



Method of multifractal analysis of seismic noise

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DFA (Detrended Fluctuation Analysis – Analysis of fluctuations after removing of scale-dependent trends) method of multifractal analysis of signal is described. Improved method of trend removal (detrending) based on discrete wavelet transform is proposed and algorithm of singularity spectrum boundaries estimation is modified. Analysis of dynamics of signal multifractal characteristics by an example of seismic noise is carried out.

Keywords

Multifractal analysis, Fractal dimension, Hurst exponent, Wavelet analysis, Detrending, Time series, Singularity spectrum

References



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