

## **CRUSTAL FRAGMENTATION, DEFORMATION AND FORMATION OF PERIOCEANIC FOLDED-BLOCK SYSTEMS**

GRANNIK V.M. Institute of Marine Geology & Geophysics, Far Eastern Branch, Russian Academy of Sciences, Yuzhno-Sakhalinsk, Russia

The following episodes of fragmentation and deformation of continental and oceanic crust, facilitating formation of the observed structure of perioceanic folded-block systems, are revealed. The subduction interaction of lithospheric plates is accompanied by segmentation of island arcs, frontal parts of the overhanging and moved up plate, bends, brittle and plastic deformations, transformations of physical properties, composing plates of rocks, formation of scaly-thrust accretion wedges, tectonic erosion with formation of melanges. Wedging in of seismic focal zones by microcontinents and thick terrains causes obduction, separation and covering-overthrusting lamination of frontal parts of oceanic and continental plates complicated by disjunctive dislocations. Then there occurs collision interaction of active margin tectonic elements complicated their inner structure. Transform interaction of lithoplates is accompanied by intensive deformations of shift character, causing the formation of local zones of compression and extension, essentially complicated their internal structure. In the initial period of formation of a new active margin the asthenosphere generated by the previous convergent interaction of plates, promotes to large-scale fragmentation of the formed Earth's crust. Stopping of subduction interaction of plates, especially under conditions of global intensive compression, results in accretion of continents by belts of folded-block systems including various terrains of covering-thrusting structure