

Tectonophysical conditions and mechanisms of forming the structures of ore-golden deposits in the Verkhoyano-Kolymskaya ore-containing regions (Russian North-East)

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There has been displayed the regular change of the dynamic regimes and mechanisms of forming the structures of ore-golden deposits in Verkhoyano-Kolymsky ore-containing region. On the earlier stage (later Jura-early neocom) of forming the ore-golden deposits, in the conditions of frontal collision there can be noticed the regional near-horizontal position of the axis compressing σ_3 and near-vertical orientation of the stretching σ_1 of strain and the development of early-collisional gold-containing mineralization in the areas of splitting of the overlapping kinematics. In the side-parts of the folded-overlapping belts the areas of splitting form the systems of lamellar fans with overlapping and tossing kinematics in the culminations of the largest anti-clinories or in the frontier parts of heterogenous structures. Early-collisional ore-quartz mineralization in the splitting zones bear the signs of tectonometamorphogenic origin, the synchronous forming of ore-containing elements.

In the later neocom there prevailed the shifting dynamic regimes with near-horizontal orientation of the compressing σ_3 and stretching σ_1 of strain which can be connected with the oblique collision of the terrains towards the edge of the cratone. Along the splittings there can be noticed the regular zone distribution of shifting, overlapping and fault paleotectonic fields of strain. Variations of paleotectonic fields of strain are due to the areas of side re-covering of faults and the development of fault-duplex structures of compression and stretching where compensation of lateral dislocation takes place. Therefore, there establishes the correlation of the gold-containing mineralization and geodynamic conditions of paleoconvergent tectonic borders.