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traceability for Infrasound: Calibration Innovations and Inter-Laboratory Comparisons from the INFRA-AUV Project

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For any physical measurement to be meaningful, it must ultimately be traceable to an absolute realization of the parameter, or primary standard. Waveform measurements are no exception, in particular the infrasound. However, until recently, no primary standards existed for infrasound at the frequencies of interest to the IMS. The INFRA-AUV project aimed to develop both primary and secondary calibration methods to address this need. One of the critical final stages of the project involves ensuring the validity of the calibration results provided by the various developed systems. For this purpose, two comparisons were organized in the infrasound field. During this exercise, microphones and barometric pressure sensors were circulated for measurements. This presentation illustrates the measurements from the four participants, describes their calibration methods, and provides an analysis of the degree of equivalence between laboratories.

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