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# of variants for seismic data pre-processing which are not leading to significant losses of information that may be needed

Seismic data processing algorithms are constantly being improved. Most algorithms demands preliminary processing. Typically, this processing is either very simple, such as frequency filtering, or highly specialized for highlighting specific features of the signal and can not be used with other post-processing algorithms. We are considering solutions which are not leading to significant losses of information that may be needed. The basic purposes of the preprocessing are the reduction of noise, elimination of obvious noise (mostly of anthropogenic origin) and decrease the dimensionality of the data, i.e., the removal of their redundancy. As a post-processing we intend using neural networks of one or another architecture, but it does not exclude a possibility of application of other algorithms. In our work we are considered Wavelet transform, Autoencoder, and Compressive Sampling as preprocessing.

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