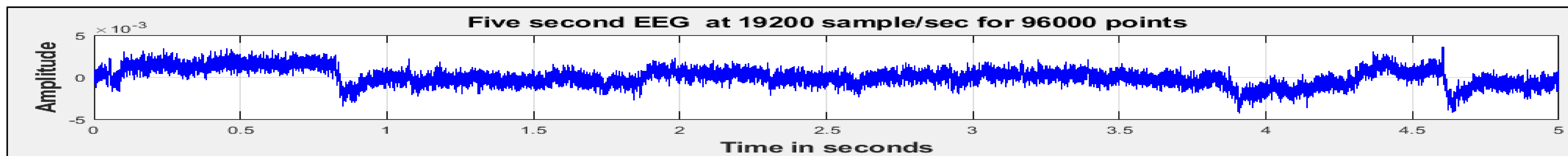




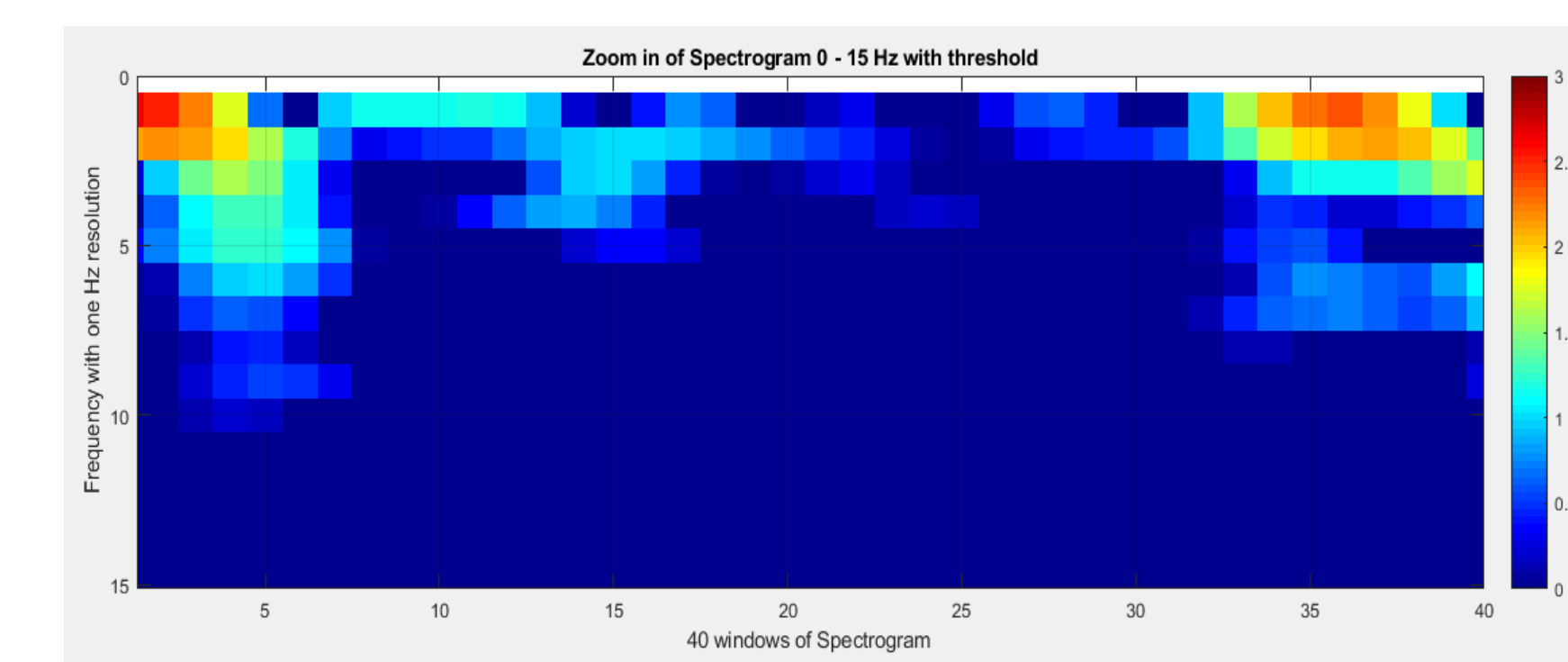
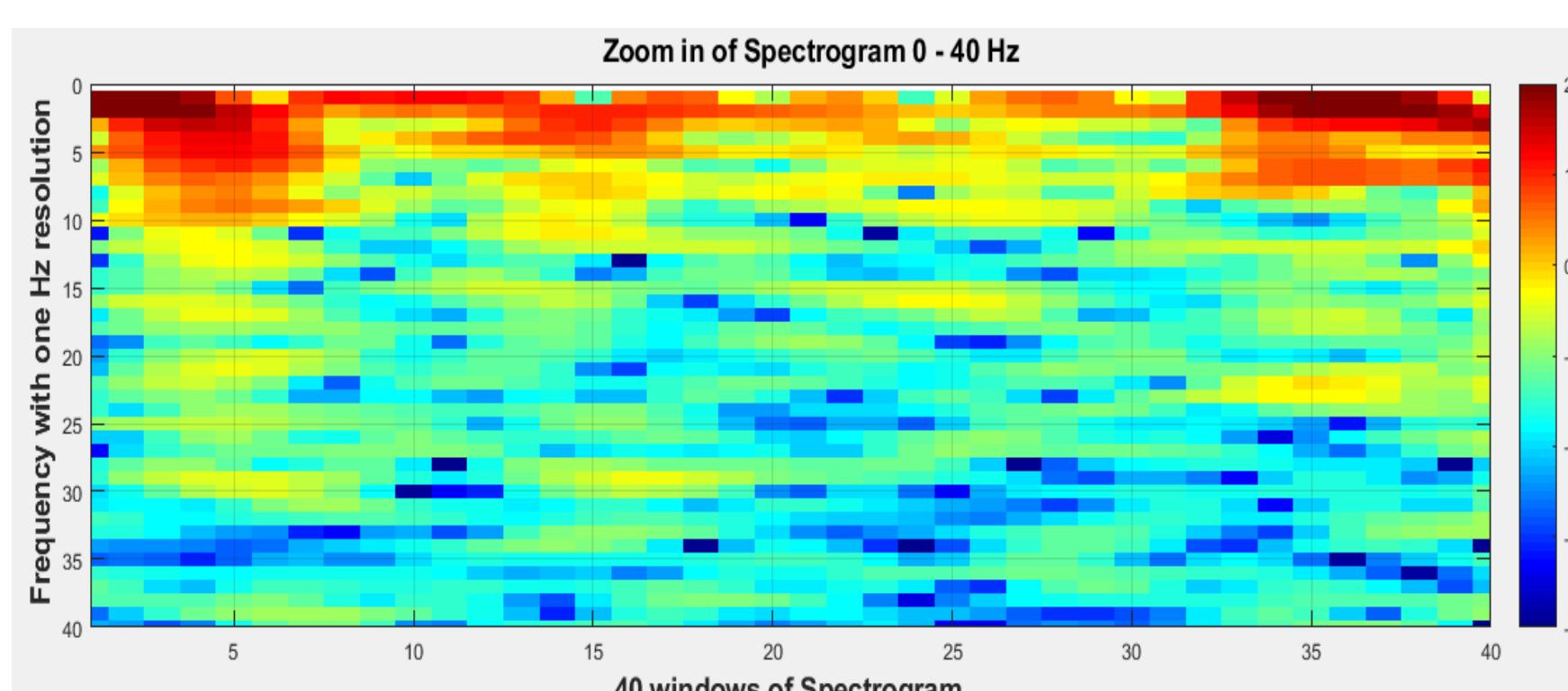
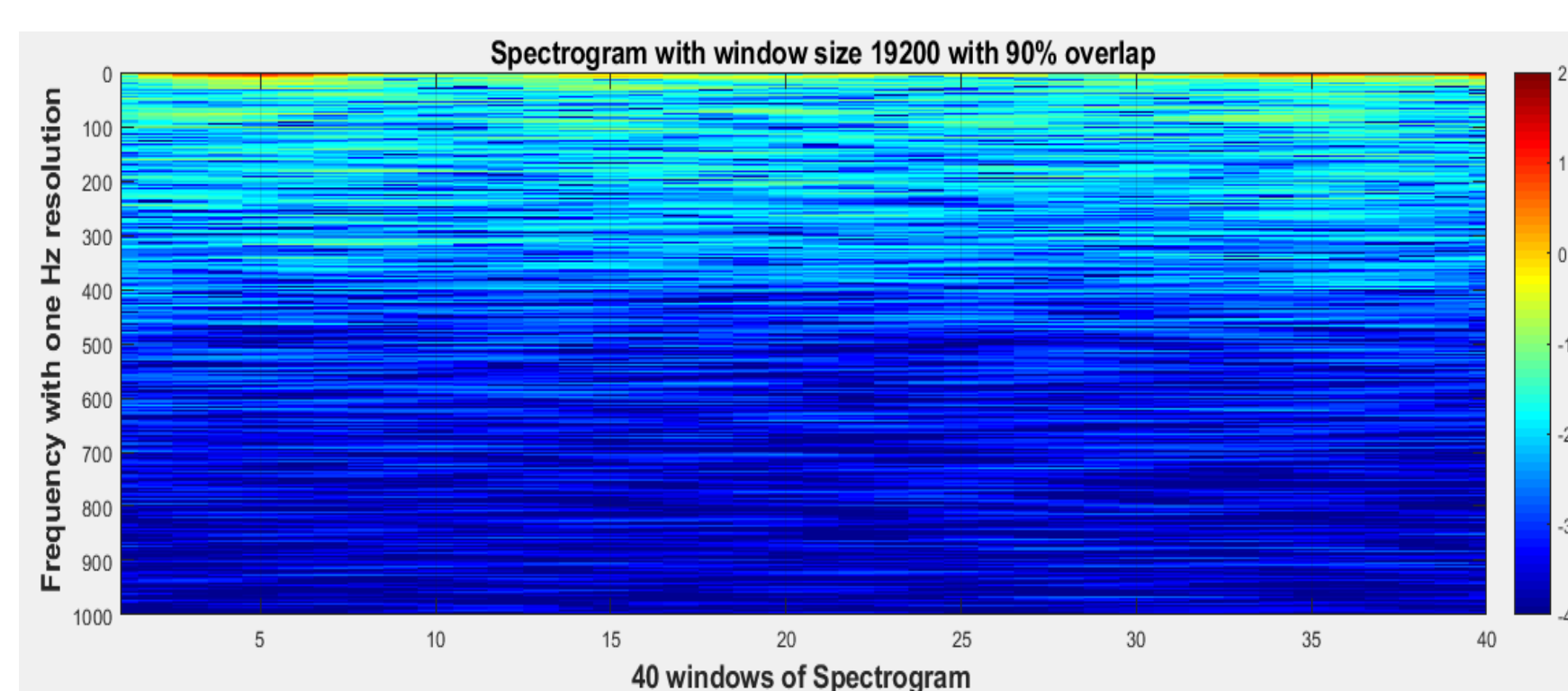
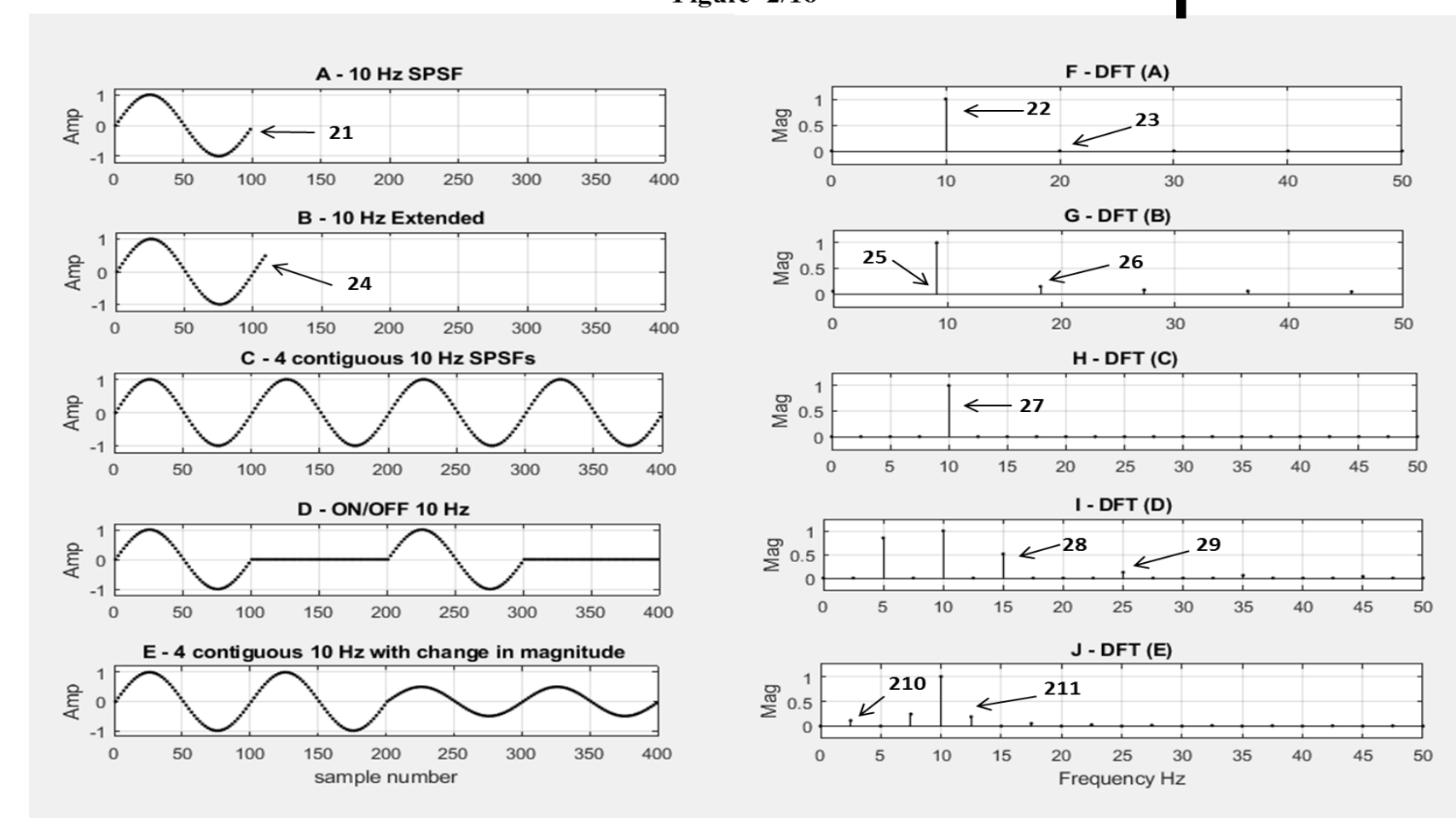
Single-Period Single-Frequency (SPSF) Visualization of an EEG's Striatal Beat Frequency

IEEE Applied Imagery Pattern Recognition Workshop

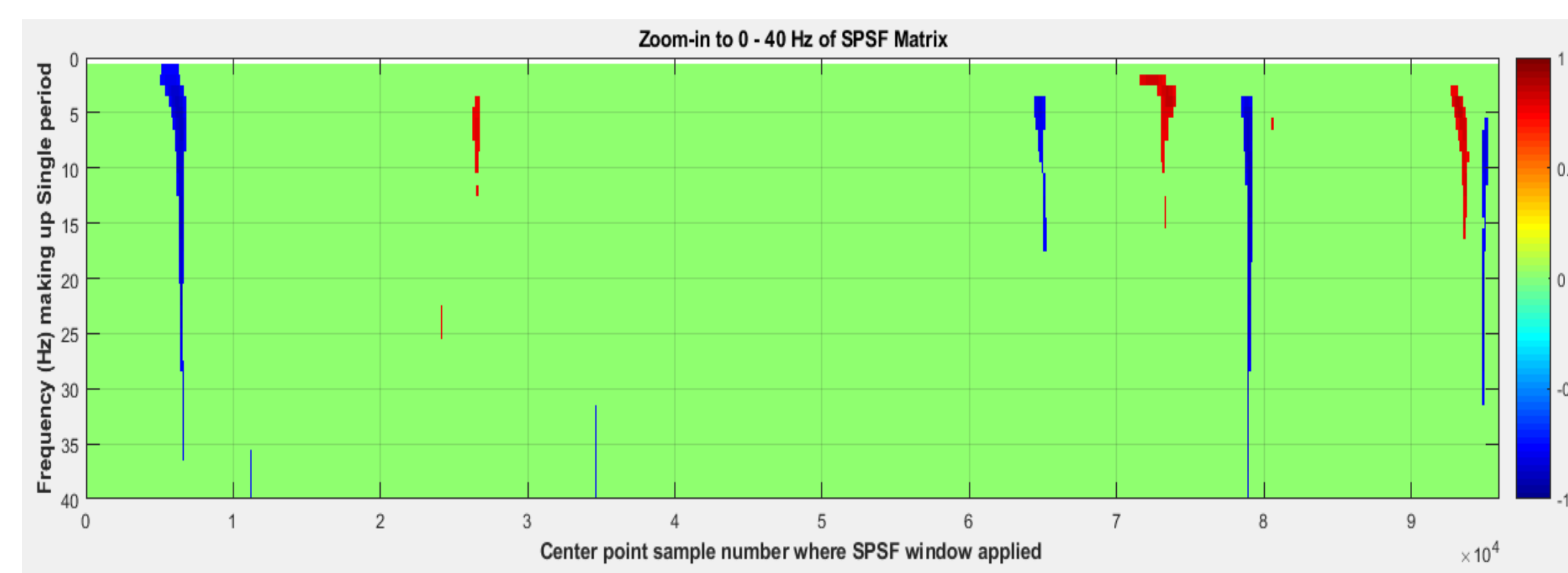
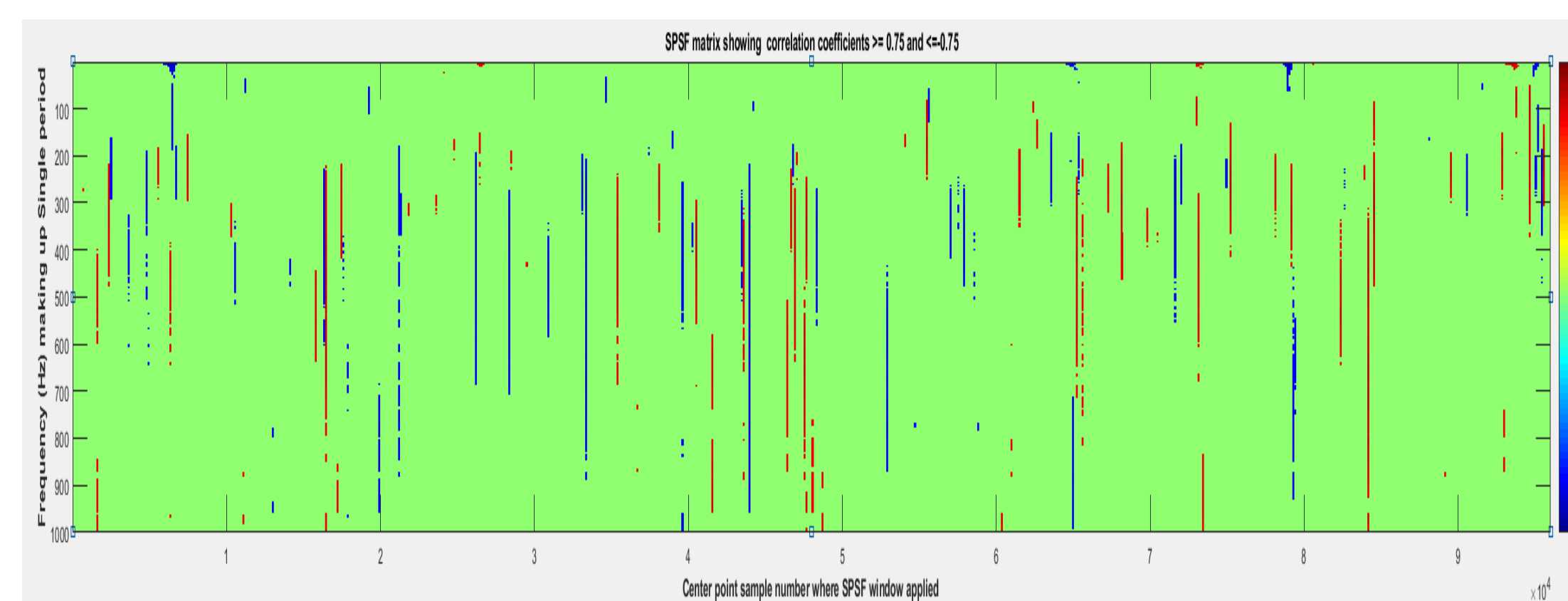
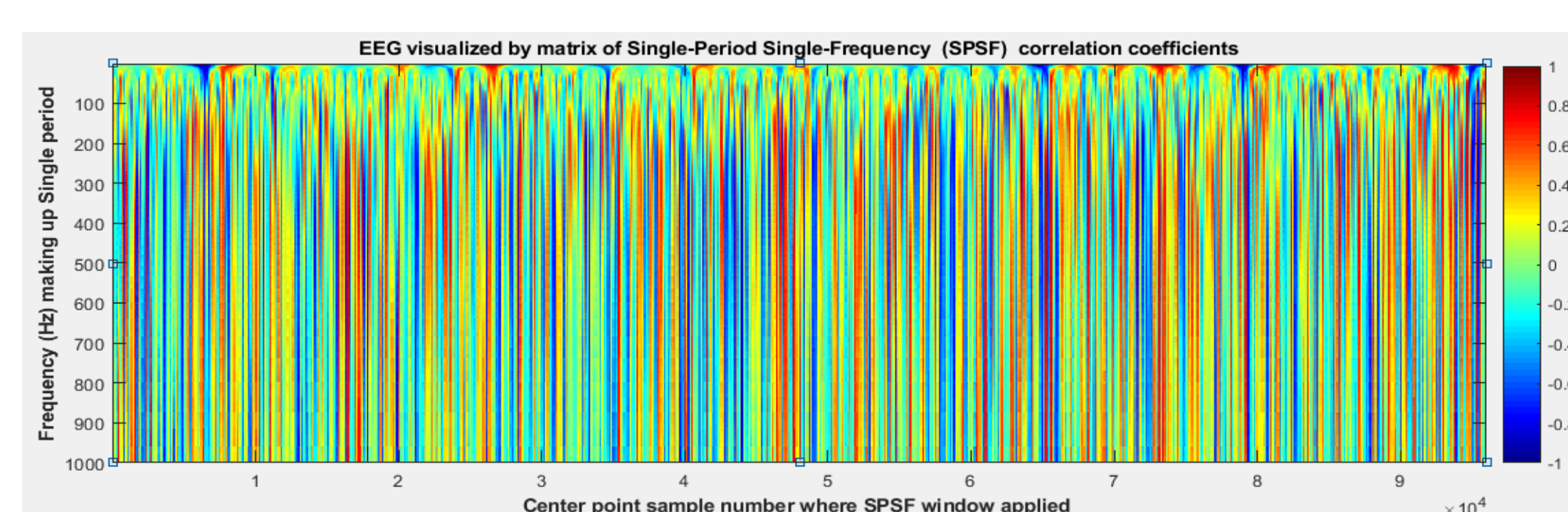
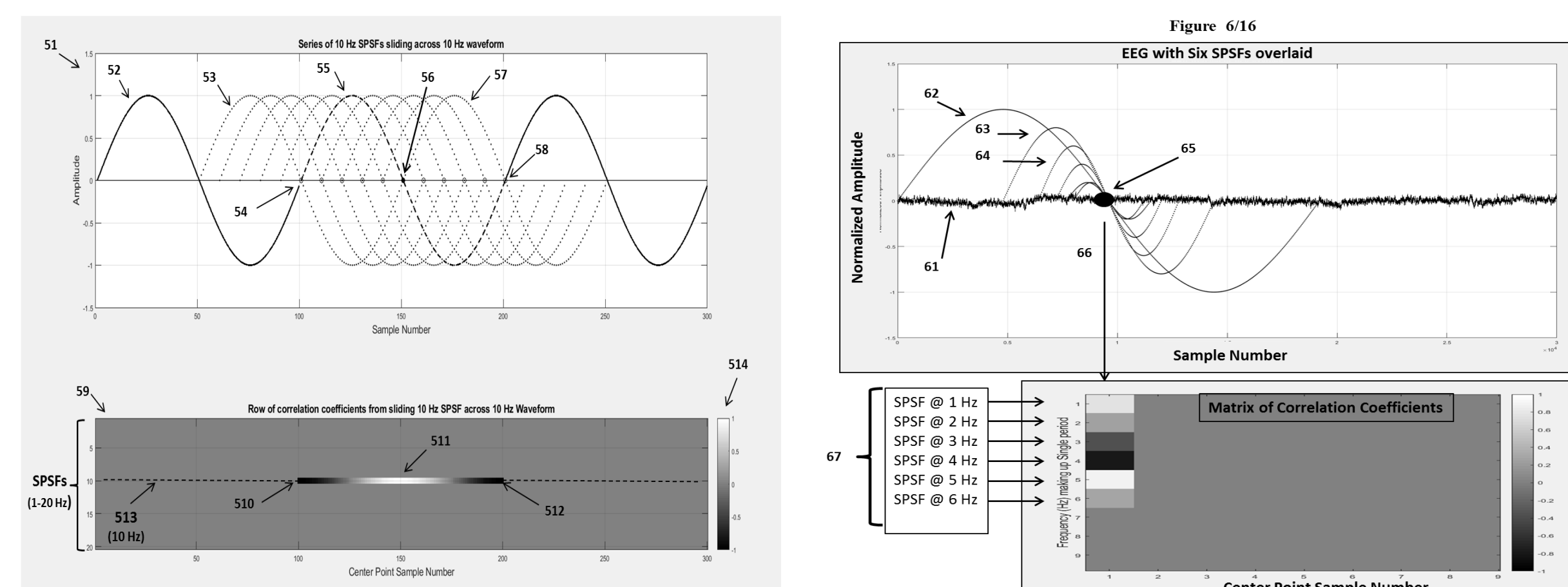
October 15, 2019



Using the **Fast** Fourier Transform invites error when off the period

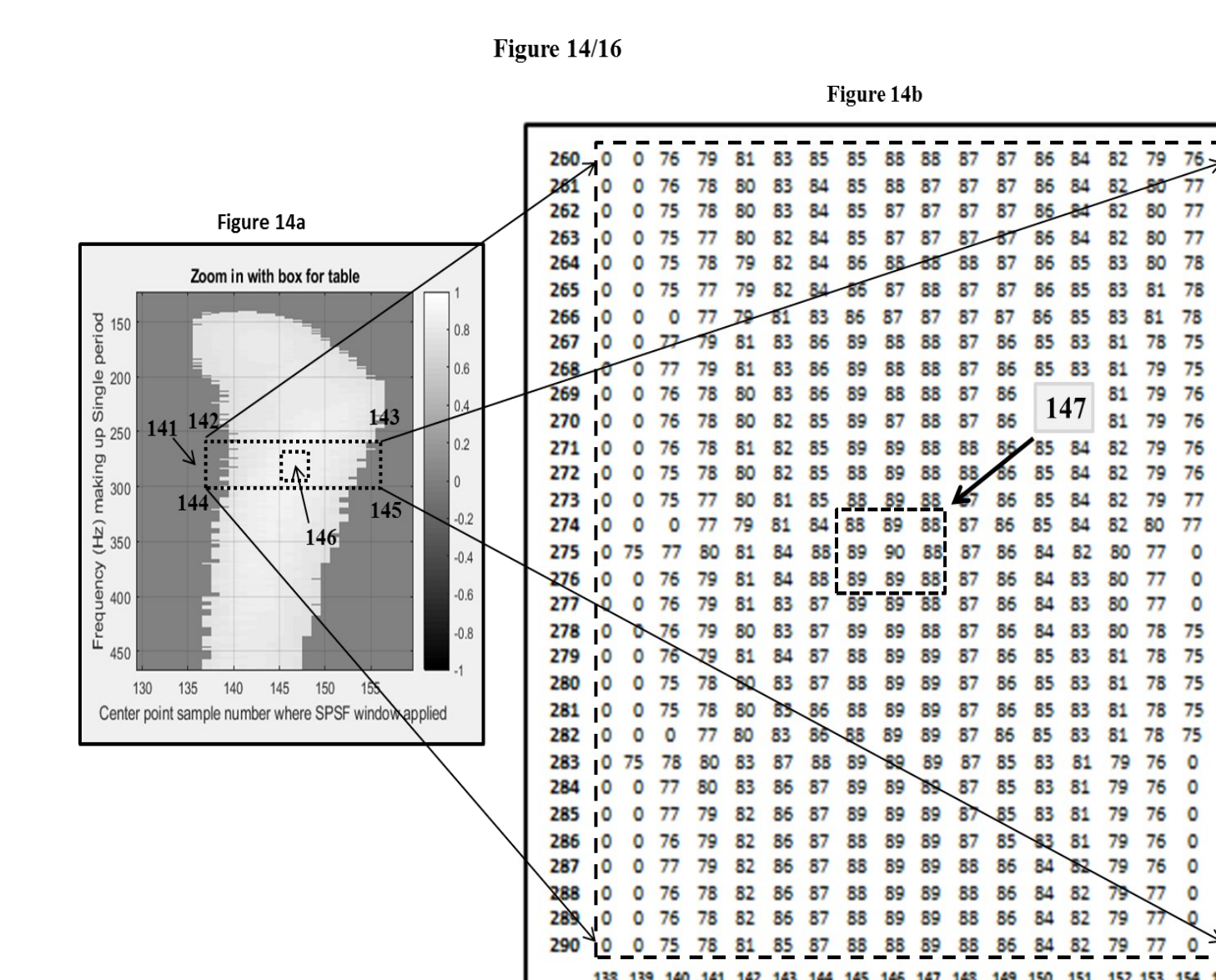
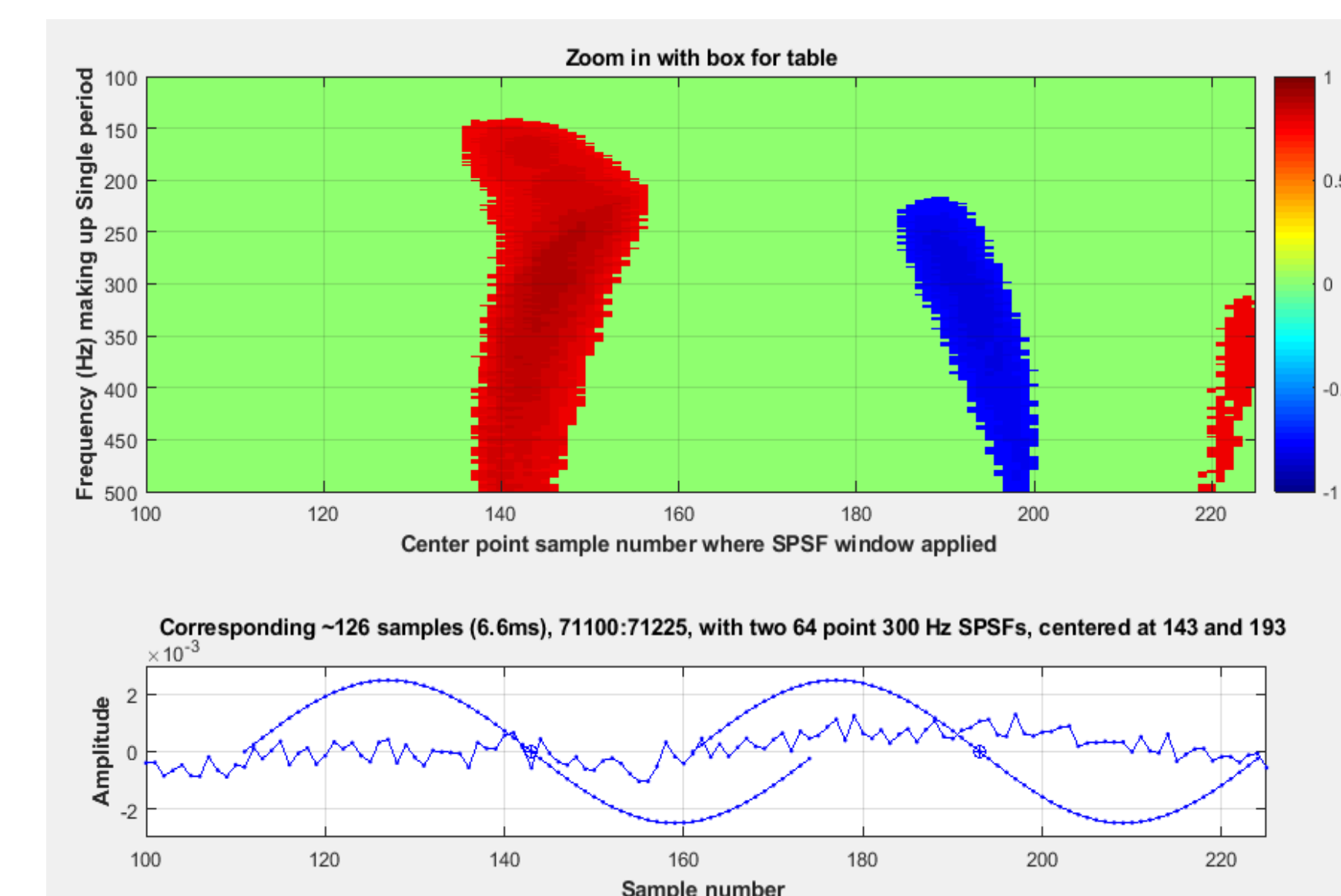
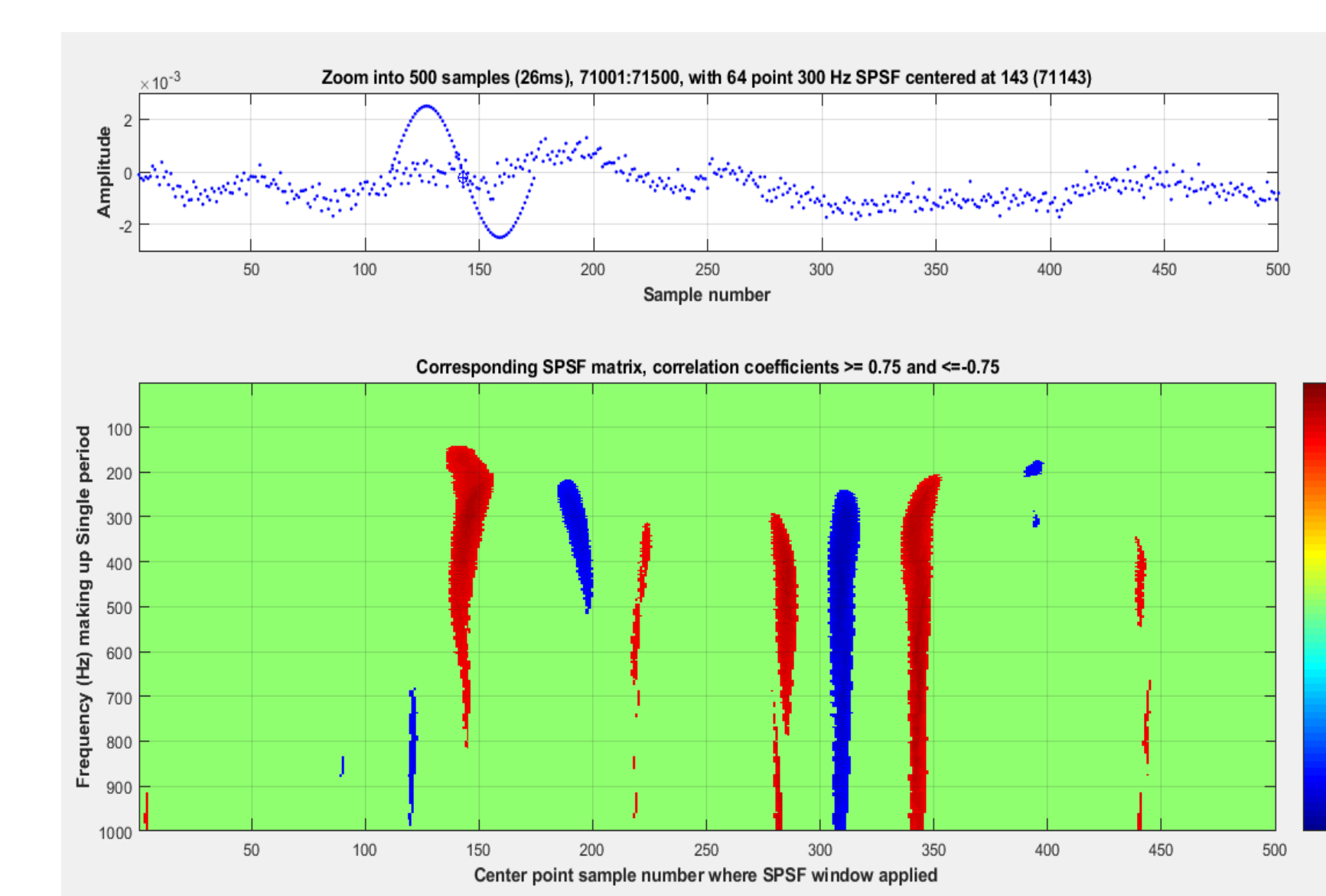
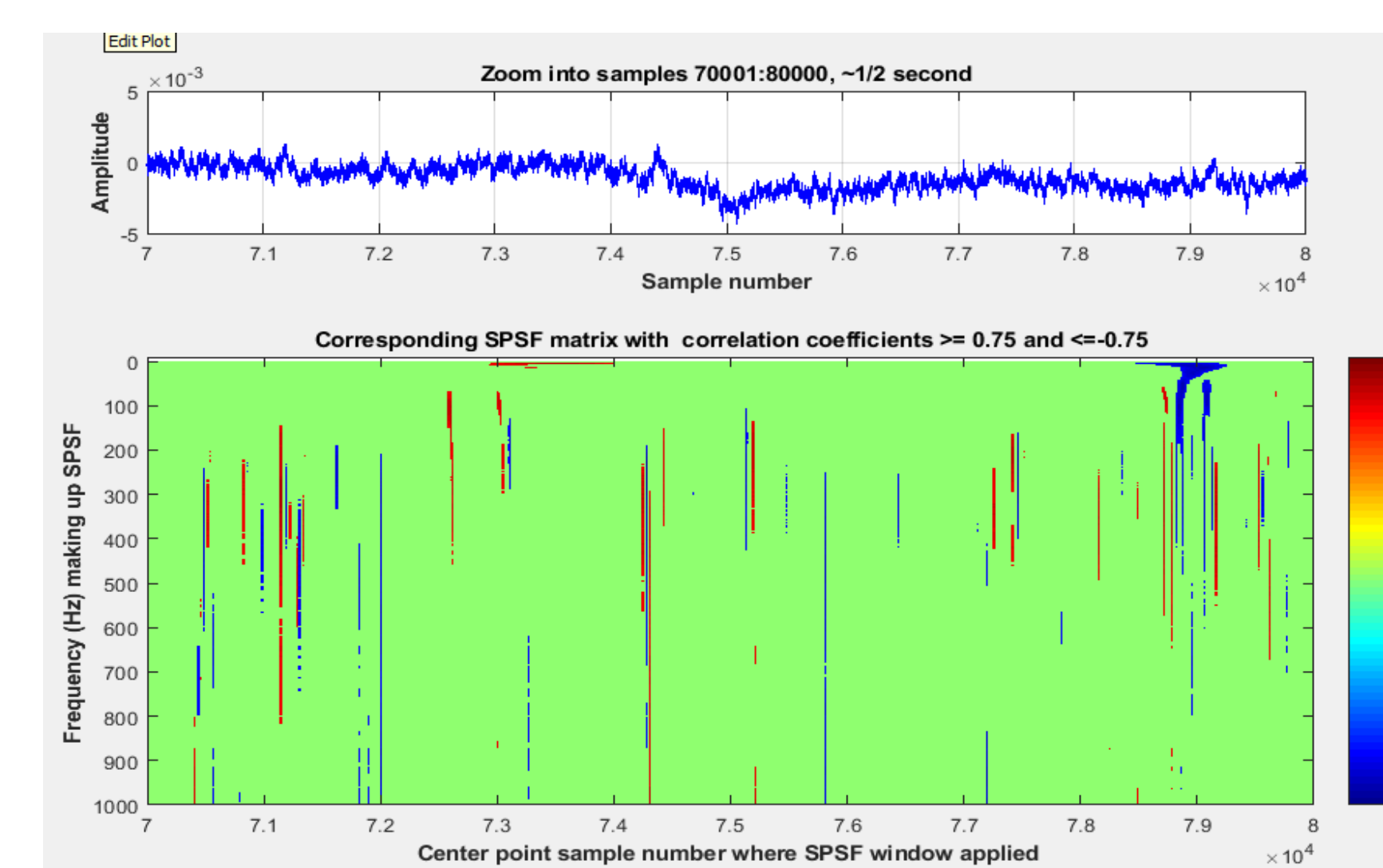


Using the **Slow** SPSF Correlation Coefficient approach closes in on Heisenberg's Uncertainty Principal



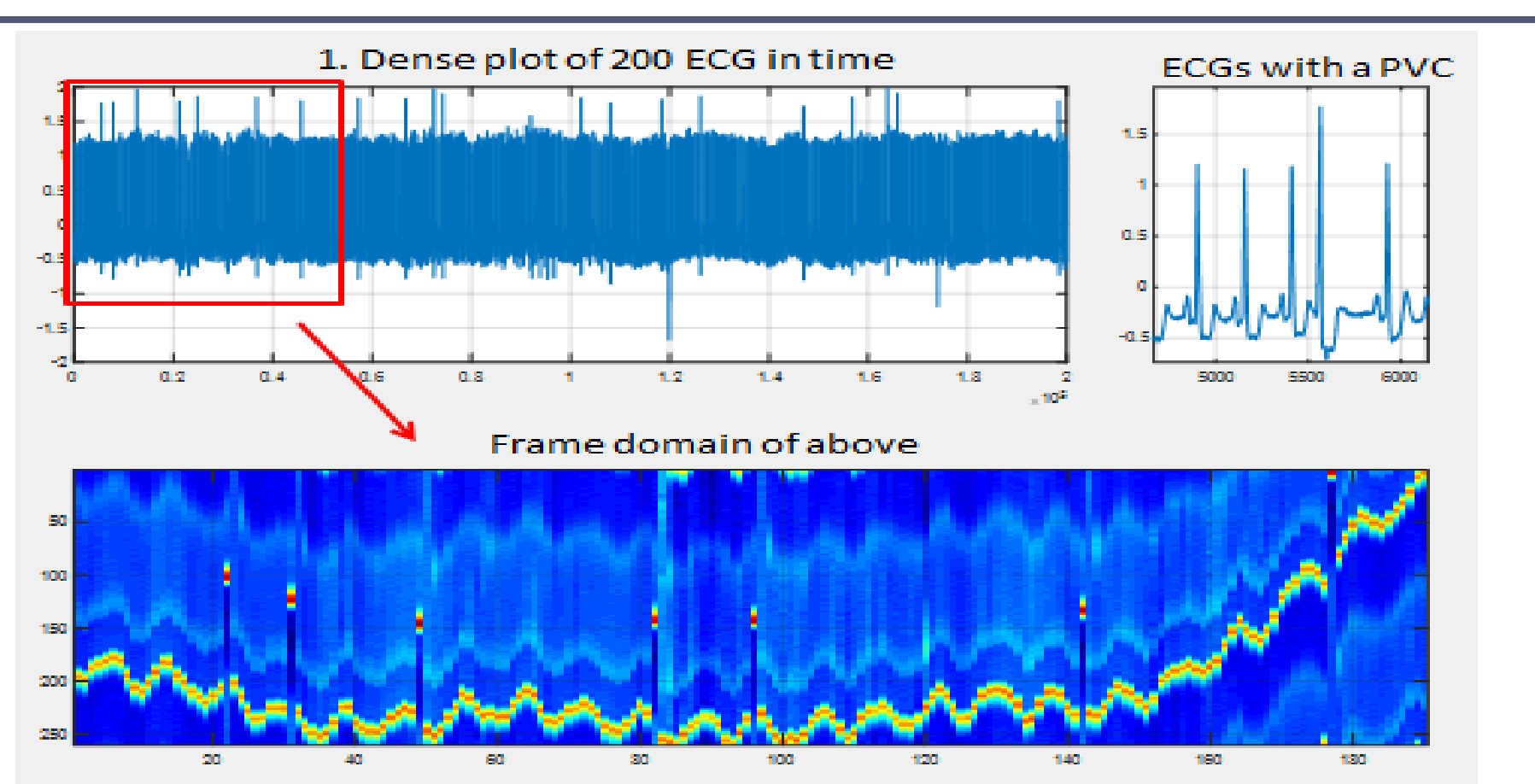
► Motivated by the neuroscience concept of striatal beat frequency (SBF), we depart from legacy time-frequency (TF) spectrogram and instead present a patent-pending approach to interpreting EEG Brain Activity using a sliding bank of individual single-period single-frequency (SPSF) sinusoids.

► Note: the SPSF approach to signal processing, is only now practical due to the presence of high performance computing architectures.

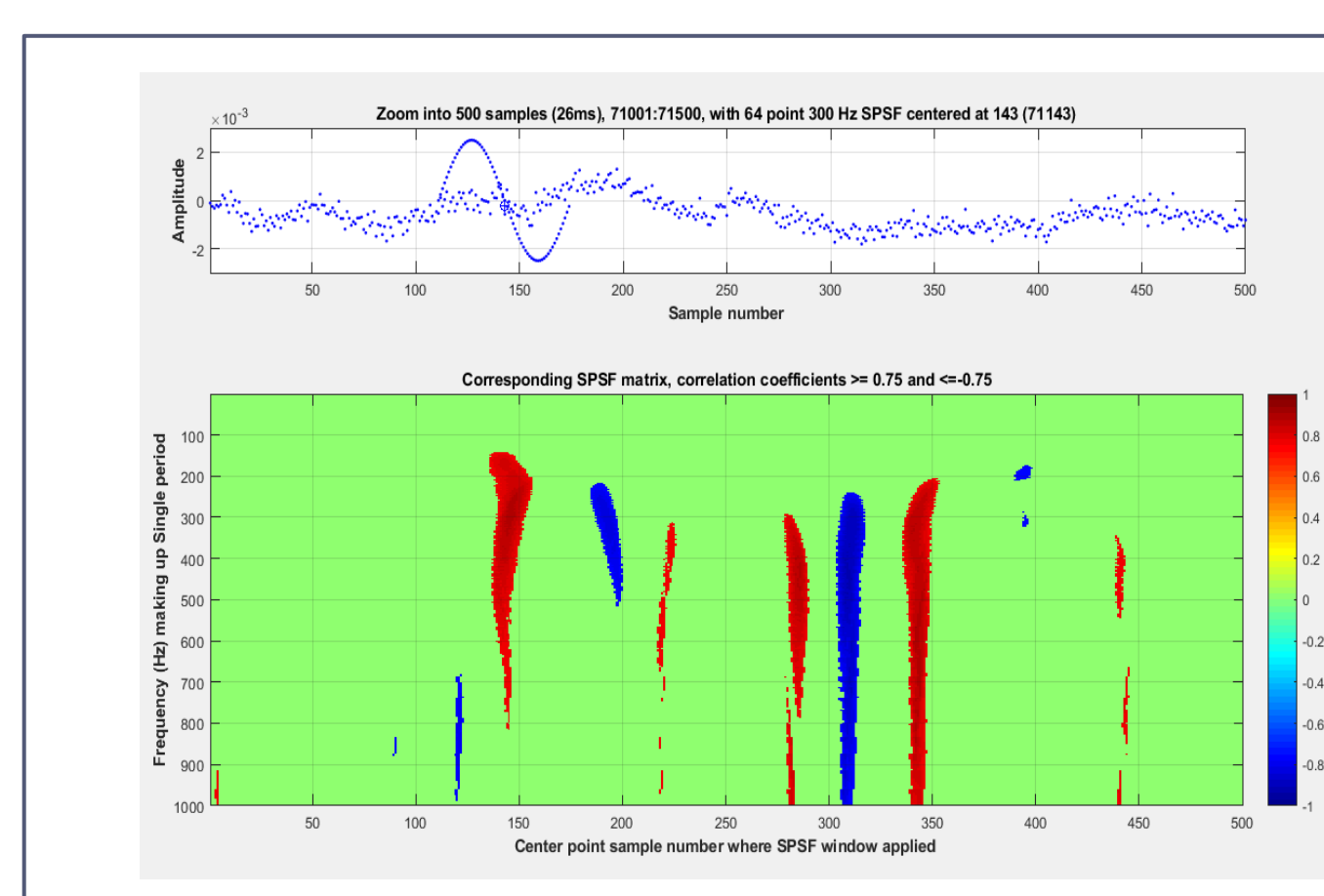


James P. LaRue, James@Jadcosignals.com, Math/Science-based Signal Processor

Framing
ECG
AIPR 2016



EEG with SPSF
Patent Pending
App# 16510842
12-JUL-2019



RAINNE
Bridging
Real and Imaginary
Neural Network
Emulation

Converting a CNN to
Bi-directional Form
AIPR 2017
Patent 2019 US 10242313

