



Wind generated seismic noise introduced by external infrastructure: advance in theory and results of improvement works

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Civil works related to improvement of intrasite communication infrastructure at two co-located seismic and infrasound IMS arrays led to significant enhancement of seismic background data quality. Experimental data allow discrimination of the noise sources. Multiple peaks in spectral domain identified as induced by external structures, have vanished after the removal of communication towers, however the disturbances caused by borehole casing resonances are still visible thus contributing to the further development of multiple sources theory of wind-induced seismic noise peaks. Data from other stations will be also examined and hopefully will allow detailed calculation of the share of each component of the wind-induced noise to achieve the best agreement with observed data. This work is generally aimed to contribute in detection capability enhancement of IMS seismic and infrasound array-stations.