Explication détaillée du code

# Labelling

Figure 1: Text file generated by Audacity after Julie's annotations on signal 12

Each text file follows a strict name structure: ObersatorID\_SampleID. Every line corresponds to a CS or NCS, with the beginning and end time of the section (cf figure 5).

These files are read one by one thanks to MATLAB, with the aim of creating a vector of 0 and 1, respectively corresponding to the NCS and CS labels. For this, a sampling with an accuracy of 10 ^-2 seconds was first carried out. In order to reduce the computation time, the vector was then reduced by taking its moving average with a 1-second window and a 25% overlap. The window was chosen based on the duration of CS, which is always more than 1 second. This was done for each signal and each rater. Cela donne à la fin une matrice 3D comportant (raters, labels, samples).

The level of agreement was then measured using Fleiss’ KAPPA. It is a statistical measure which assesses the [reliability of agreement](https://en.wikipedia.org/wiki/Inter-rater_reliability) between a fixed number of raters when assigning [categorical ratings](https://en.wikipedia.org/wiki/Categorical_rating) to a number of items. In the project, three raters, two categorical ratings and sixty items (60 sections of 1 second) were used to find a Fleiss’ KAPPA coefficient for each signal. A KAPPA coefficient equal to 0 means no agreement, while 1 means perfect agreement. The detailed calculation of this coefficient can be seen in annex … . It was implemented on Matlab using a function in the Matlab File Exchange [[1]](#endnote-1) . Mettre sa valeur ici?

Finally, each crying segments with a 2/3 or 3/3 agreement have been retained.

1. <https://github.com/dgolden1/matlab_fleiss_kappa/blob/master/fleiss_kappa.m> [↑](#endnote-ref-1)