

COMPARISON OF THE TECTONICS AMONG THE HIGHEST PEAKS OF THE SEVEN CONTINENTS IN THE WORLD

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The highest peaks of the seven continents in the world lie in longitudinal or latitudinal, global or macroscopic mobile belts. Mt. McKinley in North America, Co. Aconcagua in South America, Puncak Jaya in Oceania and Vinson Peak in Antarctica are located in the circum-Pacific global longitudinal mobile belt. Both Gora El'brus in Europe and Qomolangma Peak (Everest) in Asia are situated in the Mediterranean global latitudinal mobile belt. Kilimanjaro Mt. in Africa is situated on the shoulder of macroscopic longitudinal East African rift belt. The regular distribution implies a genetic relationship between the highest peaks of the seven continents in the world and rotation of the Earth.

The highest peaks of the seven continents in the world are related to the arcuate structures. They are due to the heterogeneity of crust movement, indicating that the highest peaks of the seven continents in the world lie in a position of stress concentration. The seven peaks were uplifted intensely in Cenozoic. So far they have been under uplift. Qomolangma Peak was uplifted at the rate of 37mm/a in the last 30 years and nearby regions at the rate of 4~15mm/a. The uplift rate of Gora El'brus is 10mm/a. They can be divided into two types based on their internal structures and uplift mechanisms. One is related to subduction-collision, another is related to extension.