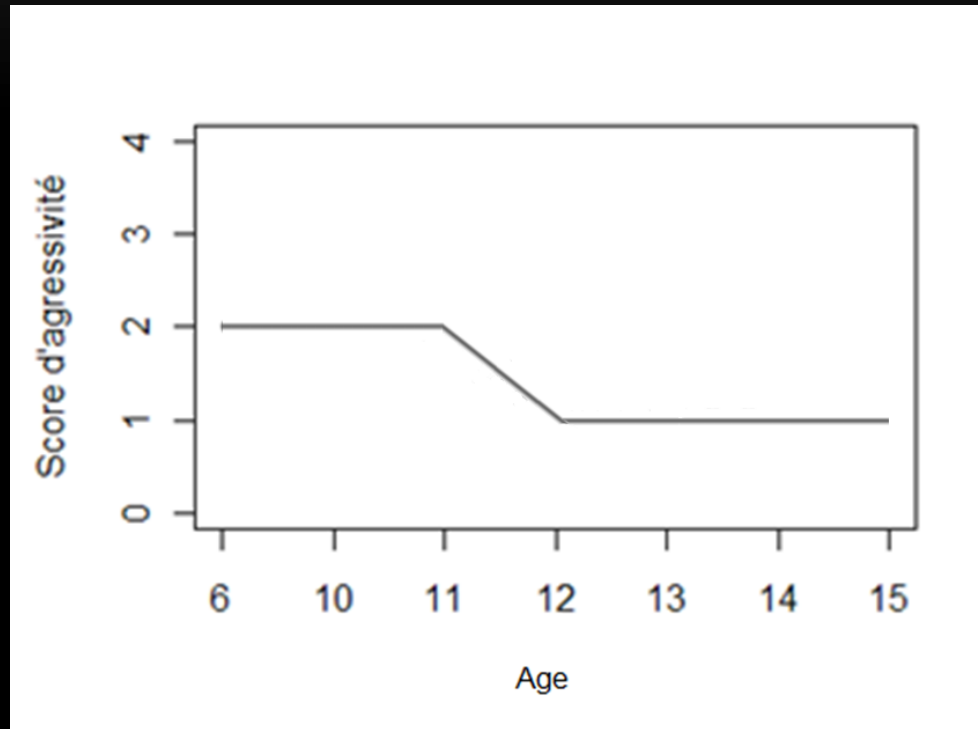


kmlShape

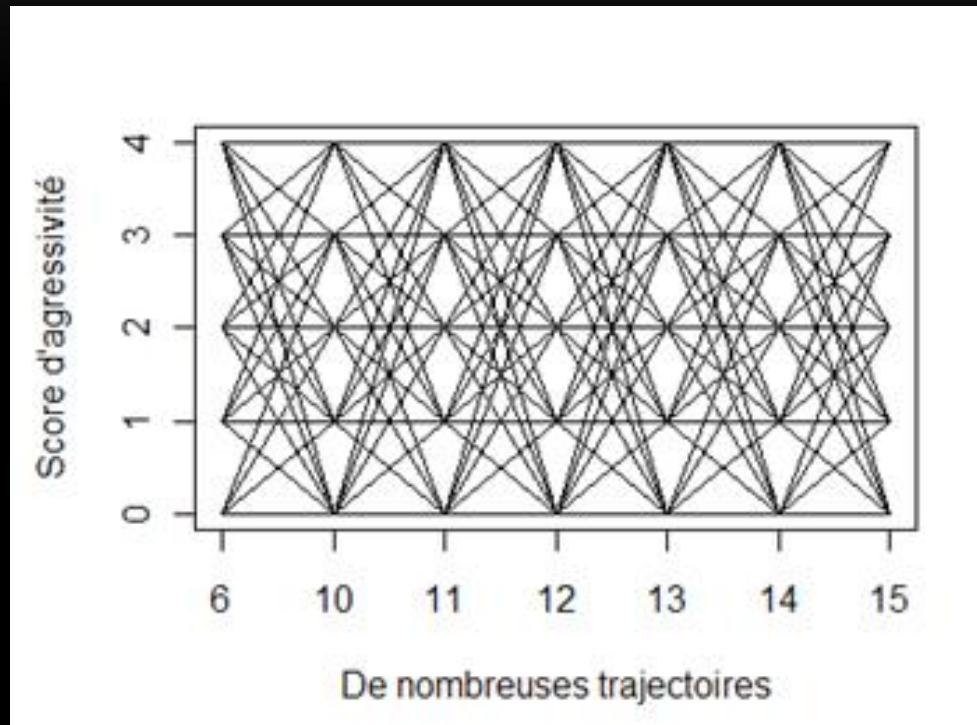
Christophe Genolini



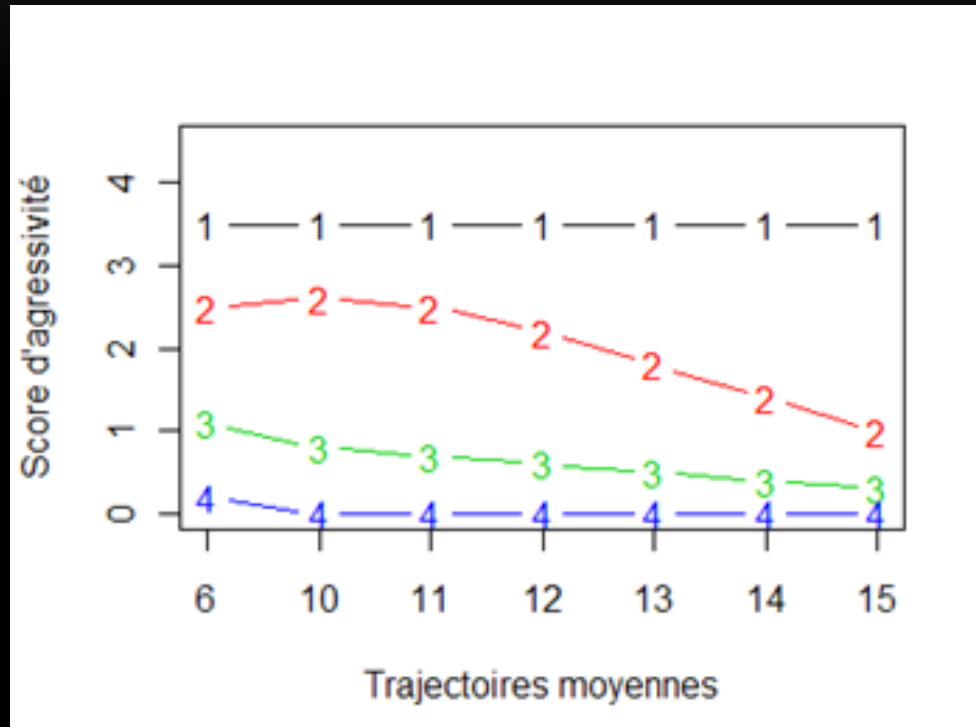
TRAJECTOIRE



TRAJECTOIRES



POURQUOI PARTITIONNER

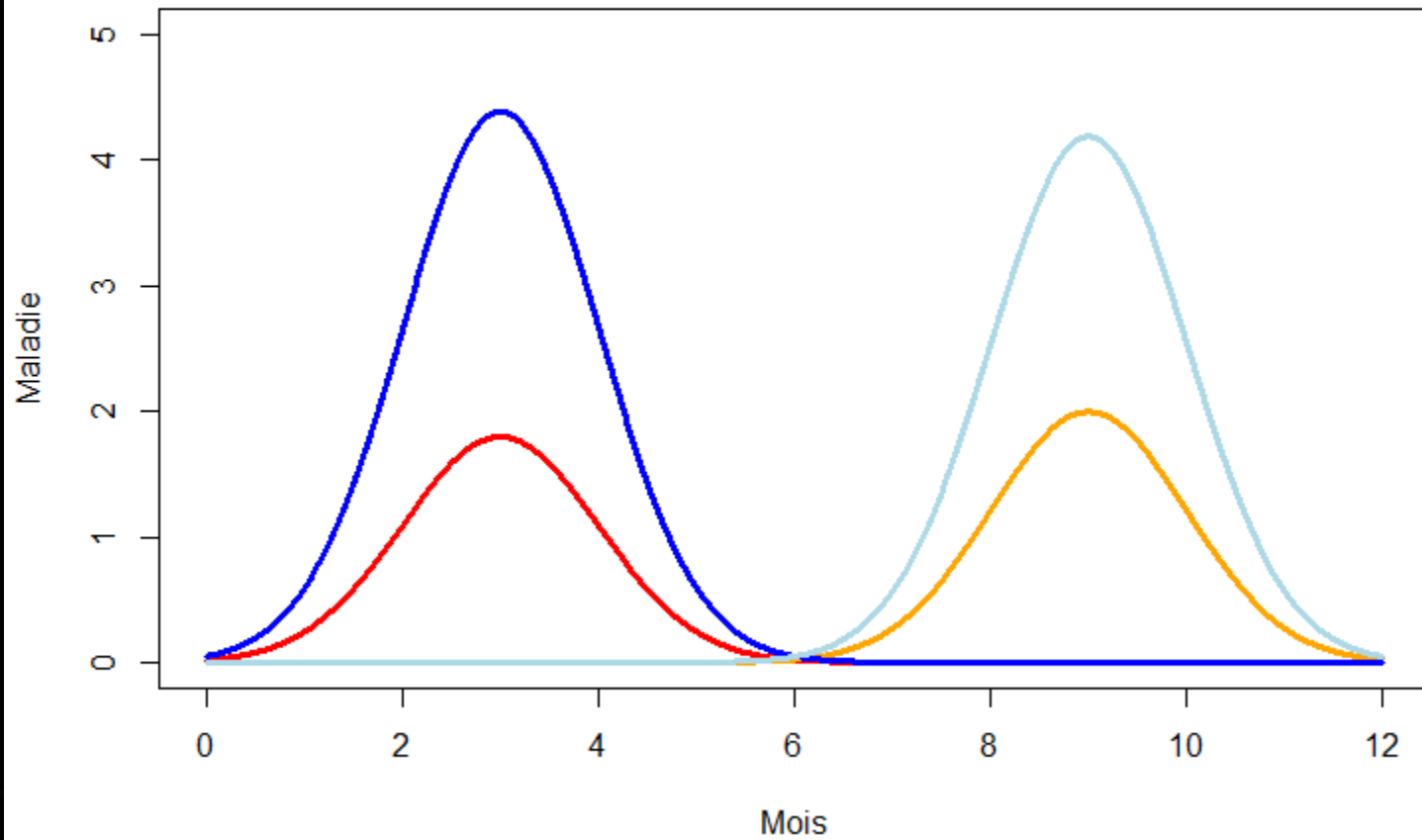


AGRESSIVITÉ

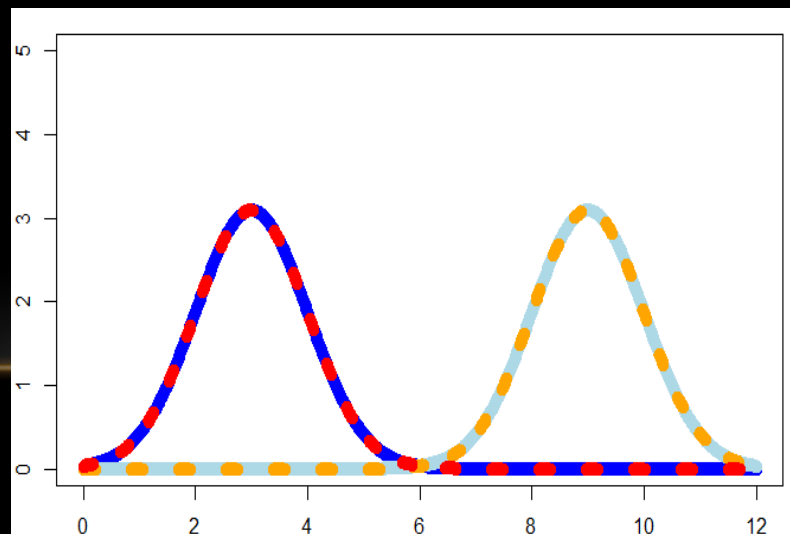
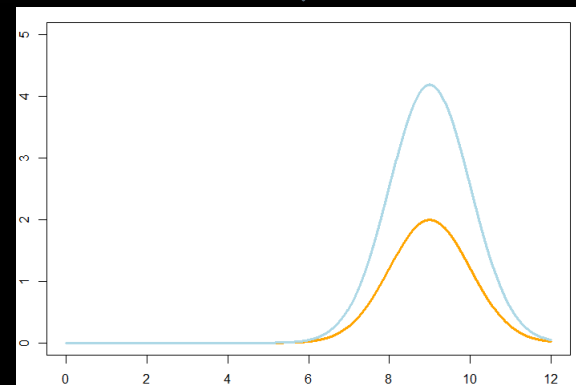
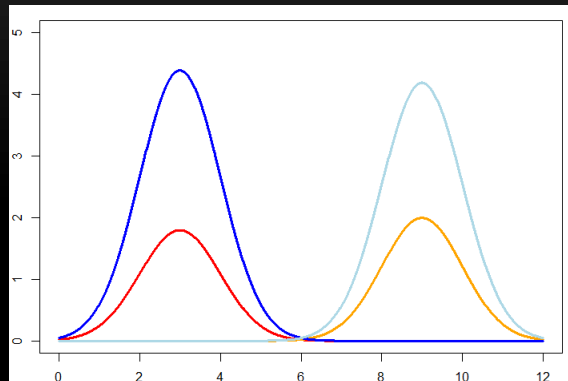
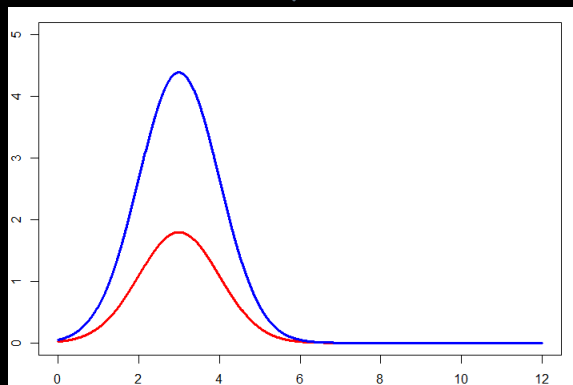
- Groupe « Trajectoires hautes » est significativement associé à :
 - Alcoolisme, suicide, faible niveau d'étude

COMMENT PARTITIONNER ?

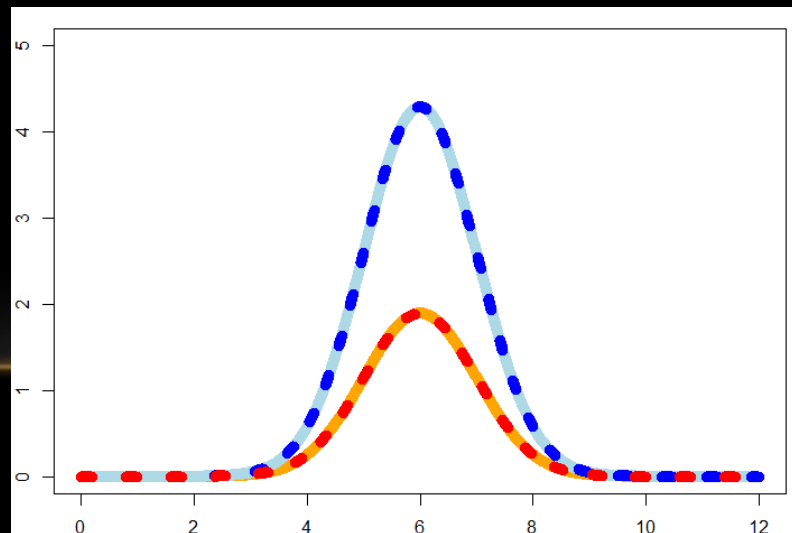
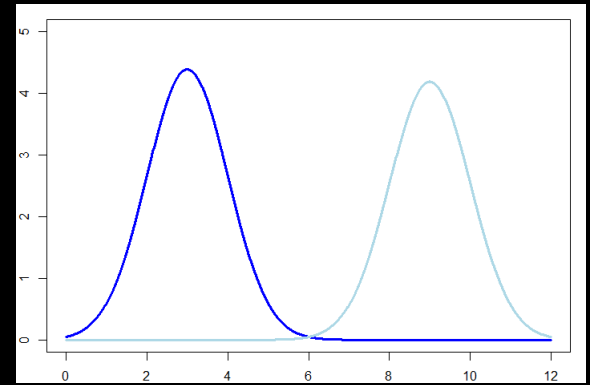
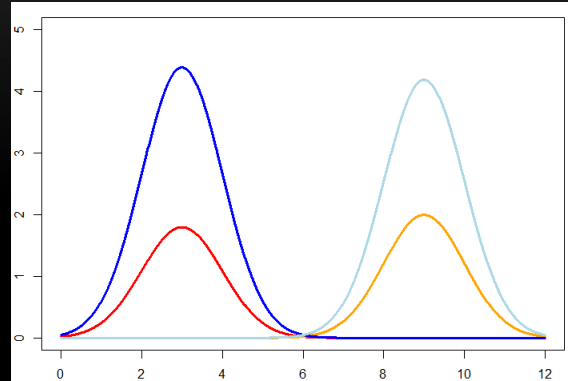
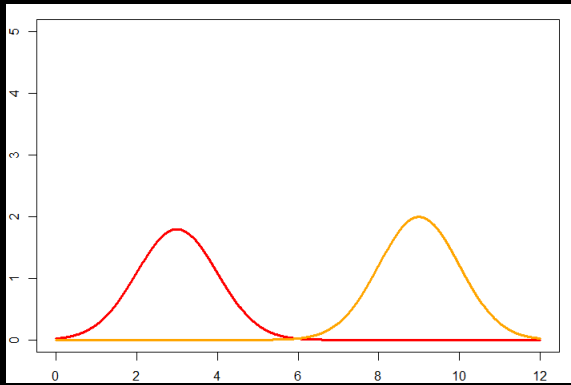
REGROUPER



REGROUPEMENT CLASSIQUE



REGROUPEMENT SILHOUETTE



K-MEANS SILHOUETTE

K-MEANS

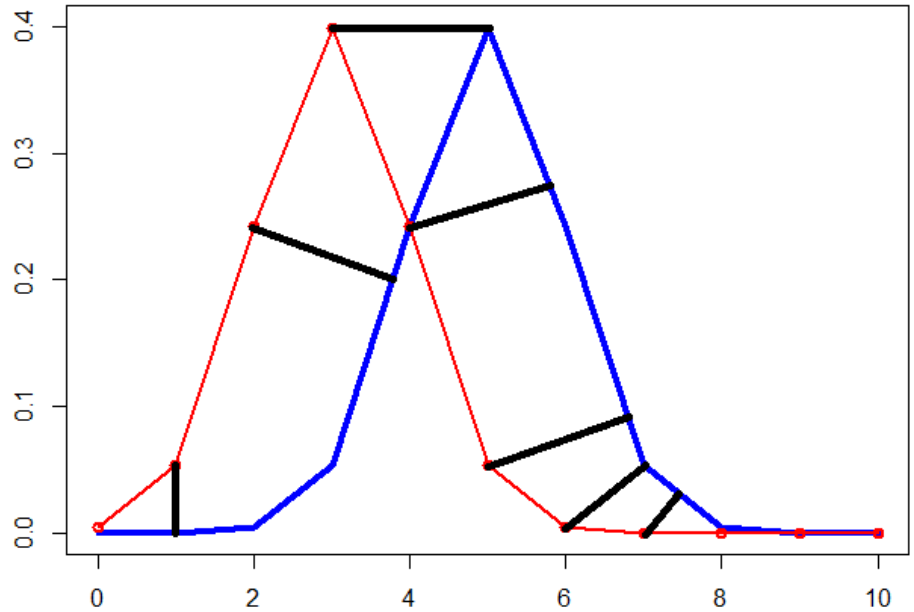
- Distance
- Moyenne

K-MEANS « SILHOUETTE »

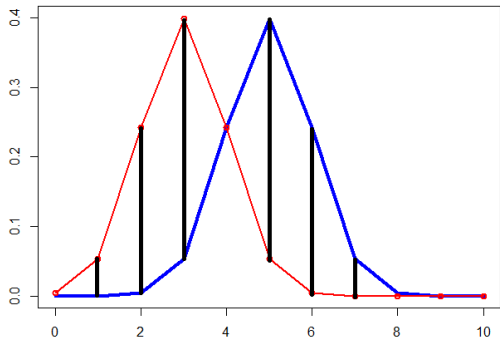
- Distance « silhouette »
- Moyenne « silhouette »

DISTANCES SILHOUETTES

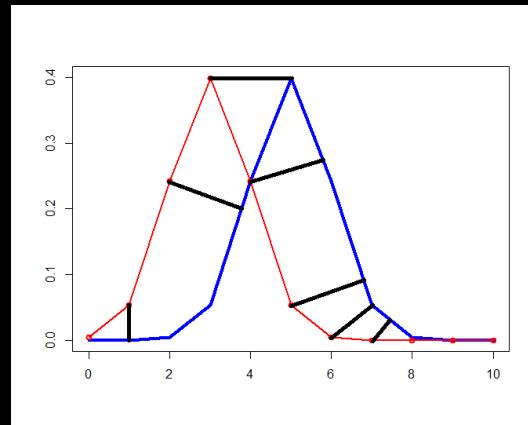
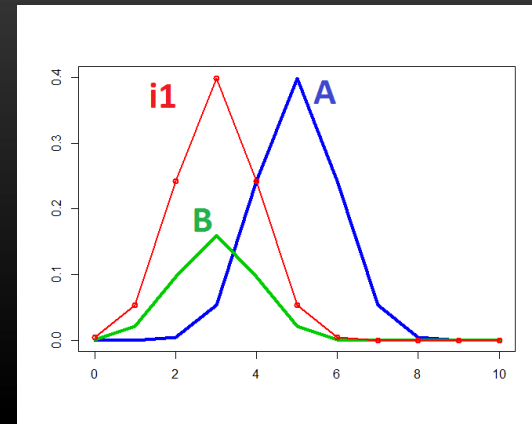
DISTANCE DE FRECHET



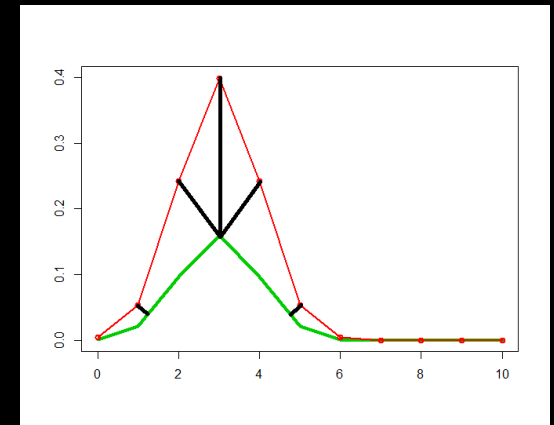
DISTANCE EUCLIDIENNE



DISTANCE DE FRÉCHET

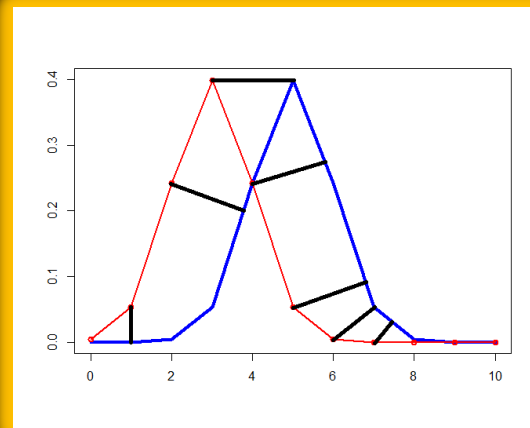
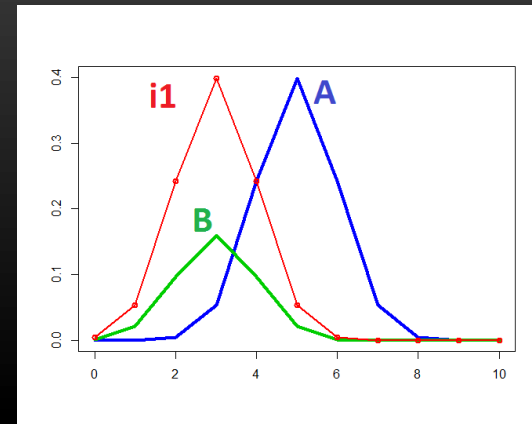


$$\text{Fréchet}(i1, A) = 0,11$$

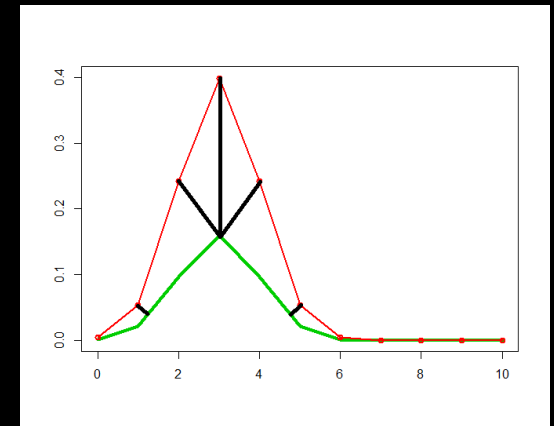


$$\text{Fréchet}(i1, B) = 0,23$$

DISTANCE DE FRÉCHET



$$\text{Fréchet}(i1, A) = 0,11$$

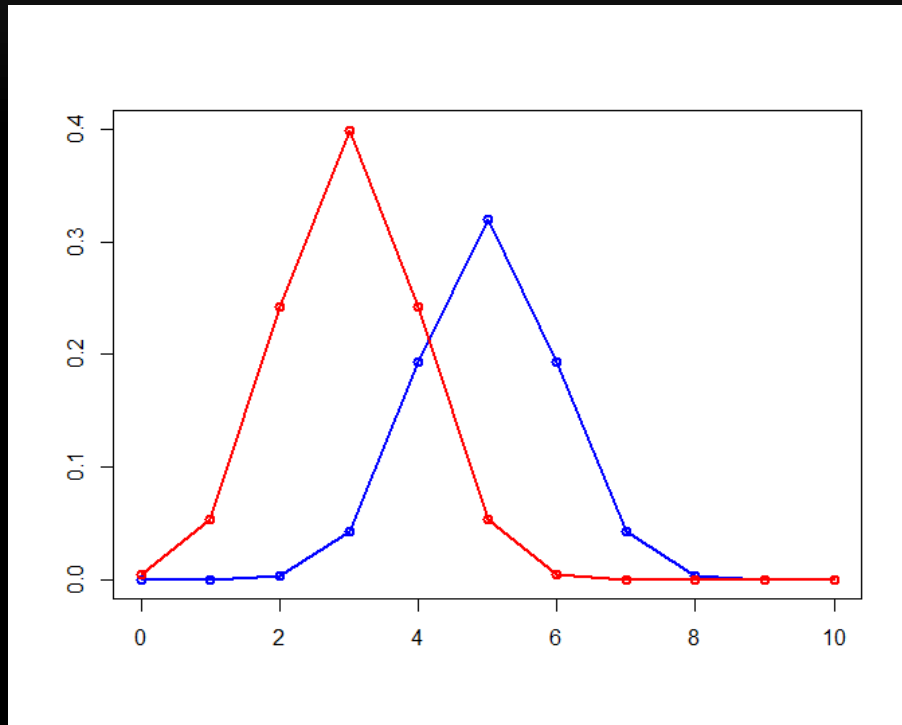


$$\text{Fréchet}(i1, B) = 0,23$$

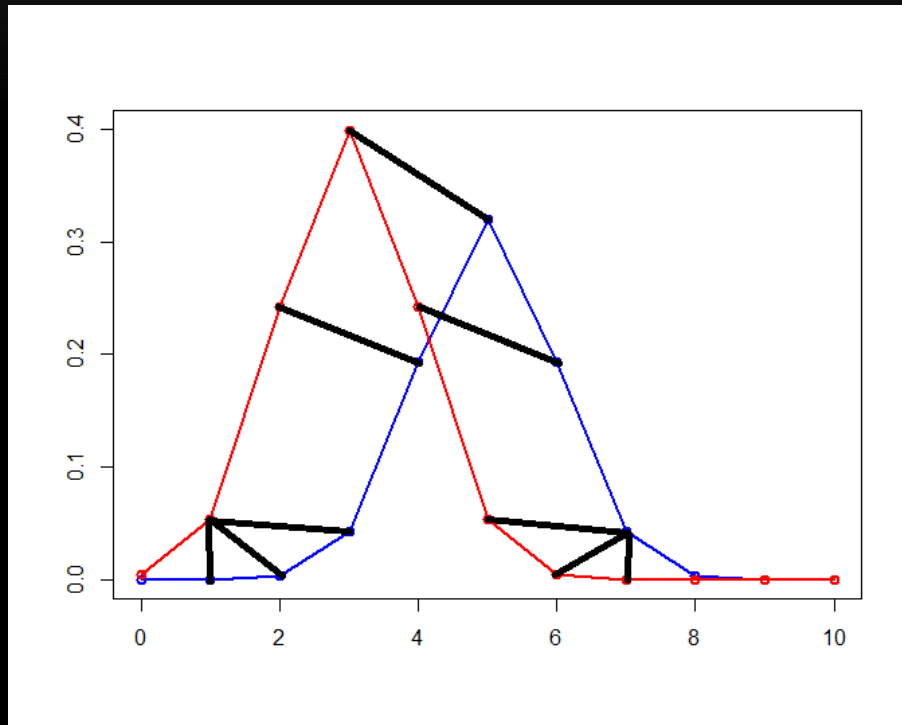
i1 est proche de A

MOYENNES « SILHOUETTES »

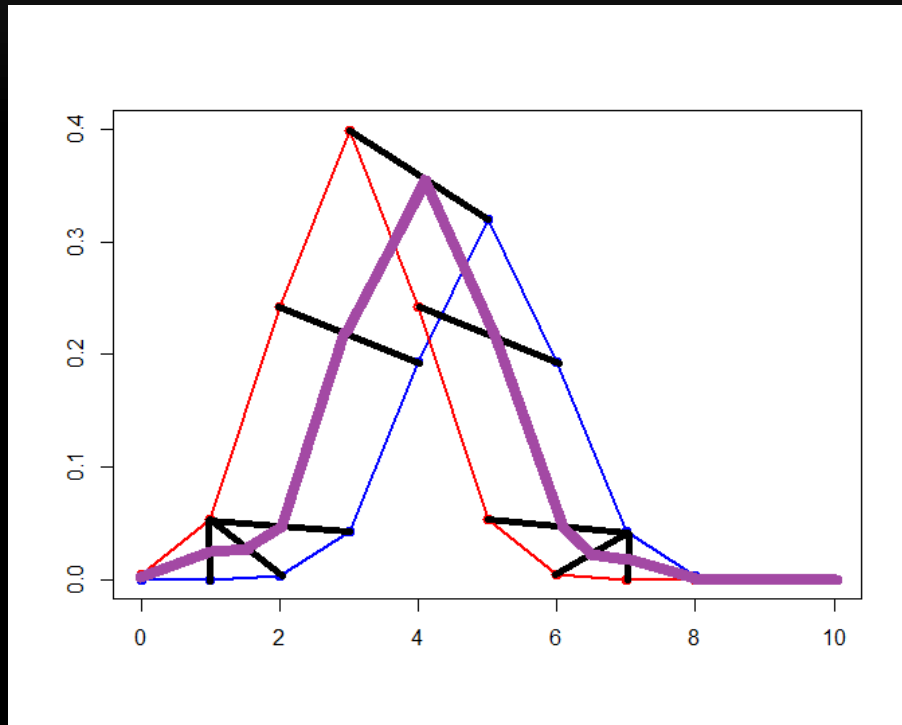
MOYENNES DE FRÉCHET POUR 2 COURBES



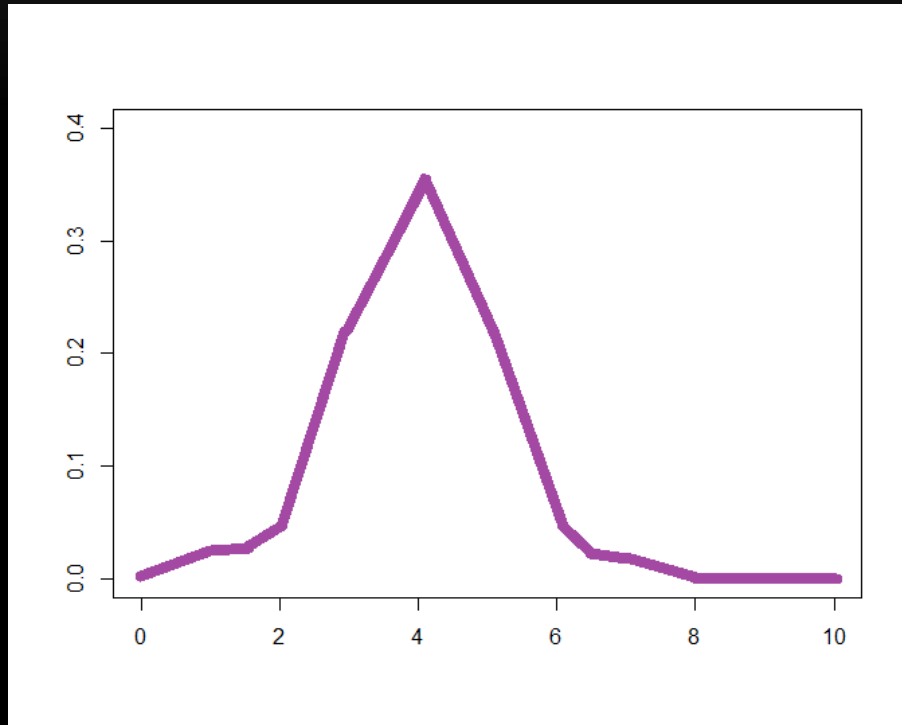
MOYENNES DE FRÉCHET POUR 2 COURBES



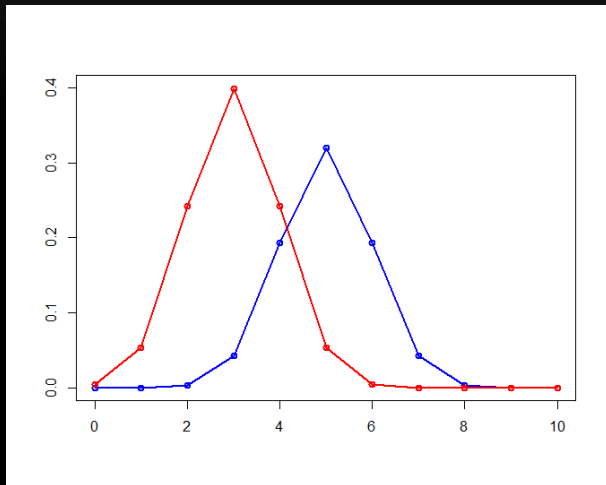
MOYENNES DE FRÉCHET POUR 2 COURBES



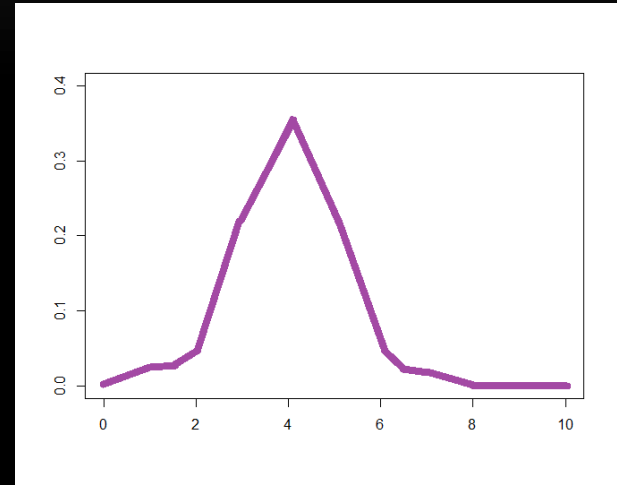
MOYENNES DE FRÉCHET POUR 2 COURBES



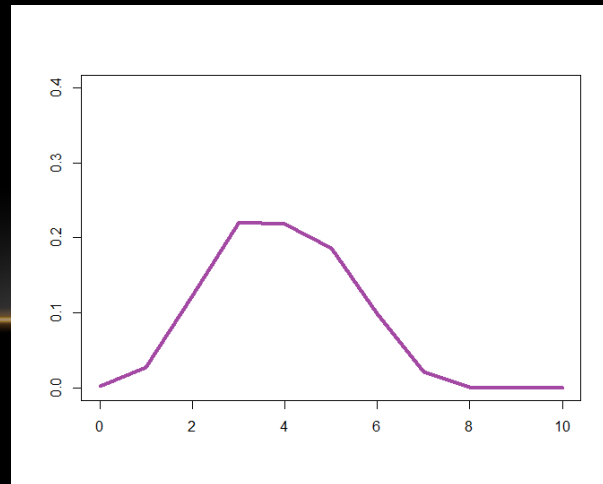
FRÉCHET OU EUCLIDE ?



Fréchet

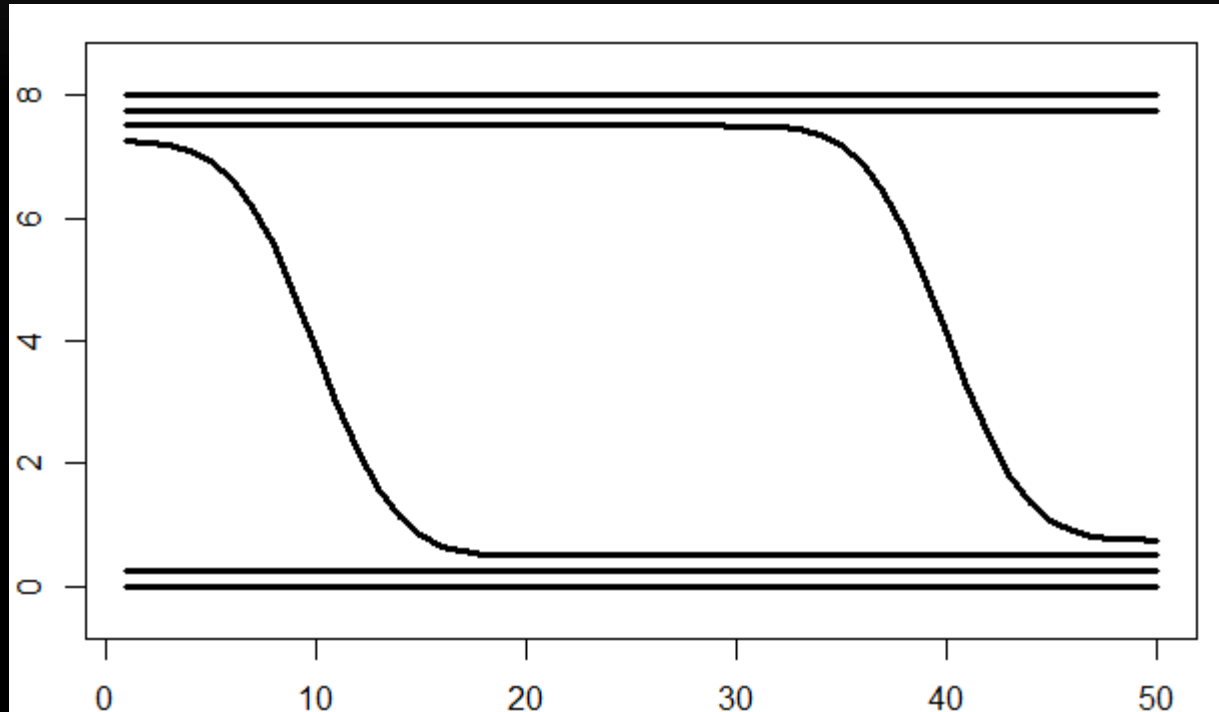


Euclide

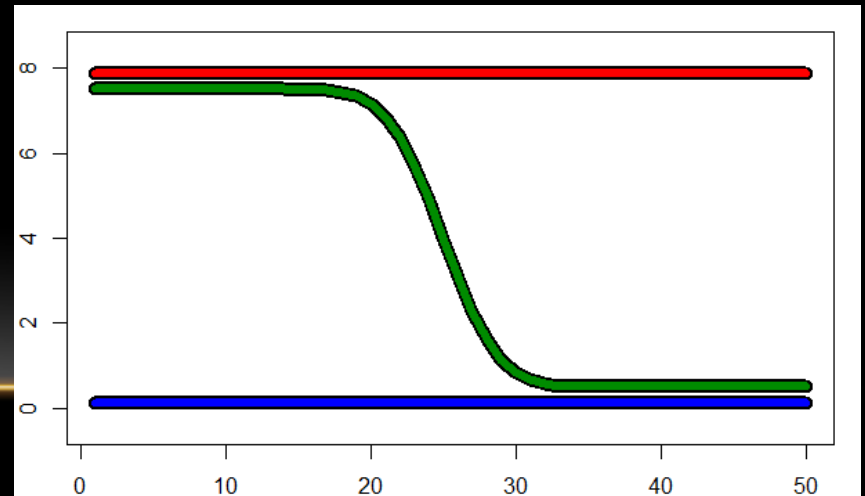
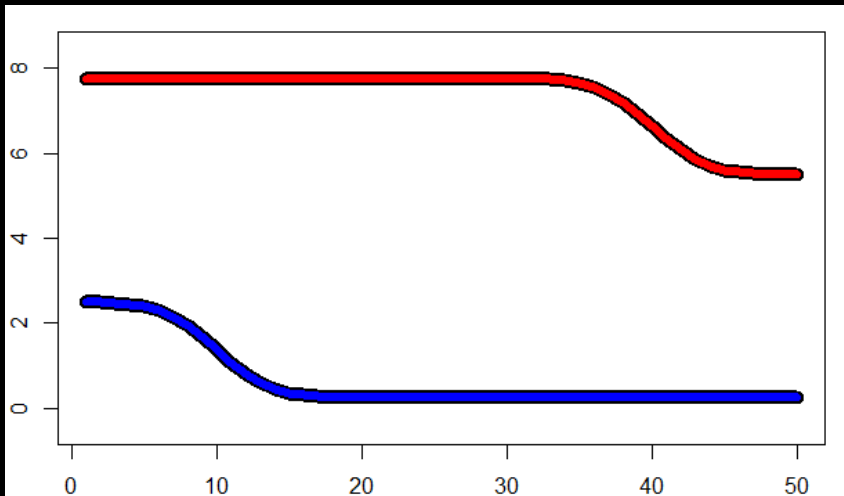
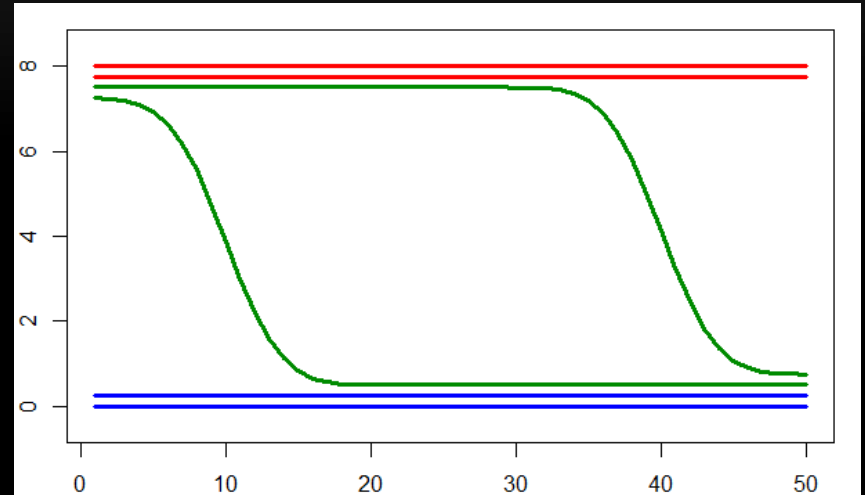
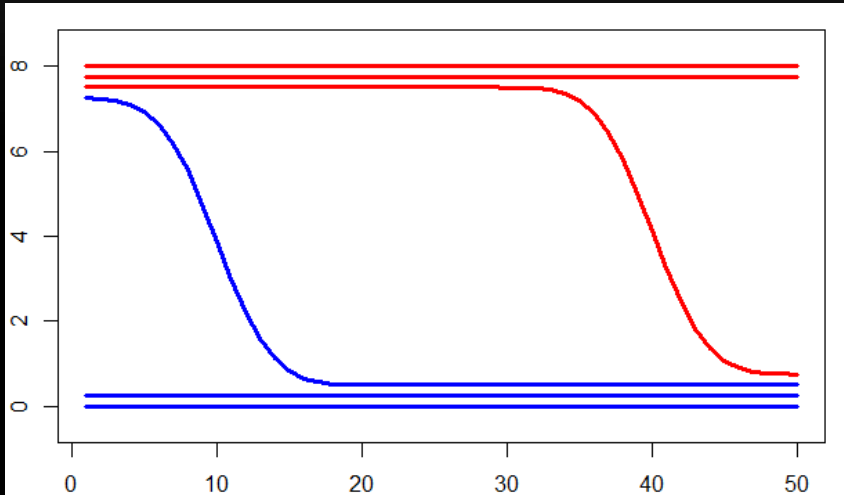


APPLICATION

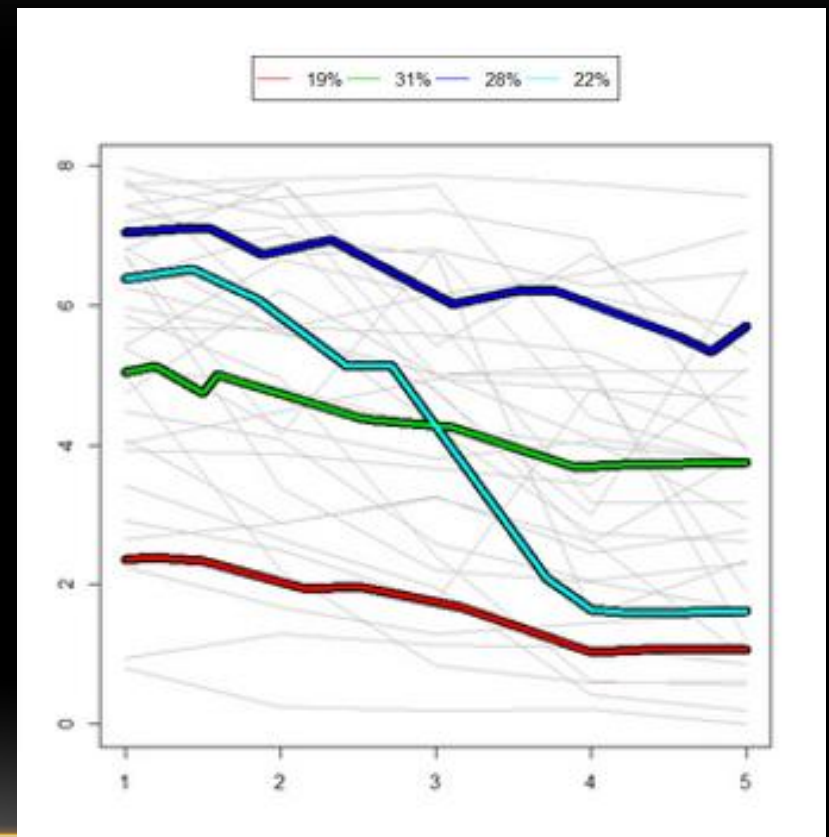
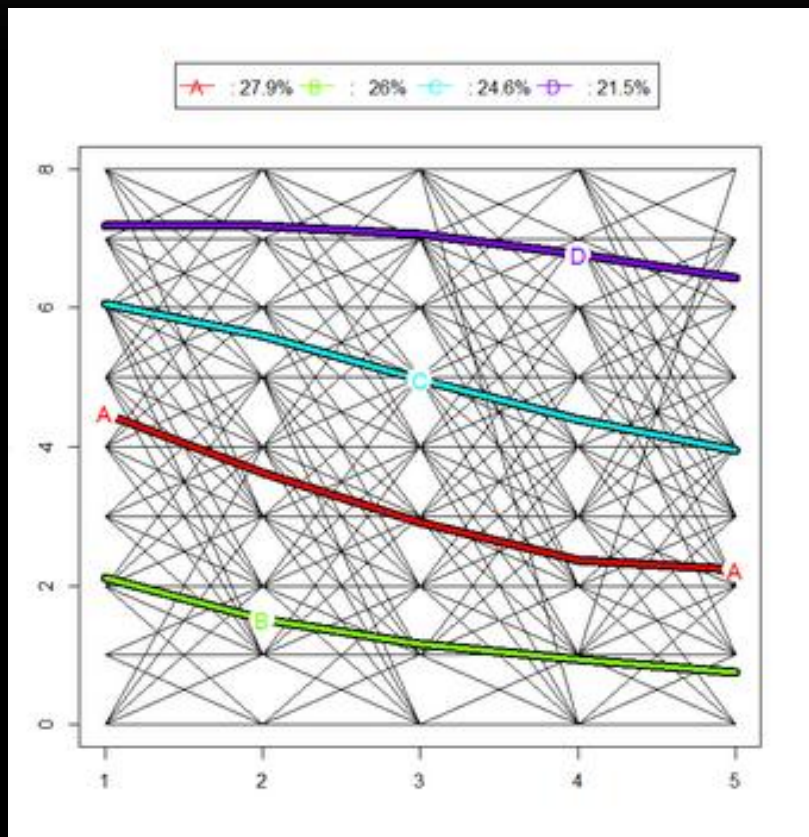
EXEMPLE ARTIFICIEL



EXEMPLE ARTIFICIEL

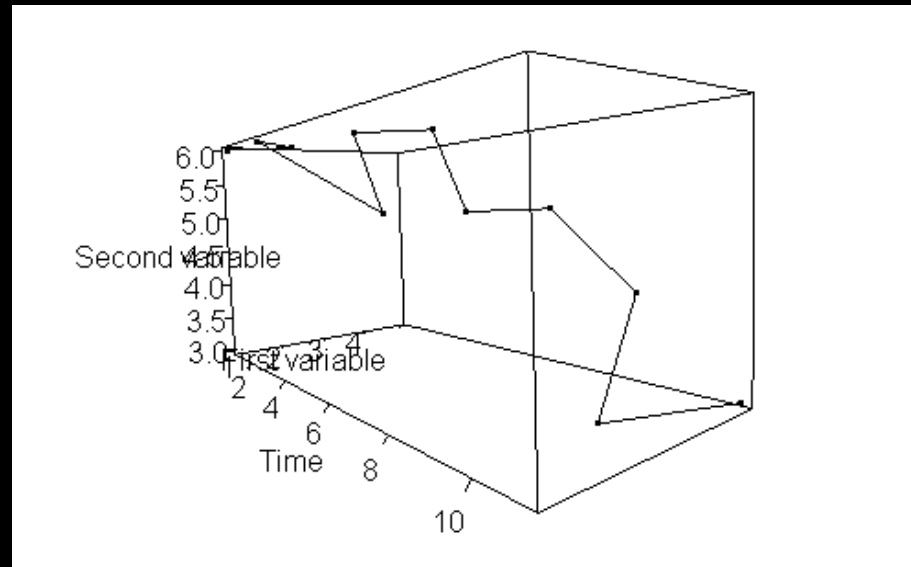


EXEMPLE ICTUS



PERSPECTIVES

- Trouver le bon nombre de clusters
- Généraliser en 3D



MERCI DE VOTRE ATTENTION

Des questions ?