Read me - Fluorescence and Optic Flow Traces

This read me will only provide information on the parameters and environment set up to run the script. Detailed explanations of the different functions have already been written in the Read Me text file linked to the event detection script - please refer to that Read Me for further details.

1 Goal of the script

This script computes the first order derivative of the %DR/R traces and plots the %DR/R traces for left and right neurons with the optic flow measurements and vertical lines at the time point of the events detected. It performs the complementary event detection for MDN and MAN as described in the event detection read me file and performs the non complementary event detection for A1 neurons.

2 Setup of the Environment

This script was run on Python 2.7.10 and uses the following libraries :

- Numpy (v 1.13.1)
- Matplotlib (v 1.3.1)
- cPickle (v 1.71)

3 Folder Organisation

To run this script, the dictionary created at the end of script P4 from the ROI selection program is needed. This dictionary should be stored in the output folder created in script P1. To learn more about folder organisation, please refer to the Read Me file related to the ROI selection program.

4 Running the Script

The user needs to set three parameters to run this script:

- the « dataDir » path should be set to the experiment folder
- the boolExp parameter should be set to 0 for experiments that ran through P1 to P5 scripts, to 1 for coronal section of VNC and to 2 for horizontal section of VNC experiments.
- the boolComp parameter is only used if boolExp is set to 0. The boolComp parameter refers to the type of complementary event detection. If set to 1, complementary event detection will be performed (used for MDN and MAN), if not, non complementary event detection will be performed (used for A1 neurons).

The script can be run once those 3 parameters are set.