

THE INTERFERENCE OF PACIFIC AND CENTRAL-ASIAN MOBILE BELTS

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The Central-Asian mobile belt, located between Siberian, North-Chinese and Tarim platforms, is formed by fold-thrust systems of Baikhalides, Salairides, Caledonides and Hercynides and contains numerous periphean granitized massives. The East flank of Central-Asian mobile belt, formed on Early Cambrian substrate of Amur and Baikal geoblocks, was in a zone of interaction with Pacific mobile belt. The latter differs by polycyclic development with peak of activity in MZ. The stages of development are: the first (PR3-PZ3) – is evolution of fold-thrust systems and their consolidation; the second (P-T1 - J3-K1) – is formation of imposed orogenic-activation structures, including volcanic-plutonic belts; the third stage (K2-KZ) - is dome-riftogenic development, intensive basaltoid volcanism, formation of largest depressions. The basic elements of deep processes model are: lateral, partly, descending heat-mass transfer under continent from the side of Pacific transital zone and ocean; formation of astenospheric lenses in mantle; heat and fluid penetration trough faults in joints of structures; continental lithosphere destruction. The interference area of Central-Asian and Pacific mobile belts has powerful potential of mineral raw material (U, Au, Fe, Sn, W, Mo, Pb, Zn, Cu, Ni, Ti, V; petroleum, coal etc.). The industrial deposits concern to 10 minerogenic epoches. Largest hydrothermal deposits of U (Streltsov), Au (Baley), and also petroleum (Songliao) and coal were formed in Late Mesozoic.