

the Effects on Response of Infrasound Sensors Deployed in Harsh Desert Environments

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We recently conducted a limited frequency response calibration of 43 Hyperion 3000 and 5000 series infrasound sensors. These sensors have been utilized in a number of temporary deployments in the high desert of the Nevada National Security Site (NNSS), northwest of Las Vegas, Nevada, USA. The sensors were not installed in a manner consistent with an IMS station installation; rather these sensors were deployed on the surface, with porous hose wind filters, and in less-than-ideal locations. The sensors were produced as early as 2012. Their desert field deployments included exposure to high temperatures, and in some cases, exposure to flooding and rodent, insect, and spider infestation. Sensors utilizing “garden-hose” type inlets were opened and cleaned, and had their transducers visually inspected prior to testing. We evaluated their sensitivity and frequency response from 0.01 Hz through 10 Hz and present results of these evaluations.

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