

**SEISMICITY LEVEL VARIATIONS ESTIMATED STATISTICALLY USING SESL'09
TECHNIQUE: APPLICATION FOR BEZYMIANNY VOLCANO (KAMCHATKA)**

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We use SESL'09 technique for a unified estimation of seismicity level in a given space-time regions. The application of the distribution function of radiated seismic energy permits the formalization of qualitative description of seismicity. We present the results from statistical estimations of seismicity level before the 2000-2012 Bezymianny Volcano eruptions. The state of seismicity was describes by the monogram, constructed according the SESL'09 technique. By processing the Klyuchevskoy volcano group seismic catalog, we estimated variations of seismicity and detected background level. Statistically significant variations of the seismicity level preceded the eruptions were detected and discussed.

Keywords: seismicity level, Bezymianny Volcano, scale SESL'09, eruption precursor.