The modern geodynamic processes in the plate and folded mountain areas by seismic raying data

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P-waves parameters, produced by nuclear explosions on Semipalatinsky test side for 1968-1989 year and registered by seismic stations in the active seismic area of Tjan-Shan and in the non active area Russian Plate, were investigated. In this aspect time series of velocities and delays of travel time to travel time curve IASPEI-91 were analyzed.

The results of this research let us expose variations of the stress state of rocks of the earth crust and the upper mantle in different blocks in the area of Tjan-Shan and the connection of variation’s amplitude, seismisity of the region and block motion’s velocities by GPS data.

Time series analysis by the data of seismic stations Obninsk and Michnevo in the area of the Russian plate let us display different periods harmonics. The most precise is the 11-year cycle, which is correlated with time series of Wolf numbers. In the area of Tjan-Shan this cycle is not displayed so clear, as in the area of the Russian plate. In the area of Tjan-Shan it may be connect with intensive 2 and 5-6-year cycles, could been produced by velocity variations of the Earth’s rotation.