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of infrasound in-situ calibration method on a 3-month measurement campaign

This work is devoted to the signal processing algorithm developed for the on-site calibration of infrasound stations in accordance with the draft IMS operational manual. This algorithm is based on the comparison of the spectral contents between the sensor under test and a known reference sensor. However because the large signal variability, mainly due to the wind effects, the requirements are very challenging. The presented study has led to use a log-scale filter bank approach and a weighted estimator based on the coherence level. The algorithm as well as the numerical results obtained for several weeks of measurements at IS26 (Germany) will be presented. The results confirm the capability of the method to provide results within IMS minimum requirements. It also appears that the method is able to provide useful information on the performance and response of the noise reduction system.

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