```
#### On selectionne les variables

variable=c("tmin_means","tmax_means","tmax_days90th","tmin_days90th","tmax_days10th","tmin
_days10th","tmin_days0","ppt_days","ppt_days2","ppt_days10","ppt_days90th","ppt_dryspell","ppt
_means")

##on selectionne des pays

world <- c("FRA","ESP","SWE","CZE","PRT",
"FIN","NOR","BRA","CHL","PRY","PER","BOL","ARG","USA","CAN","MEX","CRI","HND","JAM","CIV","T
GO", "CMR","GHA", "TUN" ,"ZMB","JPN","CHN","KAZ","MNG","IND","HKG","AUS","NZL","FJI")

##on leur attribue un continent

continent=c("EUR","EUR","EUR","EUR","EUR","EUR","EUR","SoAM","SoAM","SoAM","SoAM","SoAM
","SoAM","NoAM","NoAM","NoAM","NoAM","NoAM","NoAM","AFR","AFR", "AFR", "AFR", "AFR",
"AFR","ASI","ASI","ASI","ASI","ASI","ASI","OCE","OCE","OCE")


tabacp=NULL

for (i in 1:length(variable)){##on parcours les variables

country.dat <- get_ensemble_stats(world,"mavg",variable[i])

##on selectionne un scenario

country.dat.b1 <- subset(country.dat,country.dat$scenario == "b1")

# on choisit un quantile

country.dat.b1 <- subset(country.dat.b1,country.dat.b1$percentile== 50)


# on choisit une periode

country.dat.b1 <- subset(country.dat.b1,country.dat.b1$fromYear== 2081)

count2=NULL

 for (j in 1:length(world)){##on parcours les pays

   count=subset(country.dat.b1,country.dat.b1$locator==world[j])

   count2=c(count2,mean(count$data))##on calcule la moyenne

 }

tabacp=cbind(tabacp,count2)

}

colnames(tabacp)=variable

rownames(tabacp)=world

tabacp1=cbind(as.data.frame(tabacp),continent)
```

```
#########AFD
###pour cela nous recuperons le code de notre professeur Marie Chavent
source("AFD_procedures.R")
res<-AFD(tabacp1[,-14],tabacp1[,14])
```