Subject: FW: processing UC jet noise data Date: June 28, 2022 at 2:14 PM

To: tam@math.fsu.edu



Here is a set of Matlab codes from Dr. Gutmark for processing near field noise data.

Hi Chris.

I've just returned from Europe. I was hoping to see you at the Aeroacoustics meeting.

Please find the Matlab codes for processing near-field data in the attachments.

## Instructions for usage:

- 1. Add all the near-field data sent previously in .mat format into one folder.
- 2. Make sure the file names end in two-digit numbers for the code to order the mic locations correctly.( eg: NPR3p0\_Radial\_Position01, NPR3p0\_Radial\_Position02, ....NPR3p0\_Radial\_Position21).
- 3. Update the data folder paths in the Matlab codes.
- 4. Run "ProcessNearFieldData\_and\_SaveSpectra\_Updated06252022.mat". This processes and saves all the data in the frequency domain in one file. (eg: Processed\_BS4096.mat").
- 5. Run

"ReadSpectra\_FindToneAmplitudes\_and\_PLOT\_Updated06252022.mat". This reads the saved data(eg: Processed\_BS4096.mat") and plots the contours of select frequencies. Currently, it is set up for NPR3.0. The user needs to modify the numbers in the script for other NPRs.

Please let me know if there are any questions about its usage.

Thank You and best wishes, Effie



ProcessNearFiel ReadSpectra\_Fi dData\_...022.m ndTone...022.m