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tfavgprofilet

- **Description**

Creates a time profile in a selected frequency band of a TF file (output in EP file format **.p**). This profile (**.p**) can be displayed by erpa.

- **Usage**

tfavgprofilet [+sqrt] [+sem coef]

with :

- options :

+sqrt : computes square root of data. If omitted, the profile of data is created.

+sem coef : computes standard error of the mean (sem) for each point. It outputs 3 files : one file containing mean values (**.p** suffix), one with mean values + coef * SEM (**.sem1.p** suffix), and one with mean values - coef * SEM (**.sem2.p** suffix). For example :

tfavgprofilet +sem 2

will create files with 2*SEM values added or subtracted to the mean values.

This program uses an interactive input. The questions are as follows (questions (program) are italic, answers (user) are bold):

Frequencies in Hz (y/n) ?

y

if yes:

Start frequency :

10

Stop frequency :

16

if no:

Number of frequencies to sum or average :

3

Rank of frequency 1 :

1

Rank of frequency 2 :

2

Rank of frequency 3 :

6

In this case the frequency bands number 1, 2, and 6 are averaged. The ranks of these frequencies are stored in the tf header.

Number of samples to truncate :

50

This truncature is used to remove the first 50 and last 50 time samples from the resulting profile in the ep file, to prevent visualizing the effect of the tapering window (Blackman window).

Baseline correction: none (0), mean (1) or median (2) on a time-window ? (0/1/2) :

1

0: no baseline correction

1: the mean value between start and stop latencies will be used

2: the median value between start and stop latencies will be used

if baseline correction \neq 0

Start latency of baseline (in ms) :

-400

Stop latency of baseline (in ms) :

-100

Substract(1) or divide(2) by baseline ? (1/2)

1

1: the baseline value is subtracted from the original data

2: the original data are divided by the baseline value

Sum (0) or average (1):

1

0: sum over frequency bands of the tf values for each time sample

1: average over frequency bands of the tf values for each time sample

Input file name (with extension) or Enter to quit :

myfile1.avg.tf

Output EP file name (without extension):

myfile1.avg.freq10-16.bl

Input file name (with extension) or Enter to quit :

myfile2.avg.tf

the same processing will be repeated with new files.

Output EP file name (without extension):

myfile2.avg.freq10-16.bl

Input file name (with extension) or Enter to quit :

(return)

a new TF file can be processed with the same parameters,
or the return key terminates the program.

- **Fields of parameter file and example**

- **Examples**

In this example, the output files myfile1.avg.freq10-16.bl.p and myfile2.avg.freq10-16.bl.p contain baseline corrected averaged time-profiles between 10 and 16 Hz. Note that the .p extension is generated automatically.

- **Comments**

- **Current version**

1.08 03-10-2013

- **History**

- 1.00 09-12-2001 (PEA) : 1st documented version.
- 1.01 04-02-2002 (PEA) : minor modification.
- 1.02 09-12-2003 (PEA) : adds baseline correction support.
- 1.03 04-03-2004 (PEA) : fixes EP format header size.
- 1.04 07-10-2004 (PEA) : adds +sqrt option to compute square root of data.
- 1.05 13-08-2007 (PEA) : minor modification.
- 1.06 08-02-2011 (PEA) : updates to use cmake and free release of Elan. Removes static allocations.
- 1.07 09-01-2012 (PEA) : adds the option to create output files with Standard Error of the Mean (+sem).
- 1.08 03-10-2013 (PEA) : fixes deallocation memory after file creation.

- **Files**

\$ELANPATH/bin/tfavgprofilet

- **See also**

[tfavgprofilet](#) ^[1]

Lyon Neuroscience Research Center - Brain Dynamic and Cognition team

CRNL



Source URL: <http://elan.lyon.inserm.fr/?q=tfavgprofilet>

Links:

[1] <http://elan.lyon.inserm.fr/?q=tfavgprofilef>