



## **Seismic imaging of post-glacial sediments – test study before Spitsbergen expedition**

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This work presents results of the analysis of reflection seismic data acquired from testing area in central Poland. For this experiment we used total number of 147 vertical component seismic stations (DATA-CUBE and Reftek “Texan”) with accelerated weight drop (PEG-40). The profile was 350 metres long. It is a part of pilot study for future research project on Spitsbergen. The purpose of the study is to recognise the characteristics of seismic response of post-glacial sediments in order to design the most adequate survey acquisition parameters and processing sequence for data from Spitsbergen. Multiple tests and comparisons have been performed to obtain the best possible quality of seismic image. In this research we examine the influence of receiver interval size, front mute application and surface wave attenuation attempts. Although seismic imaging is the main technique we are planning to support this analysis with additional data from travelttime tomography, MASW and other a priori information.