

ТАРАКАНОВ, ВЕСЕЛОВ  
**UPPER MANTLE POLYMORPHOUS TRANSFORMATIONS  
FOR DIFFERENT TECTONIC ZONES**

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The paper describes the analysis of topographic features, transitional zones thicknesses in the upper mantle and velocity features of different tectonic zones. Data array is based on 70 published papers containing different features of polymorphous transformations and other features related to the depths of 410 and 660 km. The authors used statistical and tomographic approaches in order to analyze the data. Different sets of maps showing various topographic features of polymorphous transformations, as well as transitional zones thicknesses and velocity features are presented. Statistical approach was used to interpret data array from 70 papers. As a first step, the data array was subdivided into different tectonic zones, such as: 1) activated areas including seismic focal zones and subducted lithospheric plates, 2) oceanic structures (including the Pacific), and 3) continental structures, which contain predominantly continental platforms. The table, which shows topographic features of thicknesses of transitional zones, was created using both statistical approach and tomographic maps for different tectonic zones. According to the table, results from the two approaches are within the error of interpretation.

Tomographic approach visualizes all features related to polymorphous transformations for different tectonic zones.

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