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Spectral Gistogramm Method for Catalogue Nakamura Search

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Abstract

On the basis of submitted lunar seismogramm by ISAS with the help modified the spectral gistogramm method search of the hidden periodicity of the 10, 20 minutes range concerning a spectrum of the free oscillation of the Moon is carried out. Various components (X, Y, Z and $\sqrt{X^2+Y^2+Z^2}$) lunar seismogramm written down by seismic network Apollo are analyzed. As against many researches on histograms peaks which are close to a prospective spectrum of the free oscillation of the Moon clearly allocated. Thus, from 12556 events of Nakamuta Catalogue about 70% make falling meteorites on a lunar surface. Results of the spectral gistogramm method show that depending on weight and a falling corner of a meteorite some divergence between the basic spectral peaks is observed. It demands as the further improvement of the spectral gistogramm method and the analysis of the received results and also deeper connection between a place of a impact, an arrangement of seismic stations and displacement wave components on event registration.