

Environmental Calibration of Infrasound Sensors in a Long-Term Field Study

A long-term field study is being performed at Sandia National Laboratories (SNL) Facility for Acceptance, Calibration, and Testing (FACT) to compare the performance of several infrasound sensors in active use. The goal of this study, which was initiated at the beginning of 2018 and is continuing into 2019, is to evaluate the relative performance of the sensors in a field environment in which the sensors are subject to dynamic environmental conditions and to evaluate changes in the sensor's absolute performance under controlled laboratory conditions. Observations from field tests indicate that changes in sensor sensitivity are correlated with environmental conditions, such as temperature and barometric pressure. Work has been performed to evaluate the sensor's sensitivity under controlled laboratory conditions as a function of similar changes in temperature and barometric pressure. These laboratory measurements are compared against the field comparisons to determine if they are sufficient to predict what has been observed in the field

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