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## Tracing asperities in Kamchatka area using break of slope in magnitude-frequency distribution

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Magnitude-frequency distribution is usually regarded as a straight line (in logarithmic scale of the frequency) up to largest magnitudes in accordance to the well-known Gutenberg-Richter law. However, it was shown recently that this straight line may experience a break of slope at moderate magnitudes in zones of significant aseismic deformation (creep). Here, based on the statistics of earthquakes in Kamchatka slab, we exploit this phenomenon to trace possible boundaries of zones of higher seismic coupling (asperities) using band-limited analysis of the slope of the magnitude-frequency distribution. We compare our results with known observations and independent models of asperities in the considered area. The research was partially supported by Russian Foundation for Basic Researches (Project 17-05-00749).