This ReadMe broadly describes the data processing steps and scripts found in the GitHub repository that supports the ERN-Anxiety replication project. Full details are found in the accompanying manuscript.

Scripts Overview

preproc.m – data preprocessing script to be run on raw EEG files
gratton_emcp.m – regression-based ocular artifact correction script provided by Bill Gehring
emcp2001.zip – original C code that gratton_emcp.m is based off
erp_pca_toolkit_processing.pdf – description of steps to run data through alternative processing
scoring_orgpipe.m – script for scoring single-trial data and subject average data based on the original data processing pipeline
scoring_altpipe.m – script for scoring single-trial data and subject average data based on the alternative data processing pipeline

- Each script contains a header that describes inputs, outputs, and required software/plugins.

- Step 1
  - Run preproc.m on raw data files.
  - Specify locations where raw data are found, where .set/.fdt files should be saved for the original data-processing pipeline, and where .set/.fdt files should be saved for alternative data-processing pipeline
- Step 2 – Original data-processing pipeline
  - Run scoring_orgpipe.m on files to be scored based on original data-processing pipeline
- Step 3 – Alternative data-processing pipeline
  - Use the erp_pca_tookit_processing.pdf to set the parameters for data processing through the ERP PCA Toolkit
  - Run scoring_altpipe.m to score .ept files using the alternative data-processing parameters