

COLLISION TECTONICS OF CENTRAL SIBERIA

1CHIKOV, B. M., 1BELYAEV, S. Yu. and 2SERDYUK, S. S. 1The Institute of Oil and Gas Geology, Novosibirsk, Russia; 2The Research Institute of Geology and Mineral Resources, Krasnoyarsk, Russia.‰

Central Siberia is the area, where the plates of ancient Siberian and young West-Siberian platforms conjugate. Three following provinces can be distinguished there by morphological criteria (from the east): a) the system of para-autochthon blocks of Siberian platform, b) the collision belt of Enisey river region, and c) the margin of West-Siberian young autochthon. The following tectonic zoning is based on the principles of structural-formation and deformation-metamorphic parageneses. Tunguss and Biryusa para-autochthon blocks, separated by the Low-Angara avlacostrain, are the main tectonic elements of the east province. The latter was formed by the low-amplitude block motions in the Paleozoic and Mesozoic. The sub-meridian zoning is typical for the Alongenisey-river belt (from the east): a) the Beyond-Enisey area of para-autochthon folded systems, allochthon packs of plates and single shear zones; b) the axial system of deformation-metamorphic terrain, shear zones of crumple and lens-like allochthon blocks; and c) the left flange of Enisey belt, plunged under the young autochthon cover. This belt was predominantly formed by two collision stages in Riphean and Late Paleozoic periods. The longitudinal zoning is complicated by regional transform fault-shifts. The young autochthon was formed at a heterogeneous Precambrian-Paleozoic basement beginning from the Jurassic period. The terrigene complex of its cover (Jurassic-Cenozoic) is hardly deformed. For the structure of autochthon basement, the most contrast relations are established in a relatively narrow zone near the Enisey river.‰