CompPsych Project 1

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Siddhesh Bhande,
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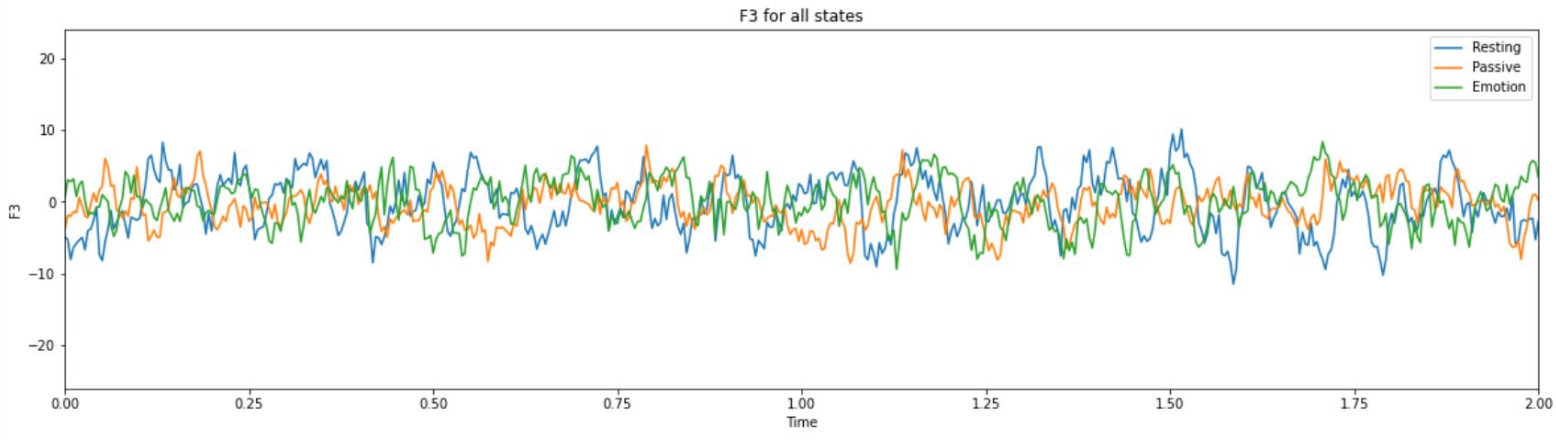
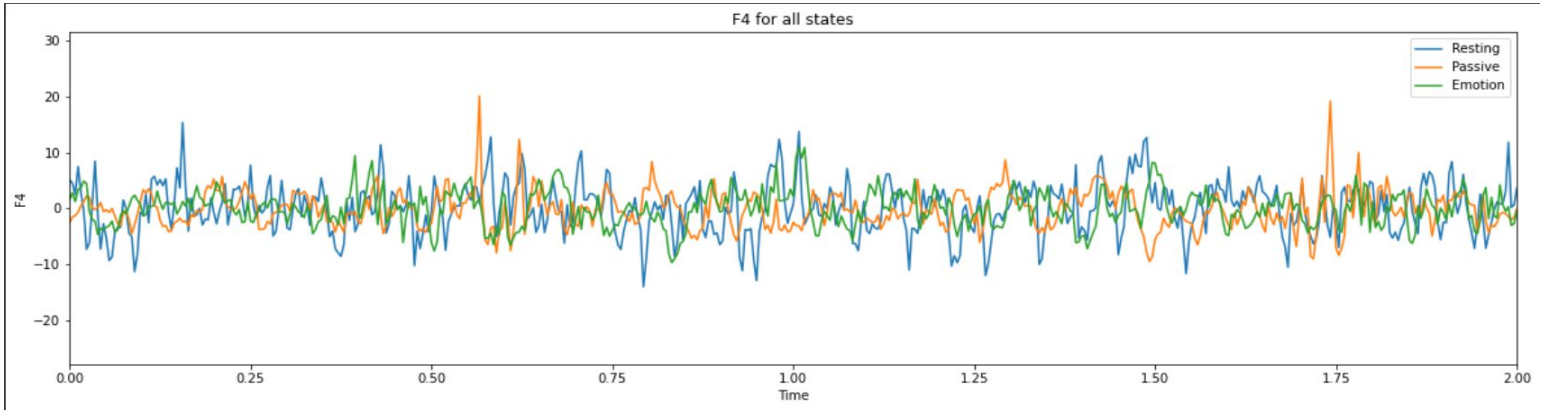
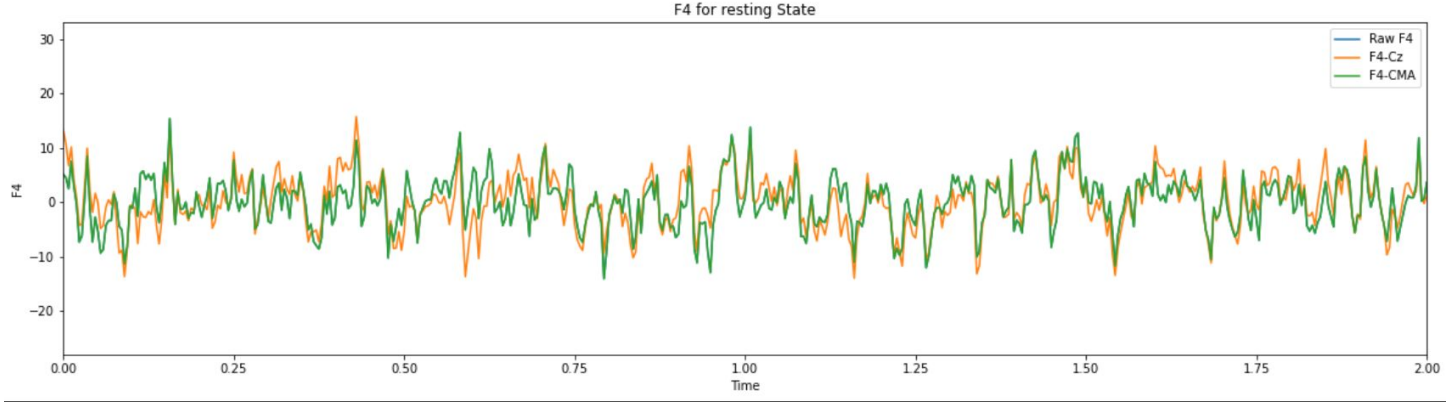
Step 1: Visualizing and Denoising the Dataset



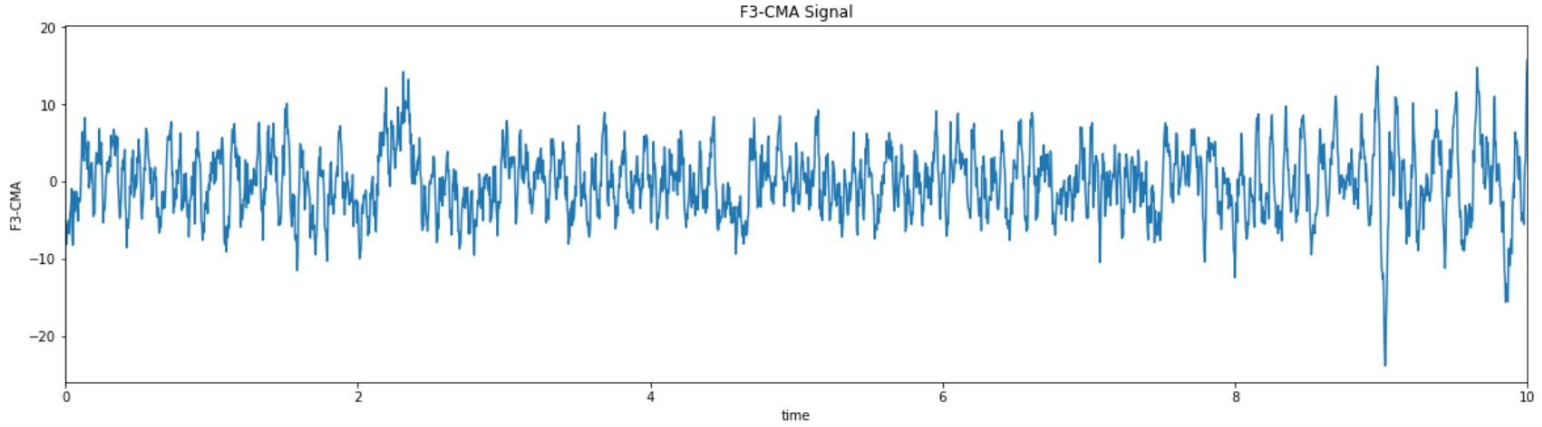
Visualizing F3 and F4 of a random sample (s001) for all states for a Window of 2 seconds.



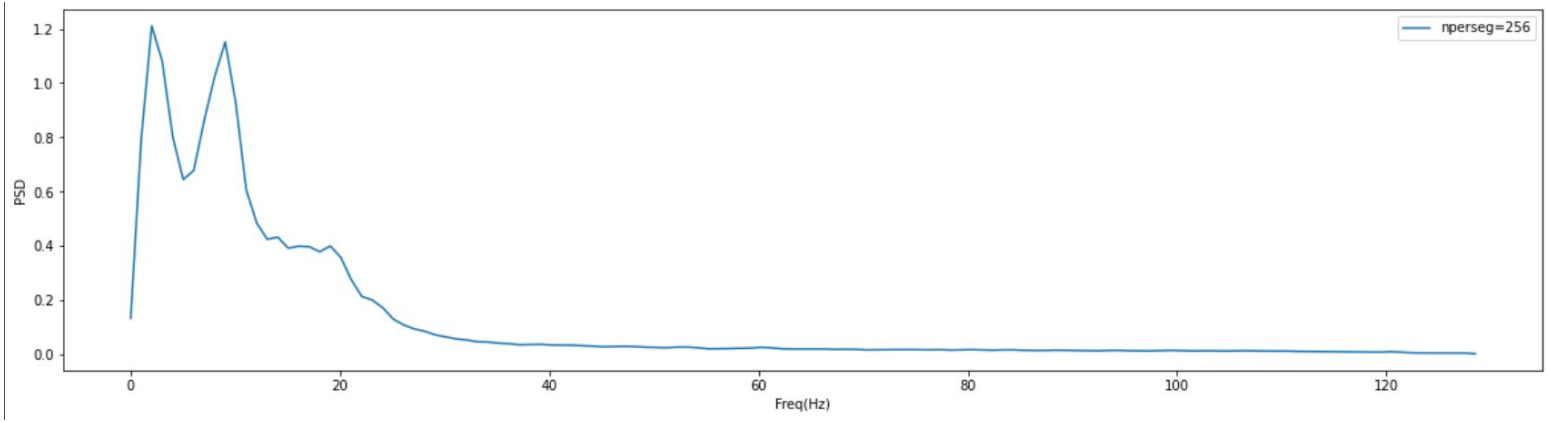
Comparison of Raw F3, F3-Cz and F3-CMA for s001 at resting state.



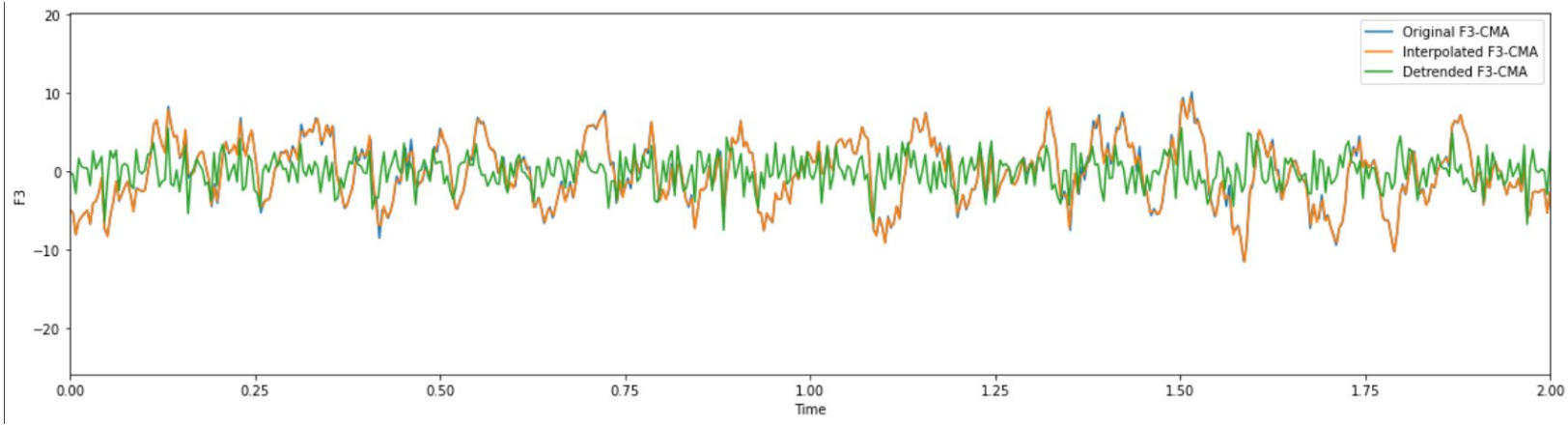
Comparison of Raw F4, F4-Cz and F4-CMA for s001 at resting state.



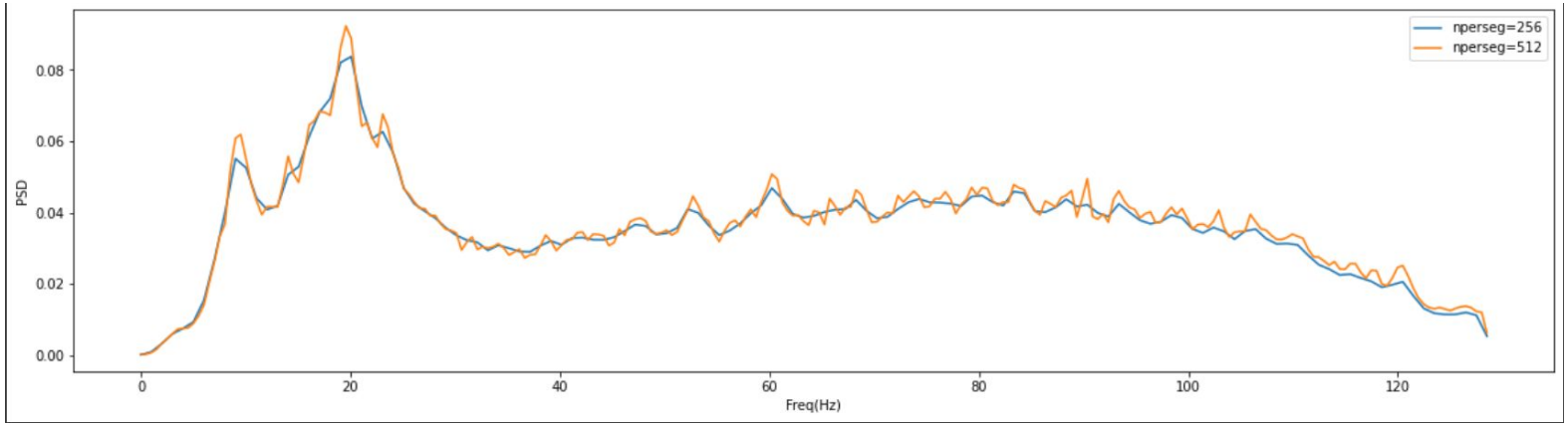
Original F3-CMA signal for s001 in Time Domain for window of 10 sec



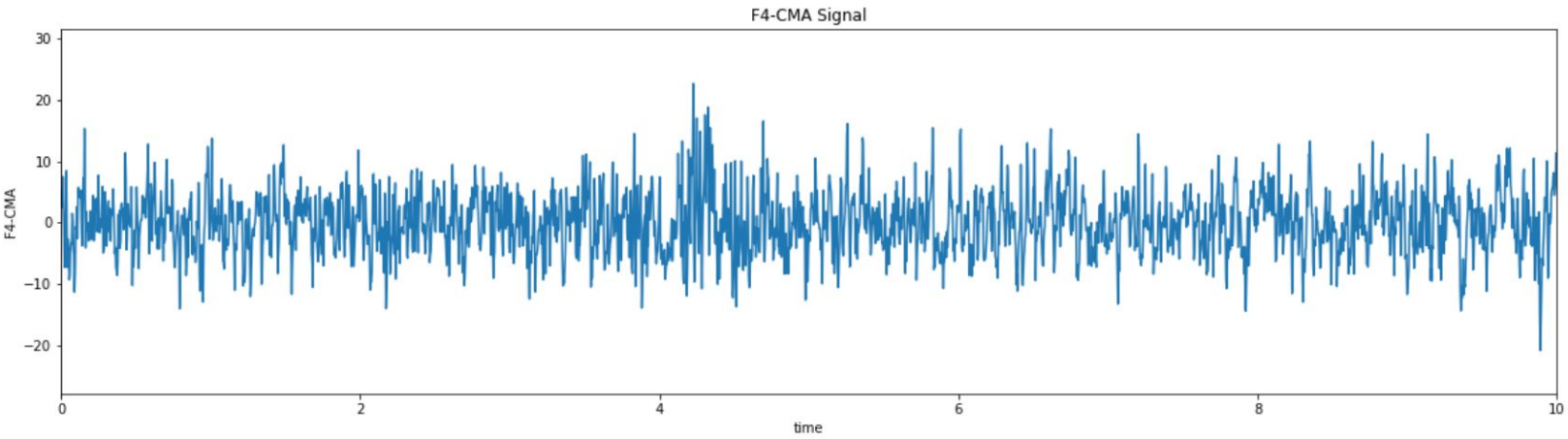
Original F3-CMA signal for s001 in Frequency Domain



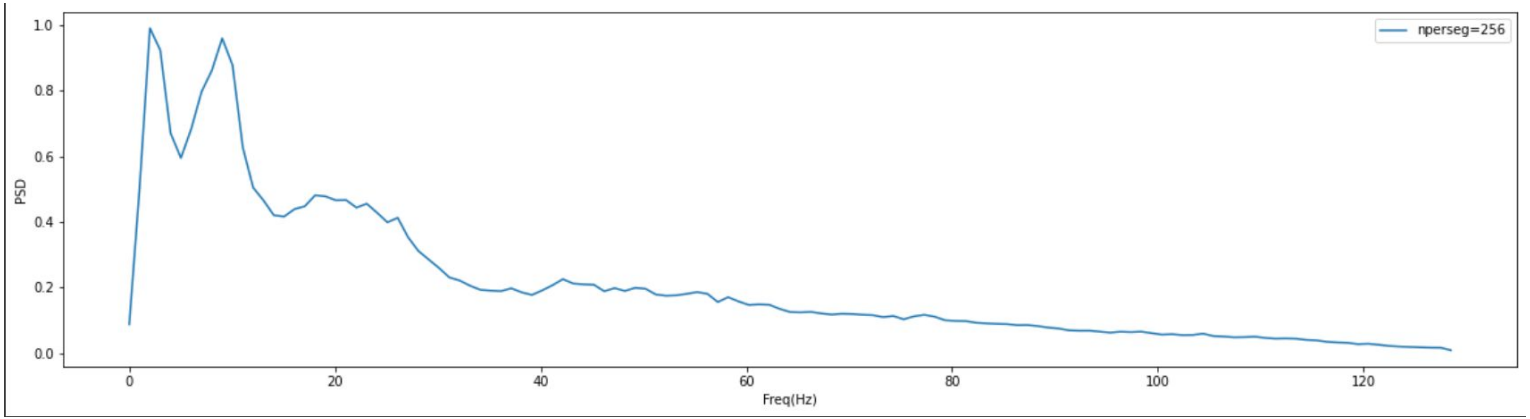
Comparison of Original, Interpolated and Detrended F3-CMA



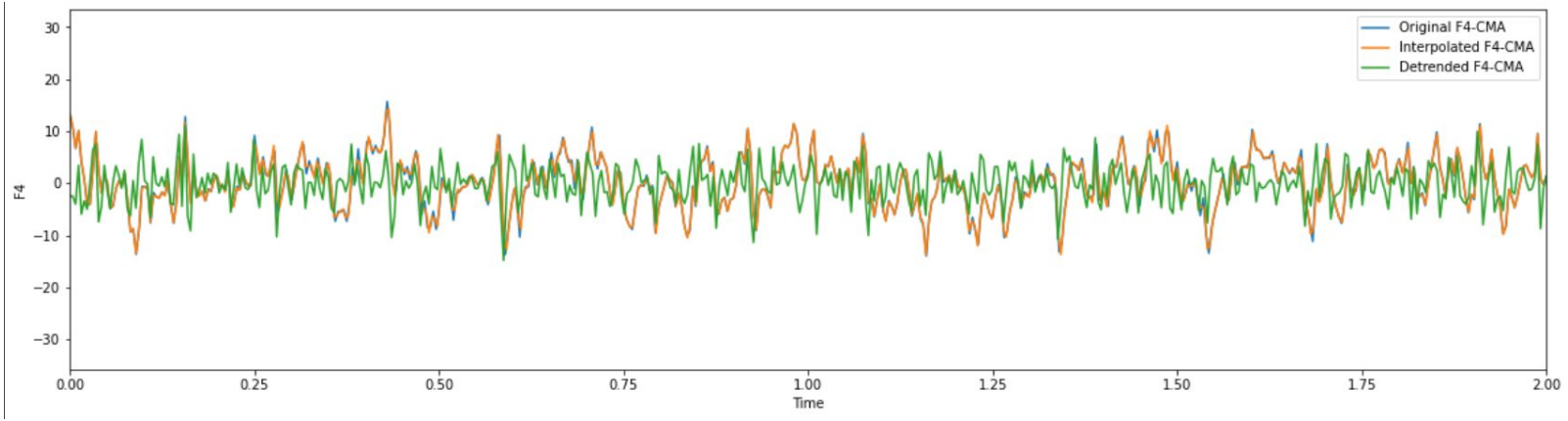
Periodogram after Detrending and Interpolating the F3-CMA signal



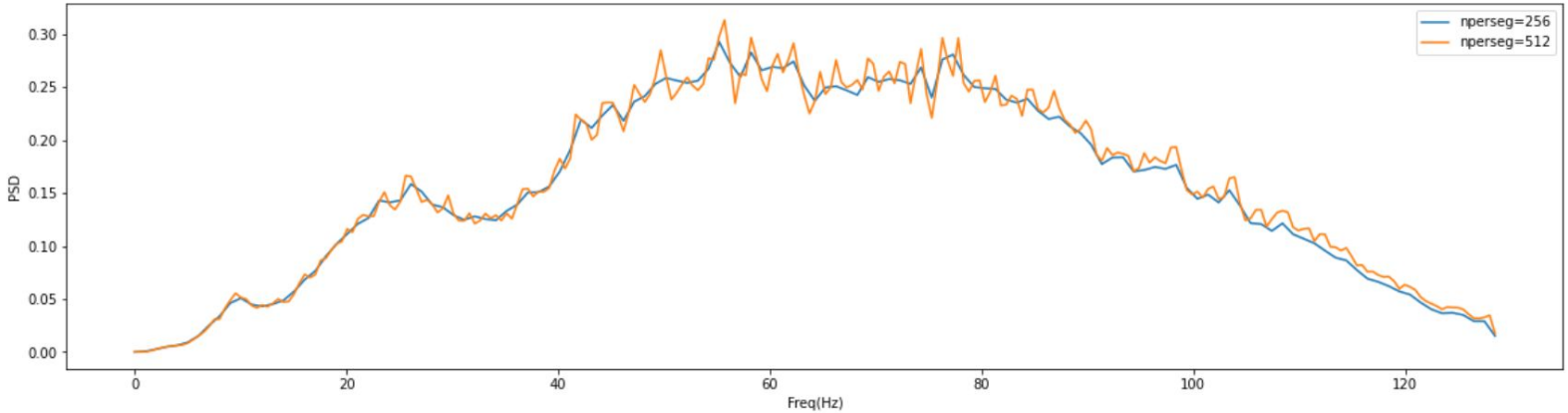
Original F4-CMA signal for s001 in Time Domain for window of 10 sec



Original F4-CMA signal for s001 in Frequency Domain

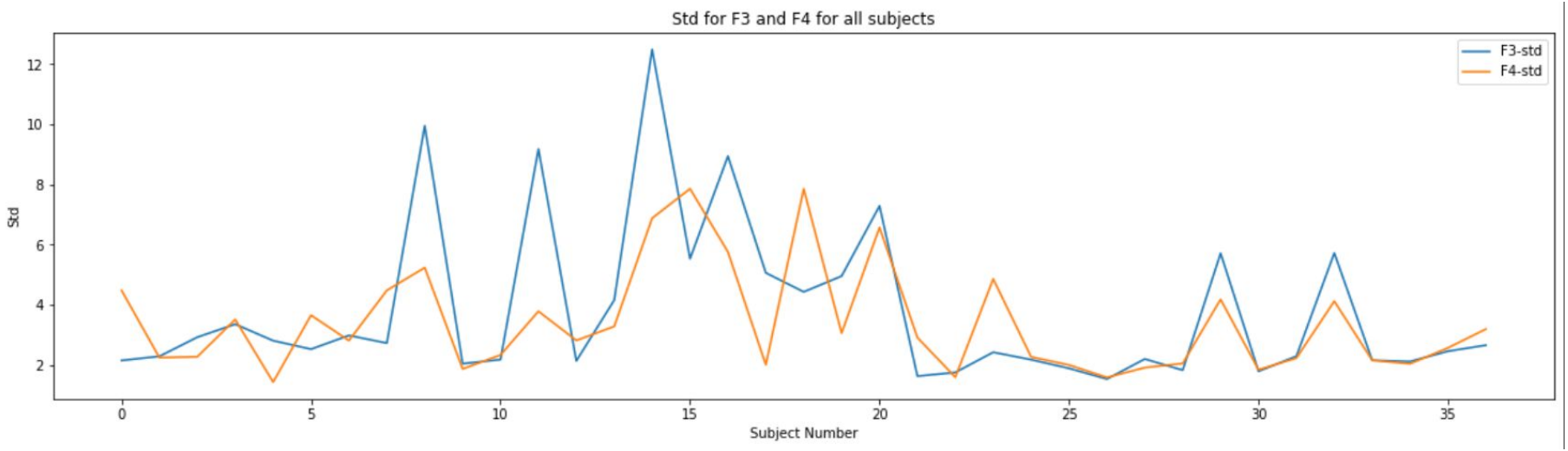


Comparison of Original, Interpolated and Detrended F4-CMA

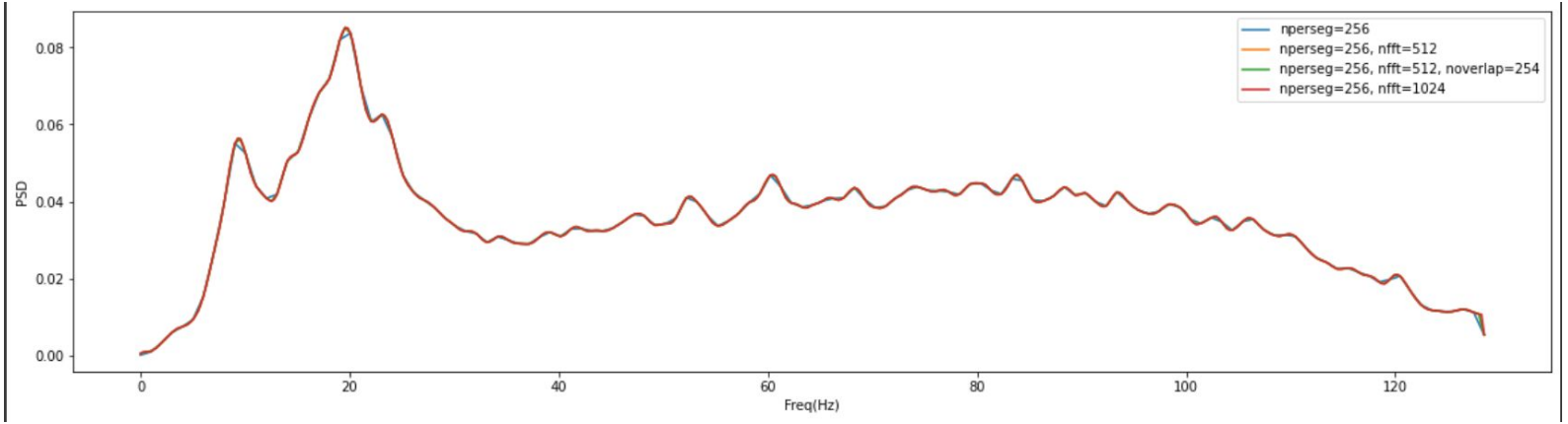


Periodogram after Detrending and Interpolating the F4-CMA signal

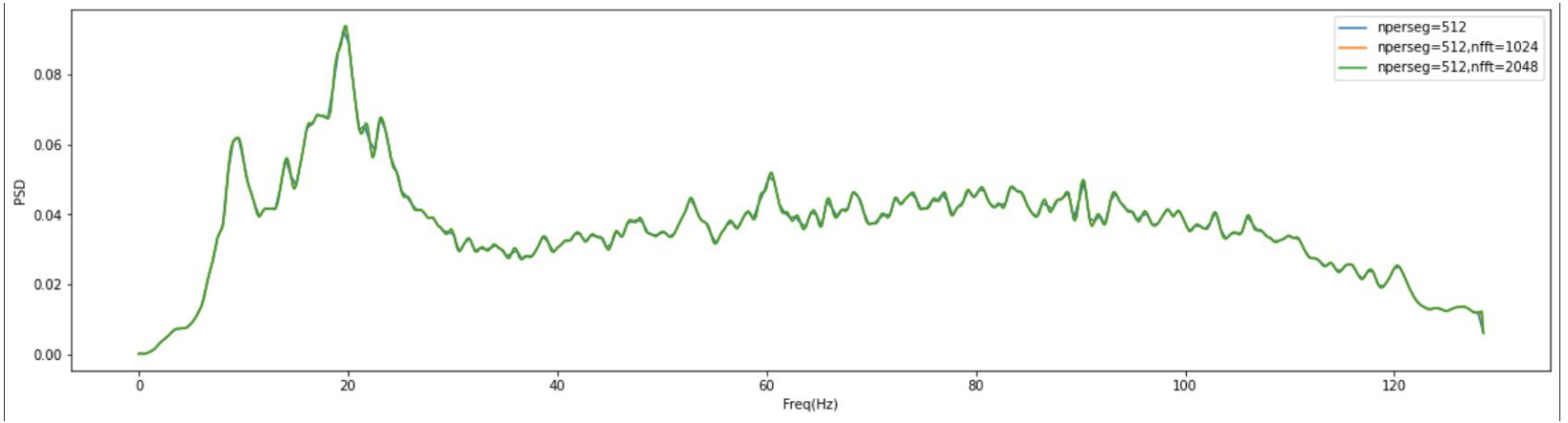
Comparing Standard Deviation of F3 and F4 for all subjects.



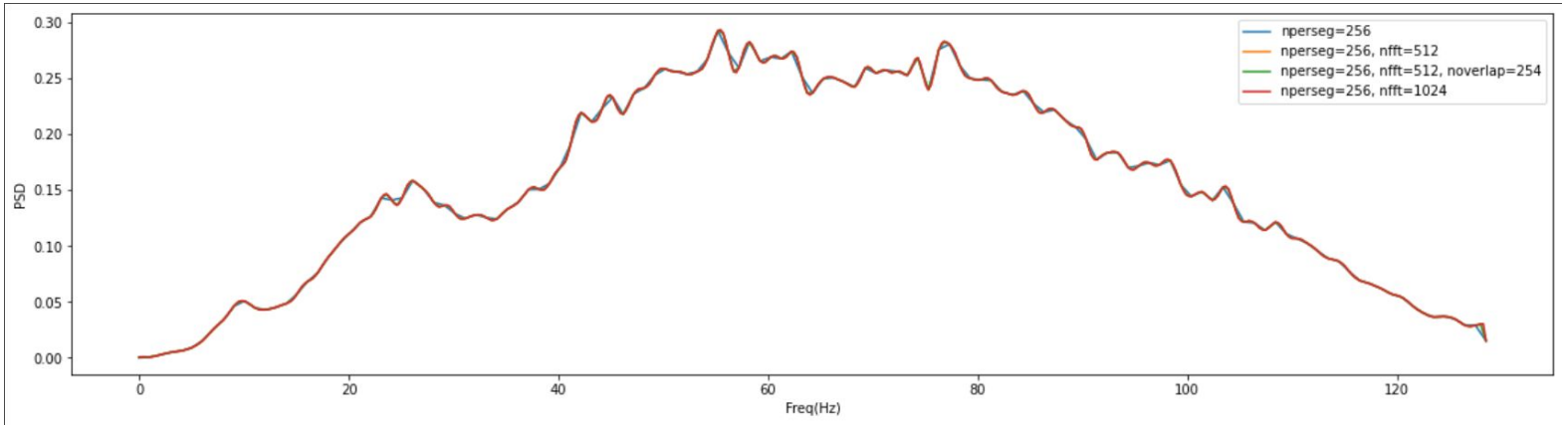
Step 2: Welch's Method To find Alpha power.



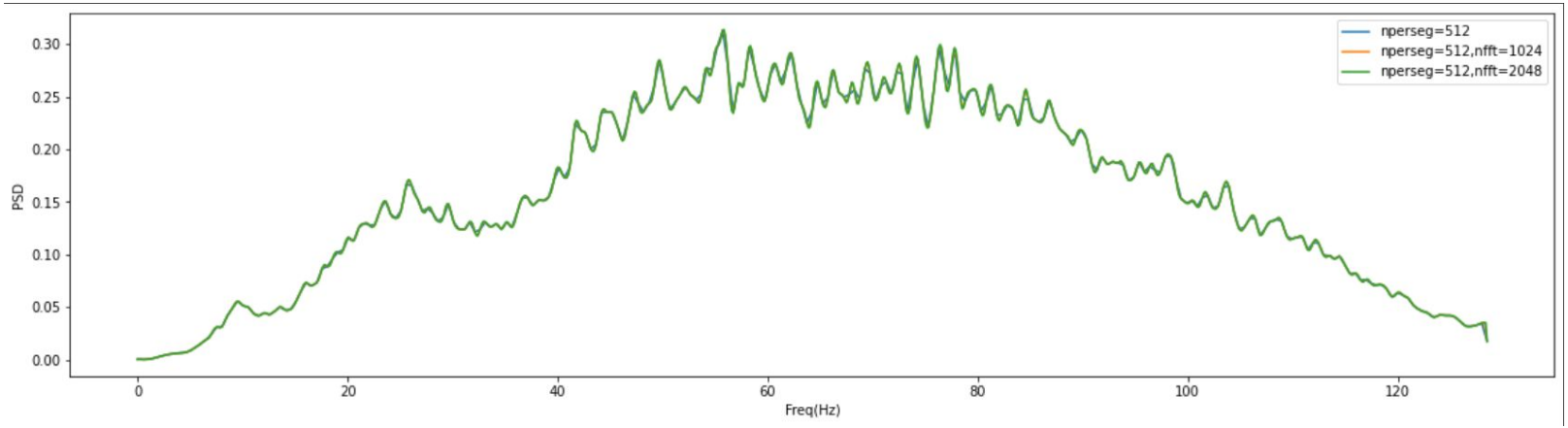
Welch’s Periodogram for nperseg=256 for F3-CMA signal



Welch’s Periodogram for nperseg=512 F3-CMA signal

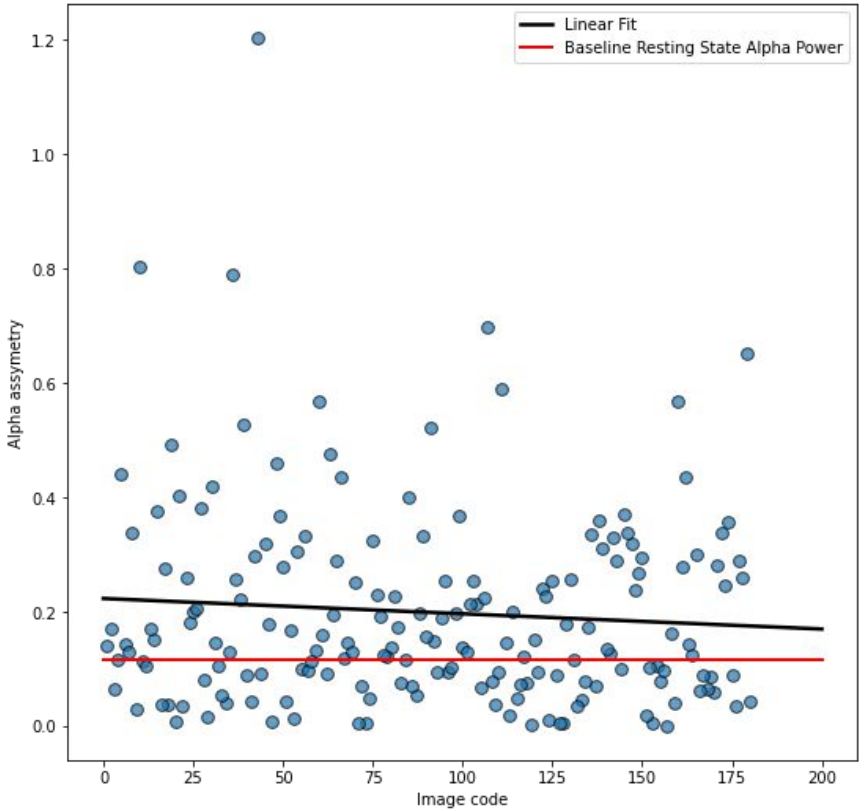


Welch's Periodogram for nperseg=256 for F4-CMA signal

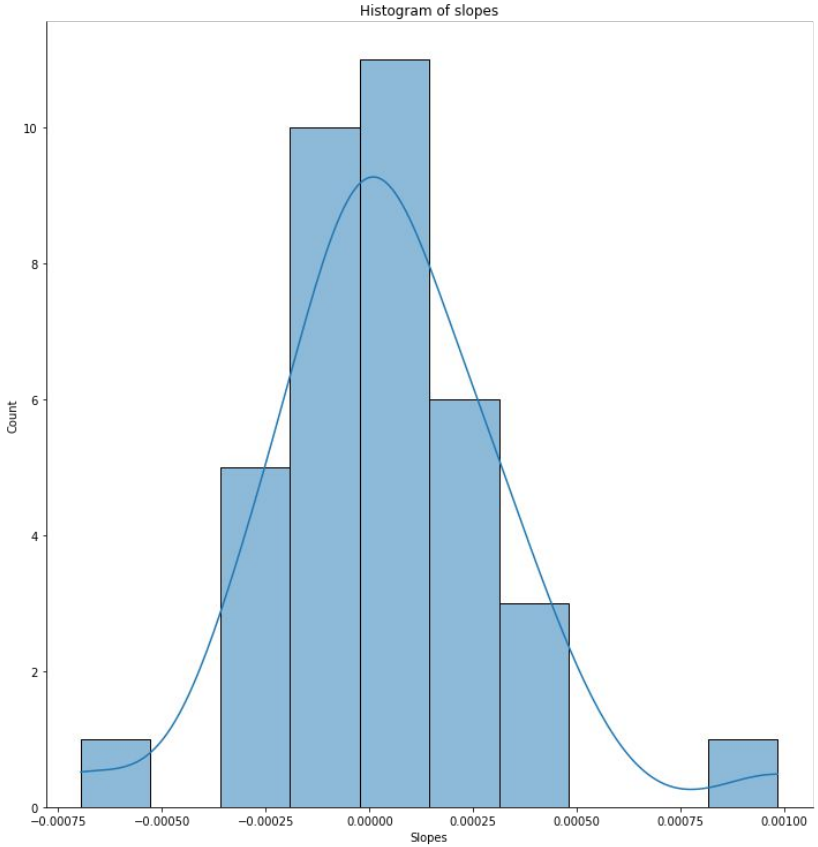


Welch's Periodogram for nperseg=512 F4-CMA signal

Step 3: Event related frontal alpha asymmetry for the Passive Viewing condition vs Image Code



Alpha Asymmetry vs Image Code For Passive Coding for s003



Histogram of Slopes for all subjects.

Step 4: Emotion Viewing Condition

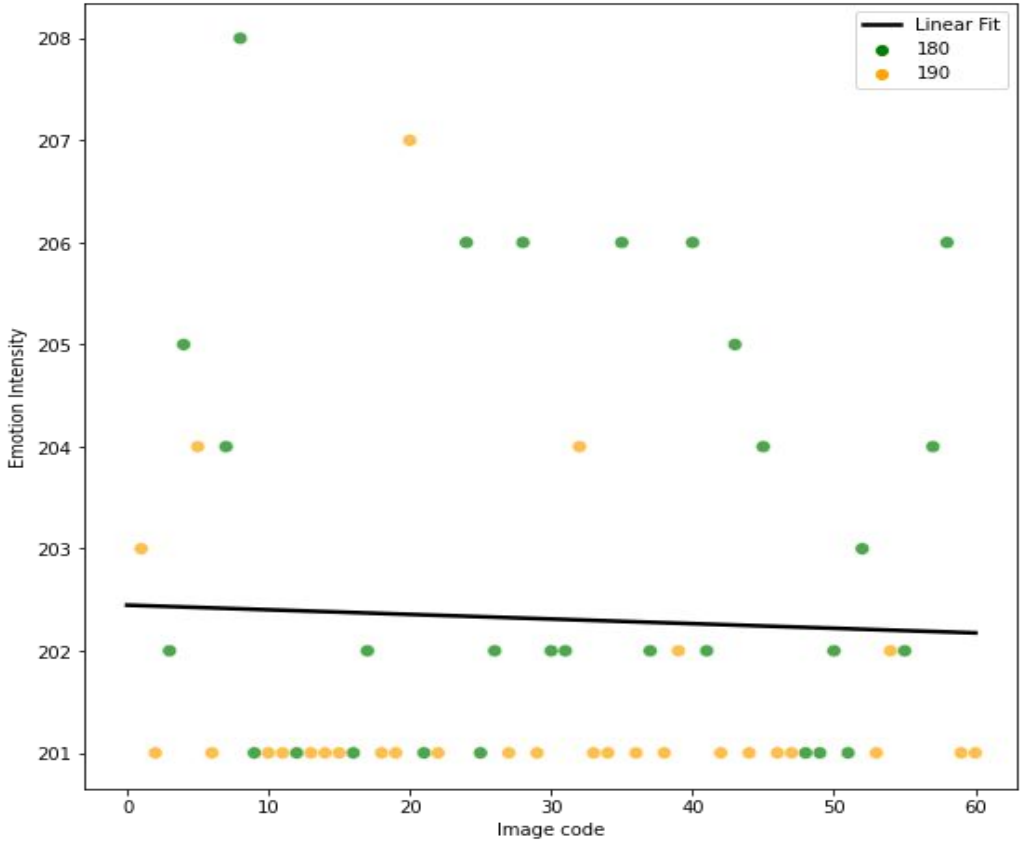
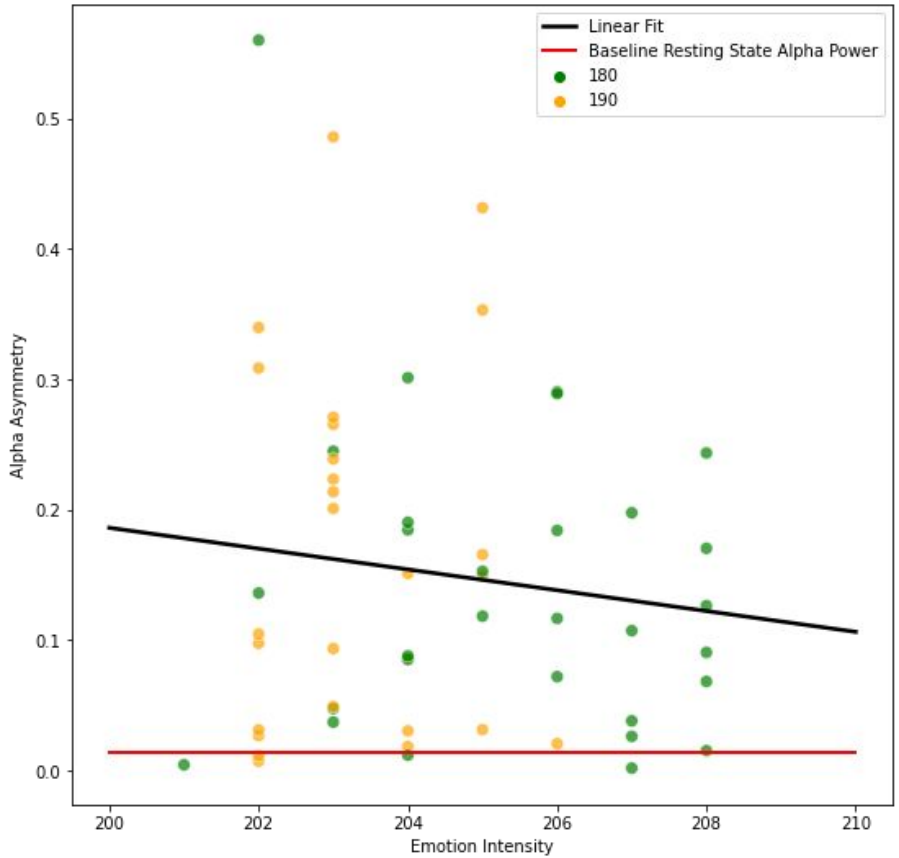
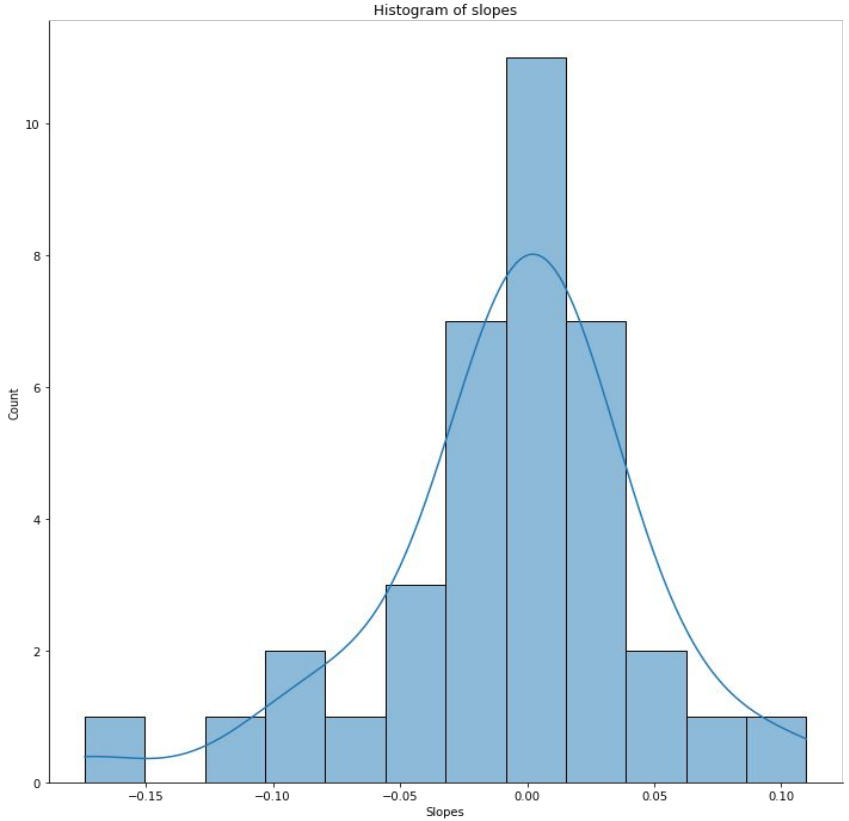


Image Code Vs Emotion Intensity for Emotion State for Random Subject



Emotion Intensity Vs Alpha Asymmtry for Emotion State for Random Subject



Histogram of Slopes for all subjects. (Emotion Intensity Vs Alpha Asymmetry)