To run cat_mov_reg_power.m

Table of Contents

| redit and date | 1 |
|---------------------------|---|
| ıtro | 1 |
| epo location | |
| ependencies: | |
| asic usage | |
| xample 1 | |
| how PMU data if available | |
| how filtered data | |

Credit and date

Code developed by Oscar Miranda-Dominguez.

First line of documentation: July 2018

Intro

This is a companion figure to cat_mov_reg_power. It shows the power spectra from each movement regressor

Repo location

https://gitlab.com/Fair_lab/movement_regressors_power_plots

Dependencies:

Dependancies have been included in this version. Extra functions are found within this repo's folder named 'utilities'

Basic usage

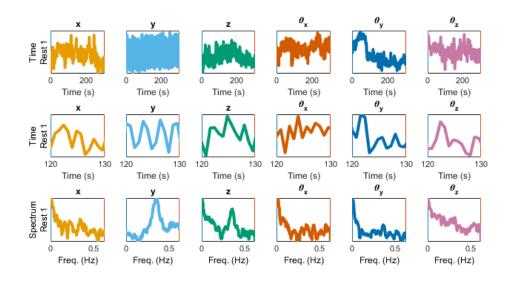
The two mandatory input arguments for this function are:

- 1. the path to the Movement Regressors files made by the pipelin. in this casi it is only the path to a single file (not a cell with paths to multiple Movement Regressors files as in cat_mov_reg_power
- 2. TR, BOLD's repetition time

Example 1

```
% cd /mnt/max/shared/code/internal/utilities/mov_reg_power % move to
  the folder to save the data
f=filesep;
TR=0.8;% TR in seconds
```

```
ver=1;
% Path to Movement regressors file
dest_path='P:\code\internal\utilities\OSCAR_WIP
\movement_regressors_power_plots\mov_reg_files\subject_with_PMU_data';
path_mov_reg=[dest_path f 'random_ix_1_ver'
   num2str(ver) '_Movement_Regressors.txt'];
```

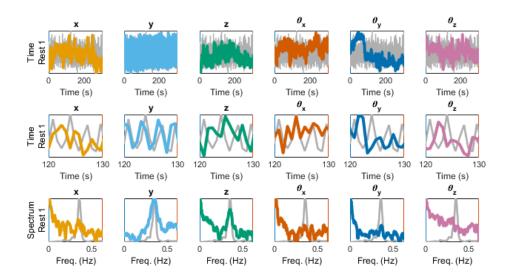


Show PMU data if available

Make the same figure and show PMU data if available

CLIM=power_per_Resting(path_mov_reg,TR);

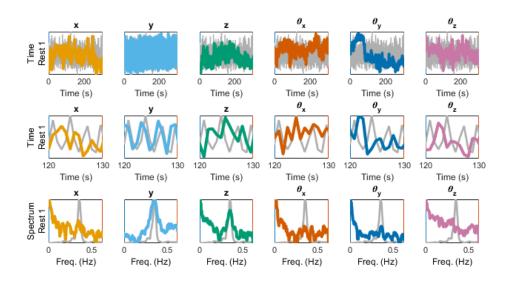
PMU_path=[dest_path f 'random_ix_1_PMUextracted.mat'];
CLIM=power_per_Resting(path_mov_reg,TR,'PMU_path',PMU_path);

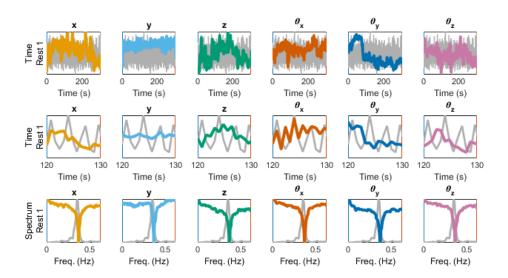


Show filtered data

Original data

```
CLIM=power_per_Resting(path_mov_reg,TR,'PMU_path',PMU_path);
ver=2;
path_mov_reg=[dest_path f 'random_ix_1_ver'
   num2str(ver) '_Movement_Regressors.txt']
% Filtered data
CLIM=power_per_Resting(path_mov_reg,TR,'PMU_path',PMU_path,'clim',CLIM);
path_mov_reg =
   'P:\code\internal\utilities\OSCAR_WIP
\movement_regressors_power_plots\mov_reg_files\subject_with_PMU_data
\random_ix_1_ver2_Movement_Regressors.txt'
```





Published with MATLAB® R2019a