



*Supplement of*

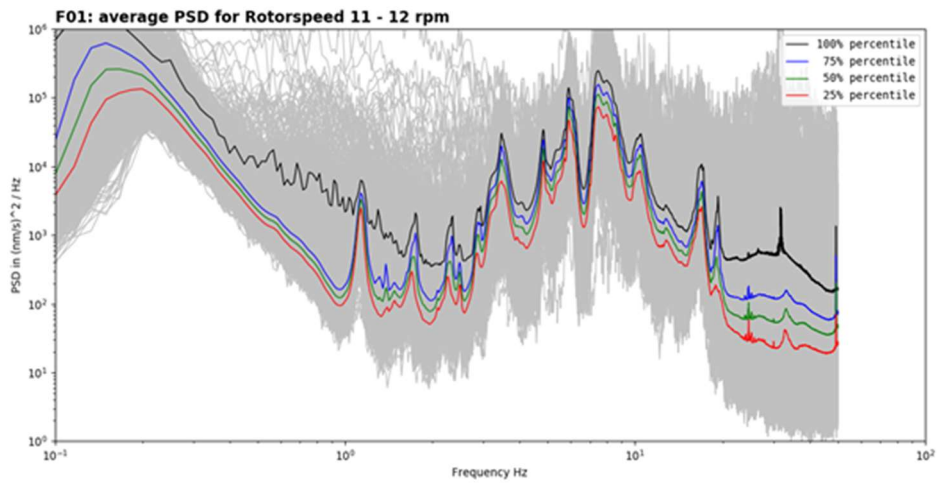
## **Seismic radiation from wind turbines: observations and analytical modeling of frequency-dependent amplitude decays**

**Fabian Limberger et al.**

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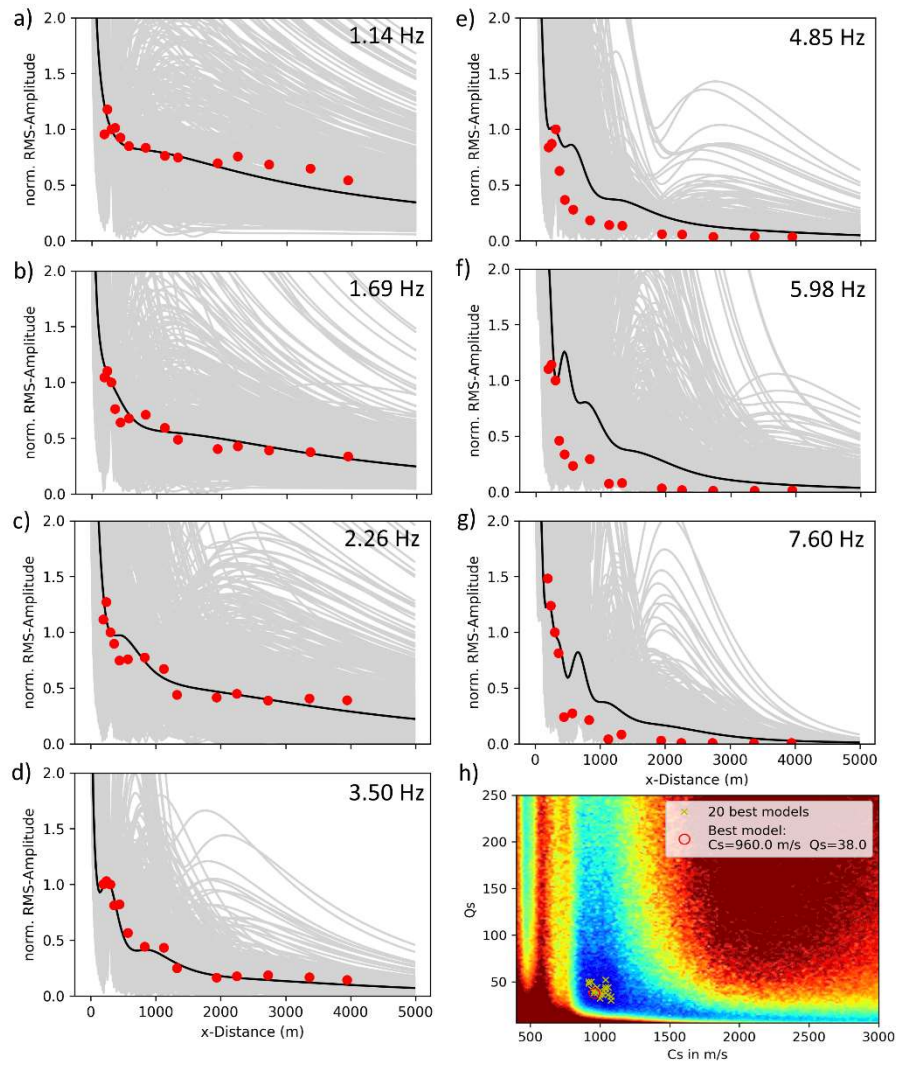
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**Figure S1:** Effect of different percentiles (25 %, 50%, 75 % and 100 %) on the calculated average PSD spectra (coloured lines) for station F01. The grey lines in the background represent single PSD spectra derived from 10 min time windows recorded at “full power” status from Sep 2019 to Mar 2020 (9855 single PSD spectra in total). To estimate the PSD amplitude decay with distance we used the 25% percentile average (red line) calculated from 2463 single PSD spectra at each of the profile stations.



**Figure S2:** (a)-(g) Comparison of calculated and observed data (red dots) for seven signal frequencies assuming a simplified homogeneous model of the subsurface. (h) Best model parameters are  $c_s = 960$  m/s and  $Q = 38$  to fit all data simultaneously.