DISCRETIZATION FILE GENERATION FOR AUTOMATIC FIR RUNING

NOTE: Once you have defined your discretization file *.m* you need to run it and then save the Workspace in a *.mat* file, because the automatic process of Visual-FIR reads it as *.mat*

This file should contain, for each variable, a structure array with the three fields needed for discretization: Number of classes (*Classes*), discretization algorithm (Algoritme) and the parameters that the discretization algorithm needs, if any (*Parametres*). The variables defined in this file should have the same name than the ones described in the Automatic-FIR-ConfigurationFile.

<Variable name>.Classes : Nº of classes (number)

<Nom variable>.Algoritme: Discretization algorithm to be used (string)

The possible algorithms are:

'SL': Single Linkage
'CL': Complete Linkage
'SA': Simple Average Linkage
'AV': Average Linkage
'CE': Centroid Linkage
'ME': Median Linkage
'WA': Ward Linkage
'EFP': Equal Frequency Intervals
'EQ_WIDTH': Equal Width Intervals
'FM': Flexive Method : Parameters needed => (1)
'K_MEANS': K_Means algorithm : Parameters needed => (1)
'HCM': Hard C_Means : Parameters needed => (2)
'FCM': Fuzzy C_Means : Parameters needed => (3)
'EEFP': Enhanced Equal Frequency Intervals : Parameters needed => (2)
'MAN': Manual. Llindars preestablerts: Parameters needed => (1)

<Nom variable>.Parametres: Parameters needed by the selected algorithm (number).

If the algorithm chosen does not have parameters, you should set this field to 0. If it needs more than one parameter, they should be defined as a vector of values.

Possible parameters:

'FM': Flexible Method => Beta
'K_MEANS': K_Means algorithm => Number of iterations
'HCM': Hard C_Means =>
    Param(1): Number of iterations
    Param(2) :Ending criteria
'FCM': Fuzzy C_Means =>
    Param(1): Exponent
    Param(2) : Number of iterations
    Param(3) : Ending criteria
'EEFP': Enhanced Equal Frequency Intervals =>
    Param(1): percentage of equal data;
    Param(2) : percentage threshold value;
'MAN': Manual =>

Param (1): Matrix with the landmark values of each class. Example: a=[3.5 5; 5 7] and X.Parametres = a;