama Complexes are correlated with tectonostratigraphic units of the Tamba-Mino Terrane in the Inner Zone of Southwest Japan. The middle Early Jurassic Oshirakawa Complex is one of complexes showing the oldest accretionary age, and occupies the structurally uppermost portion in the Tamba-Mino-Ashio Terrane.