Untitled

Balde

2025-08-17

R Markdown

```
# données intégrées et création d'un dataframe à partir d'un vecteur
mydata <- data.frame(stack.loss)
View(mydata)
```

```
# Calculer la moyenne d'un échantillon
mean(mydata$stack.loss)
```

```
## [1] 17.52381
```

```
# Afficher la médianne
median(mydata$stack.loss)
```

```
## [1] 15
```

```
# Moyenne rogner
attach(mydata)
```

```
## The following object is masked from package:datasets:
##
##     stack.loss
```

```
mean(stack.loss, trim = 0.05)
```

```
## [1] 16.78947
```

```
# Quantile de l'échantion
# Let's simplify the writing
attach(mydata)
```

```
## The following object is masked from mydata (pos = 3):
##
##     stack.loss

## The following object is masked from package:datasets:
##
##     stack.loss
```

```r
mean(stack.loss, trim = 0.05)
```

```
## [1] 16.78947
```

```r
quantile(stack.loss, probs = 0.75)
```

```
## 75%
##  19
```

```r
quantile(stack.loss, probs = c(0, 0.25, 0.80))
```

```
##  0% 25% 80%
##   7  11  20
```

```r
# Percentile : le pourcentage d'observations qui se situent en dessous d'un point de données spécifique

pnorm(1800, mean = 1500, sd = 300)
```

```
## [1] 0.8413447
```

```r
# Calcul de la variance de l'échantillon et l'ecart type
var(stack.loss); sd(stack.loss)
```

```
## [1] 103.4619
```

```
## [1] 10.17162
```

```r
# Coefficient inter quantile
IQR(stack.loss)
```

```
## [1] 8
```

```r
quantile(stack.loss, probs = c(0.25, 0.75))
```

```
## 25% 75%
##  11  19
```

```r
# Asymétrie de l'échantillon
library(e1071) # install.packages("e1071")
skewness(stack.loss)
```

```
## [1] 1.156401
```

```r
# calcul de l'assimetrie
skewness(discoveries)
```

```
## [1] 1.2076
```

```r
2*sqrt(6/length(discoveries))
```

```
## [1] 0.4898979
```

```r
# Excès de kurtosis de l'échantillon 2
library(e1071)
kurtosis(stack.loss)
```

```
## [1] 0.1343524
```

```r
# Si..., alors la distribution des données est fortement kurtique.
kurtosis(UKDriverDeaths)
```

```
## [1] 0.07133848
```

```r
kurtosis(UKDriverDeaths)
```

```
## [1] 0.07133848
```

```r
4*sqrt(6/length(UKDriverDeaths))
```

```
## [1] 0.7071068
```