

THE MESOZOIC VOLCANO-SEDIMENTARY BASINS OF THE NORTHERN MARGIN OF THE AMUR SUPERTERRANE

A. P. Sorokin, A. A. Sorokin. Division of Regional Geology and Hydrogeology, FEB, RAS, Blagoveshchensk, Russia.

The Early Mesozoic history of the Russian Far East resulted in collision between the southern margin of the North Asian craton and the Amur superterrane. In the Early collision stage (the Late Triassic-Jurassic) there formed residual oceanic basins. Their relics are composed of flysch-like deposits of the Un'ya-Bom and Ul'ban structural zones. At the same time along the northern margin of the submerging Amur superterrane there formed a chain of sedimentary basins (the Upper Amur, Zeya-Dep, Bureya basins). Their lowermost parts (the Pleinsbachian-Early Bajocian stages) were formed in shallow marine environments while their middle parts (the Late Bajocian-Callovia) and their upper parts (the Oxfordian-Tithonian stages) were formed in paralic and in typical continental environments respectively. In the Late Jurassic continental mode of sedimentation extended to the central part of the superterrane. Within its body there formed a system of graben-like structures (the Zeya-Selemdzha, Yekaterinoslavka, etc.) accompanied by accumulation of proluvium-alluvium complex. In the Cretaceous final stage collision processes resulted in formation of the late collision structures extended along the northern margin of the superterrane (the Urusha-Oldoy, Urkan, Pikan, Ogodzha structures) and composed of volcano-sedimentary deposits. In the Cretaceous to the south from the collision zone formation of rift-like systems partially inheriting the Jurassic basins took place. And, finally, in the Late Cretaceous-Cenozoic the Amur superterrane was overlain by sedimentary plate complex.