

Abstract

The main goal of this paper is to identify reflection from seismic data using the multifractal formalism. Firstly, the wavelet transform modulus maxima lines method is applied with a sliding window of 128 samples at the seismic seismogram data. After that, we estimate the generalized fractal dimension. Application at the noisy synthetic seismic seismogram of the pilot Kontinentales Tiefbohrprogramm der Bundesrepublik Deutschland borehole shows that the three fractal dimensions related to the three first moments are a good tool that can separate between reflection due to the change of facies and random noise