

Abstract Submitted  
for the DFD17 Meeting of  
The American Physical Society

**Atmospheric Infrasound during a Large Wildfire.**<sup>1</sup> ALEXIS VANCE, BRIAN ELBING, Oklahoma State University — Numerous natural and manmade sources generate infrasound, including tornado producing storms, human heart, hurricanes, and volcanoes. Infrasound is currently being studied as part of Collaboration Leading Operational UAS Development for Meteorology and Atmospheric Physics (CLOUD MAP), which is a multi-university collaboration focused on development and implementation of unmanned aircraft systems (UAS) and integration with sensors for atmospheric measurements. To support this effort a fixed infrasonic microphone located in Stillwater, Oklahoma has been monitoring atmospheric emissions since September of 2016. While severe storm systems is the primary focus of this work, the system also captures a wide range of infrasonic sources from distances in excess of 300 miles due to an acoustic ceiling and weak atmospheric absorption. The current presentation will focus on atmospheric infrasound observations during a large wildfire on the Kansas-Oklahoma border that occurred between March 6-22, 2017.

<sup>1</sup>This work was supported by NSF Grant 1539070

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Date submitted: 01 Aug 2017

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