

## First results of the surface ambient seismic noise characterization campaign along scan-lines around Terziet.

In November 2024, the ET-EMR noise characterization team conducted a passive seismic survey in the Euro-regio Meuse-Rhine (EMR) region, focusing on the area surrounding the Terziet broadband seismic stations (NL.TERZ) at both surface level and a depth of 250 meters. The primary objective of this survey was to identify and characterize the dominant seismic noise sources in the region.

To achieve this, we deployed a series of scan-lines extending from various suspected noise sources—including wind turbines, bridges, tunnels, and pumping operations—measuring the surface wavefield along trajectories leading toward the Terziet borehole station. Additionally, a small seismic array with a 500-meter aperture was installed to complement the setup.

In this presentation, we will provide a general overview of the seismic noise environment and focus on a detailed analysis of one or two key noise sources. Finally, we will discuss how these findings can help establish guidelines for future surveys using a similar approach.

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