Visualize the EEG output from the PREP processing pipeline.

Table of Contents

write data status and report neader
Line noise removal step
Initial detrend for reference calculation
Spectrum after line noise and detrend
Referencing step
Robust channel deviation (referenced)
Robust channel deviation (original)
Robust channel deviation (interpolated)
Robust deviation window statistics
Median max abs correlation (referenced)
Median max abs correlation (original)
Median max abs correlation (interpolated)
Mean max abs correlation (referenced)
Mean max abs correlation (original)
Mean max abs correlation (interpolated)
Bad min max correlation fraction (referenced)
Bad min max correlation fraction(original)
Bad min max correlation fraction (interpolated)
Correlation window statistics
Bad ransac fraction (referenced)
Bad ransac fraction (original)
Bad ransac fraction (interpolated)
Channels with poor ransac correlations
HF noise Z-score (referenced)
HF noise Z-score (original)
HF noise Z-score (interpolated)
HF noise window stats
Noisy average vs robust average reference
Noisy and robust average reference by time
Noisy vs robust average reference (filtered)
Noisy minus robust average reference by time

Calling directly: prepReport

This helper reporting script expects that EEGReporting will be in the base workspace with an EEGReporting.etc.noiseDetection structure containing the report. It also expects the following variables in the base workspace:

- summaryFile variable containing the open file descriptor for summary
- consoleID variable with open file descriptor for console (usually 1 unless the output is redirected).
- relativeReportLocation report location relative to summary

The reporting function appends a summary to the summary report.

Usually the prepReport script is called through the function:

```
publishPrepReport
```

It is not a function itself, to allow the MATLAB publish to dump a nice output.

Write data status and report header

```
EEG03_auda_lab.set[64 channels, 252080 frames]
Error status: unprocessed
Boundary errors: [prepPipeline bad boundary events: Error using
 prepPipeline (line 87)
Dataset EEG03_auda_lab.set has boundary events: [[ 1 286 ]] which are
 treated as discontinuities unless set to ignore. Prep cannot continue
Detrend errors: [ ]
Line noise errors: [ ]
Reference errors: [ ]
Versions:
Data summary: sampling rate 500Hz
Events: 685, Original events: 685
Unique event types: 6
Boundary events: 2, Hard boundary events: 2
Hard boundary events: [ 1 286 ]
Hard frame numbers:
                       [ 1 105591 ]
```

Line noise removal step

Signal didn't have line noise removed

Initial detrend for reference calculation

Signal wasn't detrended

Spectrum after line noise and detrend

Skipping line noise and detrend

Referencing step

Signal wasn't referenced

Robust channel deviation (referenced)

Skipping robust channel deviation

Robust channel deviation (original)

Skipping robust channel deviation (original)

Robust channel deviation (interpolated)

Skipping robust channel deviation (marking interpolated)

Robust deviation window statistics

Skipping robust deviation window statistics

Median max abs correlation (referenced)

Skipping median max absoluted correlation (referenced)

Median max abs correlation (original)

Skipping median max abs correlation (original)

Median max abs correlation (interpolated)

Skipping median max abs correlation (marking interpolated)

Mean max abs correlation (referenced)

Skipping median max abs correlation (referenced)

Mean max abs correlation (original)

Skipping mean max abs correlation (original)

Mean max abs correlation (interpolated)

Skipping mean max abs correlation (marking interpolated)

Bad min max correlation fraction (referenced)

Skipping bad min max correlation (referenced)

Bad min max correlation fraction(original)

Skipping median max abs correlation (original)

Bad min max correlation fraction (interpolated)

Skipping bad min max correlation fraction (marking interpolated)

Correlation window statistics

Skipping correlation window statistics

Bad ransac fraction (referenced)

Skipping bad ransac fraction (referenced)

Bad ransac fraction (original)

Skipping bad ransac fraction (original)

Bad ransac fraction (interpolated)

Skipping bad ransac fraction (marking interpolated)

Channels with poor ransac correlations

Skipping channels with poor ransac correlations

HF noise **Z**-score (referenced)

Skipping HF noise Z-score (referenced)

HF noise Z-score (original)

Skipping HF noise Z-score (original)

HF noise Z-score (interpolated)

Skipping HF noise Z-score (marking interpolated)

HF noise window stats

Skipping HF window stats

Noisy average vs robust average reference

Skipping noisy vs robust average reference

Noisy and robust average reference by time

Skipping noisy and robust average reference by time

Noisy vs robust average reference (filtered)

Skipping noisy vs robust average reference (filtered)

Noisy minus robust average reference by time

Skipping noisy minus robust average reference by time

Published with MATLAB® R2016a