ID: Type: **Poster**

Graphical User Interface for Interactive Infrasound Time Series Analysis

InfraPy is a Python-based infrasound analysis toolkit being developed at Los Alamos National Lab for detection, association, localization, and characterization using infrasonic signals. The software is intended to eventually provide a complete suite of tools for infrasonic signal analysis. The use of the Python language allows for fast development through a wealth of built in libraries and ease of use through rapid development of documentation. In addition to continued development and evaluation of the analysis algorithms, a Graphical User Interface (GUI) is being developed to make many of the tasks associated with array analysis easier and less time consuming. The primary focus of this GUI development has been on implementing methods for interactive time series analysis enabling rapid analysis using the built-in Bartlett, Capon, and MUSIC beamforming algorithms to identify coherent signals recorded across an infrasonic array. Continued development is ongoing and intended to lead to an open-source version of the InfraPy toolkit including the GUI. The software is aimed to be utilized by and accept contributions from the general infrasound research community. An overview of the capabilities of the time series analysis GUI as well as examples of its application to a number of data sets will be presented and discussed.

Primary author: WEBSTER, Jeremy (U.S. Department of Energy, National Nuclear Security Administration)

Presenter: WEBSTER, Jeremy (U.S. Department of Energy, National Nuclear Security Administration)

Track Classification: Poster session