

THE K-T BOUNDARY IN AMUR-ZEYA BASIN (RUSSIAN FAR EAST)

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Amur-Zeya basin is the largest intracontinental Mesozoic-Cenozoic structure of the South of Russian Far East. This depression is restricted by Maly and Bol'shoy Khingan, Turan and Yankano-Tukuringra-Djagdy ridges and filled by the continental Upper Mesozoic-Cenozoic deposits. The section of the Cretaceous-Tertiary is mostly represented in south-eastern part of basin where the sequence starts with the Turonian sediments. The overlying Kundur, Tsagayan and Kivda Formations contain abundant well-preserved remains of fossil plants, spores and pollen, dinosaurs, turtles and crocodiles. The fossil reptiles were found only in lower-middle part of the Tsagayan Formation.

The comprehensive analysis of paleontological and geological data allows us to establish the important time boundaries of the paleogeographic and paleobiotic changes, connected with general tectonic restructuring of Far East region. The importantest from these boundaries coincides with the middle of the Maastrichtian. It was revealed in intensification of the tectonic movement contrasting, climate deterioration, change of terrestrial vegetation and disappearance of dinosaurs.

The second important time boundary is the K-T boundary. It was linked with rise of dynamic activity of mountain frame, what resulted in sharp increase of coarse-grained alluvial facies in the section of the Danian along depression margins, oftenly containing tuffaceous material.

Paleoenvironment at the K-T boundary was sharply changed, while the biota was changed in the mid-Maastrichtian.