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Locating infrasound events in wind with dense distributed arrays

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Applications for infrasound suffer due to the presence of wind noise in the sensor data. Several techniques have been and are being used to mitigate the influence of wind noise in locating infrasonic signals of interest. One of these methods is the averaging of data from multiple sensors in a distributed array. A distributed array was employed to study infrasonic signals from airborne sources. Wind noise during testing masked the location of the infrasonic signals in the time domain. Post-processing techniques using statistical measures for dense arrays were employed to recover the onset of the infrasonic events. Data from these tests and an explanation of the post-processing techniques will be discussed.