

TIME-DOMAIN FILTERING OF SEISMIC ROTATION WAVES

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A b s t r a c t

Rotational parts of seismic waves are extracted from recordings of differential seismic signals. Thus, all differences in responses of the seismometers cause disturbances which obscure these hidden components. The method of removing great part of these disturbances is developed, based on the time-domain filtering and using the data collected over a selected period of seismic monitoring, called the test phase. Examples of seismic rotation components for some events registered in the Ojców observatory are shown, together with results of checking the adequacy of the presented method.

Key words: rotation waves, twist waves, filter design, recording system.