

TREMOR ANALYSIS



Analysis Workshop Tools:

- ▶ [BacAv Online](#) (simple)
- ▶ [BacAv on GitHub](#) (advanced: requires [R base](#) and [RStudio](#))
- ▶ [Tremoroton Online](#) (simple)
- ▶ [Tremoroton on GitHub](#) (advanced: also requires R)
- ▶ [Spike2 Demo](#)

ANALYSIS TOOLS

R-based open-source program for visualizing and analyzing EMG + accelerometer data, created by Felipe Vial (PMID: 32095660)

- ▶ TXT file, with each channel as a column separated by a space (not a comma), with no headers
- ▶ Column 1: time
- ▶ Columns for accelerometers
- ▶ Columns for EMG

TREMOROTON GENERAL FORMAT

Data acquisition

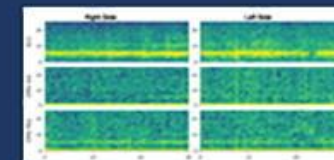
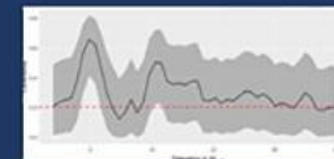
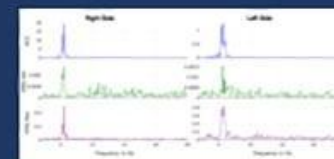
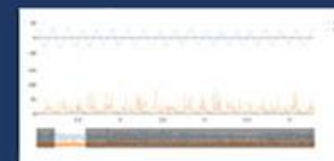
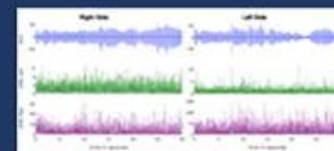


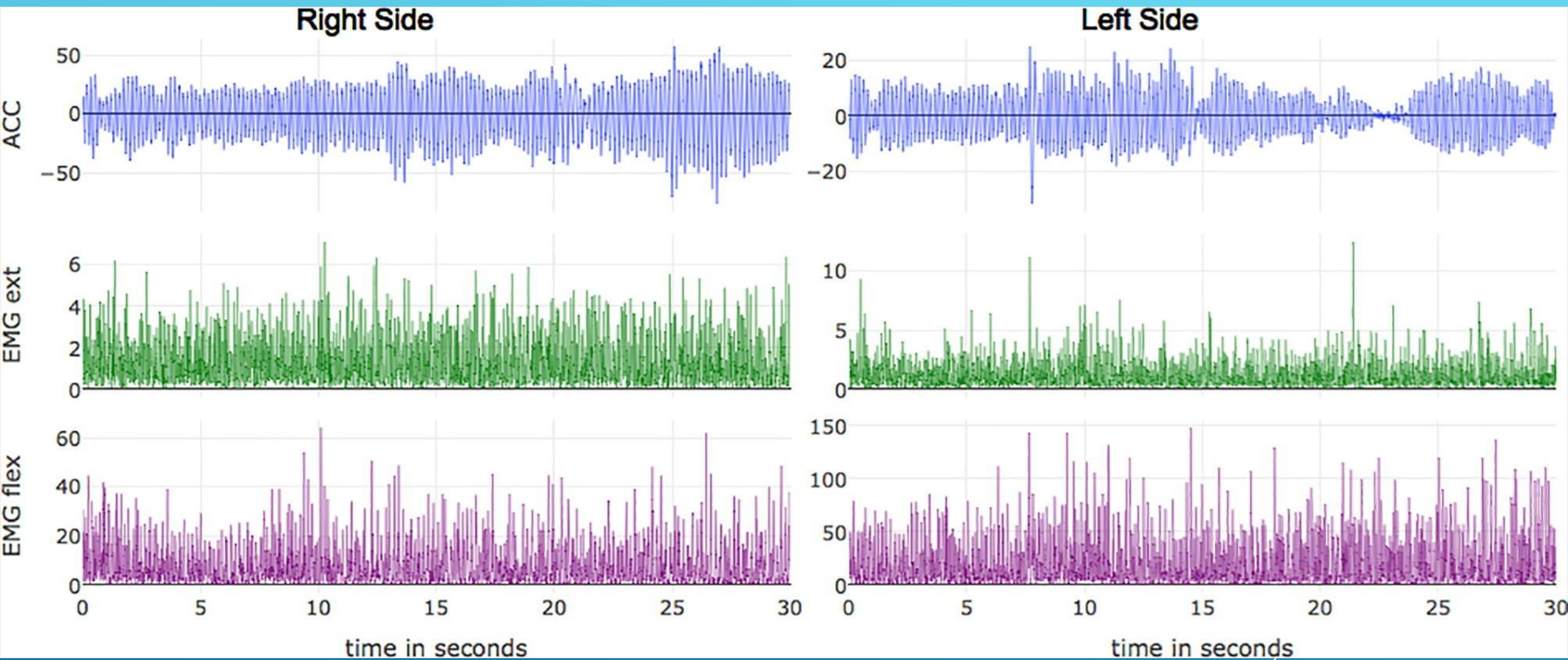
Transform

Tremoroton

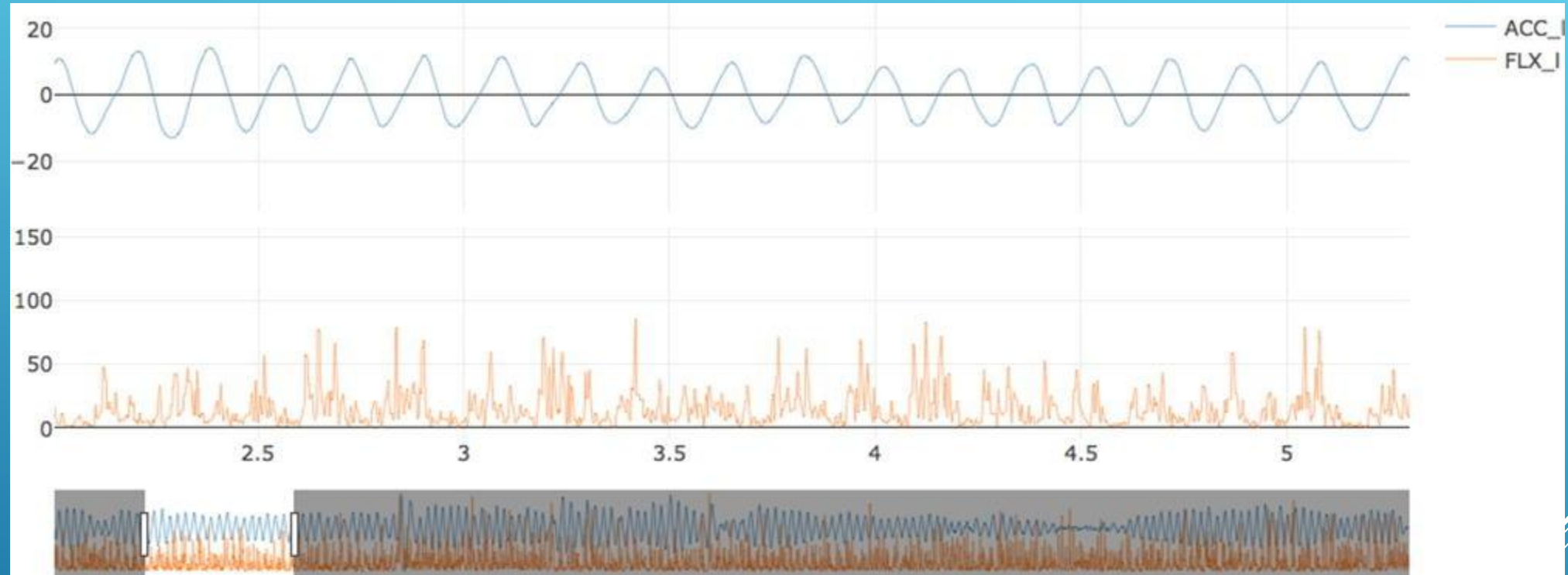
Transform to .txt
format

Results

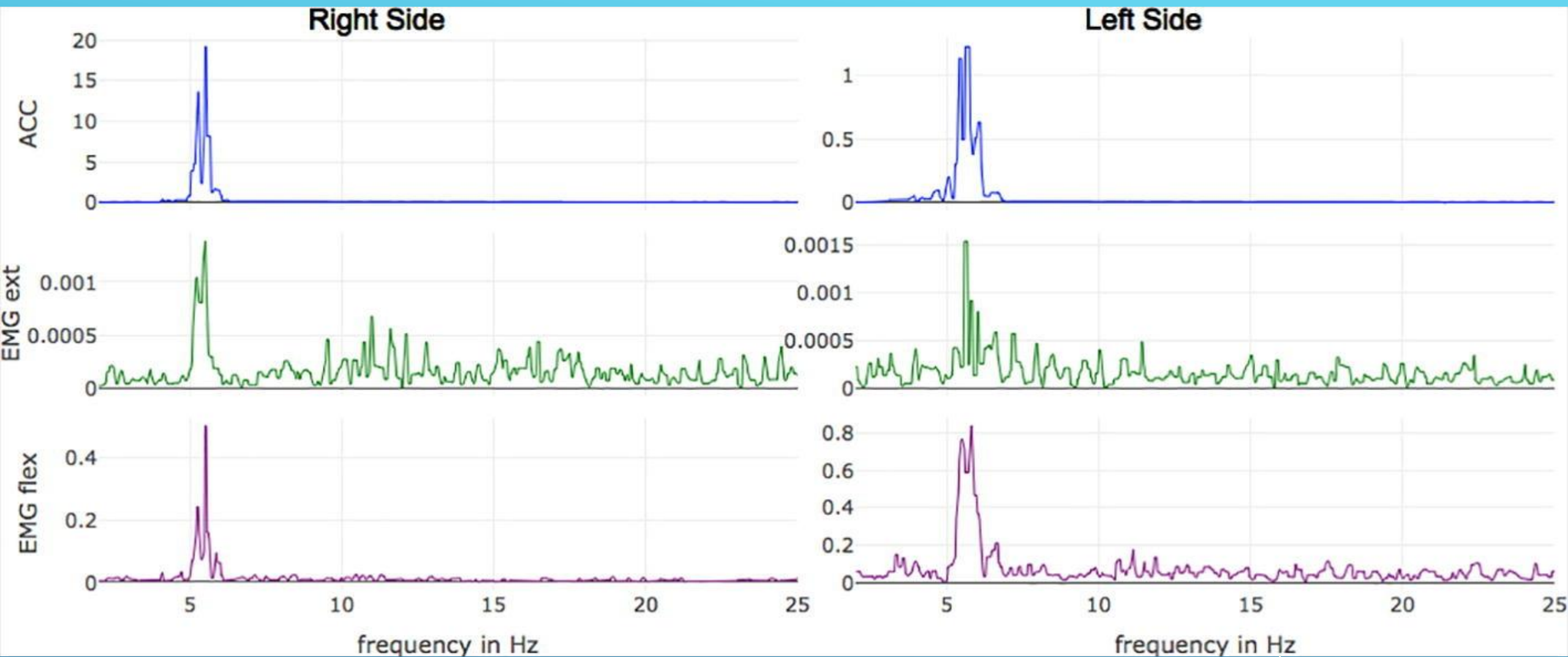




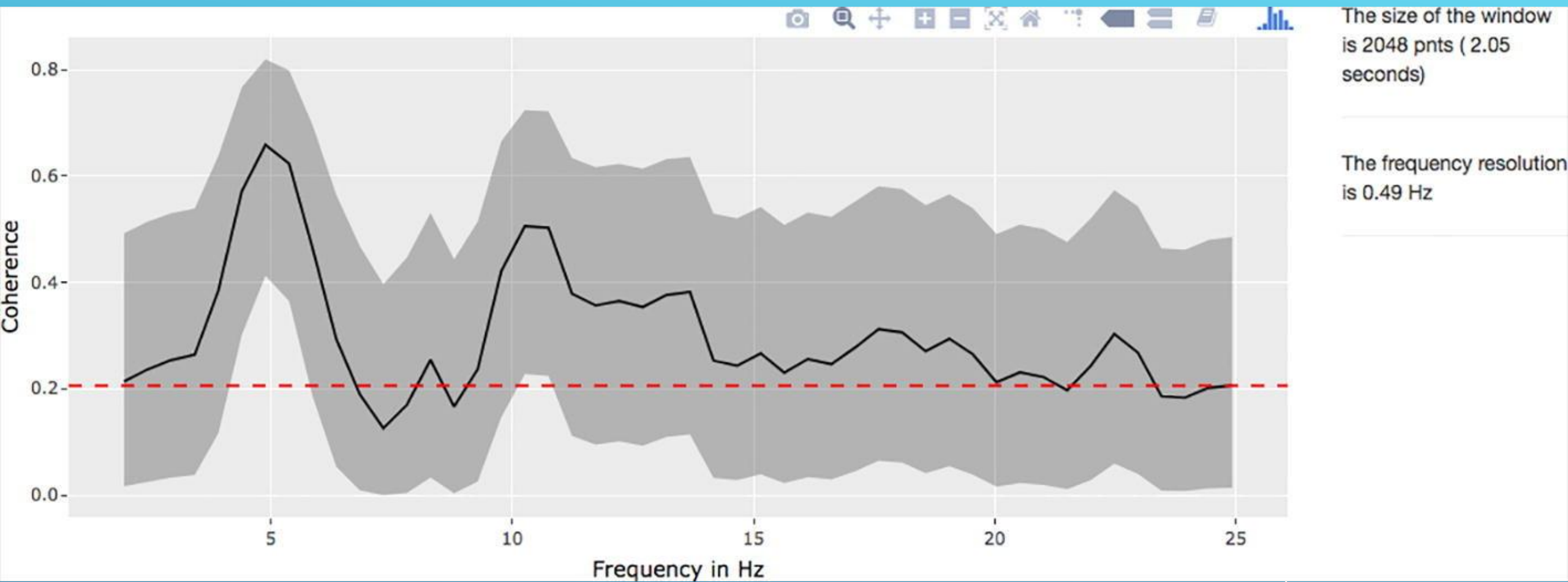
TREMOROTON RAW ACCEL, EMG DATA



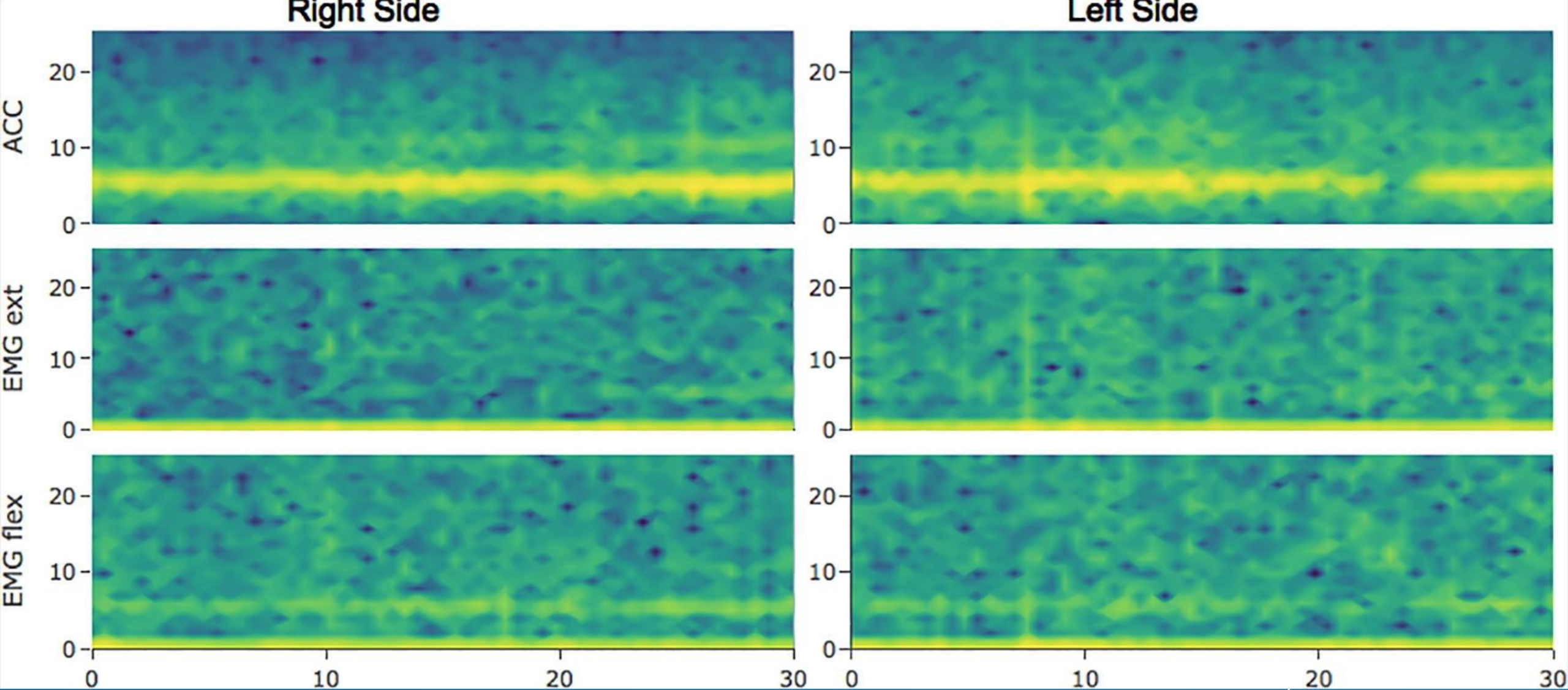
TREMOROTON TIME DOMAIN



TREMOROTON FREQUENCY DOMAIN



TREMOROTON COHERENCE



TREMOROTON TIME FREQUENCY SPECTROGRAM

- ▶ Tremoroton 2-1, 2-2
 - ▶ Column 1: time
 - ▶ 2: right accelerometer
 - ▶ 3: right wrist extensors
 - ▶ 4: right wrist flexors
 - ▶ 5: left accelerometer
 - ▶ 6: left wrist extensors
 - ▶ 7: left wrist flexors

TREMOROTON PRACTICE

▶ Tremoroton 2-3

- ▶ Column 1: time
- ▶ 2: right accelerometer
- ▶ 3: right tibialis anterior
- ▶ 4: right medial gastrocnemius
- ▶ 5: left accelerometer
- ▶ 6: left tibialis anterior
- ▶ 7: left medial gastrocnemius

TREMOROTON PRACTICE