# INVESTIGATION OF RESPONSE TO THE TIDAL EFFECT IN TIME-SERIES OF THE BOREHOLE GEOACOUSTIC MEASUREMENTS

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This paper presents the main research results from investigation of the tidal deformation modulating effects on the geoacoustic emission based on the long-term measurements at a depth of 730 m in the borehole R-2 within the Petropavlovsk-Kamchatsky geodynamical monitored area.
The method of stages superposition was used to select the periodic components. This method allows selecting tidal harmonic curves $O_1$ ($T_{O1}$ = 25.82 h.) и $M_2$ ($TM_2$ = 12.42 h.) from the original geoacoustic emission time-series with pinpoint accuracy in period assignment. The article also provides estimates on the detected tidal constituents intensity.

*Keywords: geoacoustic emission, deep borehole, tidal harmonic curves.*