-going research in Infrasound at Georgia Tech Research Institute (GTRI)

This presentation discusses on-going research in Infrasound at Georgia Tech Research Institute (GTRI), the applied research arm of Georgia Institute of Technology. In particular, results of a study that compared a number of commercially available infrasound sensors with and without a wind screen loaned to GTRI by NASA Langley and described by Ahuja and Shams in the 2017 Infrasound Workshop are presented. Sources of producing controlled infrasound under consideration at GTRI are also discussed. These include a sonic boom simulator, a low frequency acoustic driver, oscillating jets, and door opening and closing. Each source was most effective in a given frequency range. Controlled infrasound at 0.1 Hz was obtained by varying the exit Mach number of exit Mach number of a cold plume from very low Mach number to a high Mach number at a nominal frequency of 0.1 Hz. It is expected that the amplitude of this signal will increase by heating the jet. Preliminary results of successful attempts at removing wind noise using Wavelet methodology are also shown. This talk will also describe planned collaborative work on the topic of infrasound between researchers at Georgia Tech and those at CTBTO.

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