

DELINEAMENTO

ANÁLISE FATORIAL (2 fatores)

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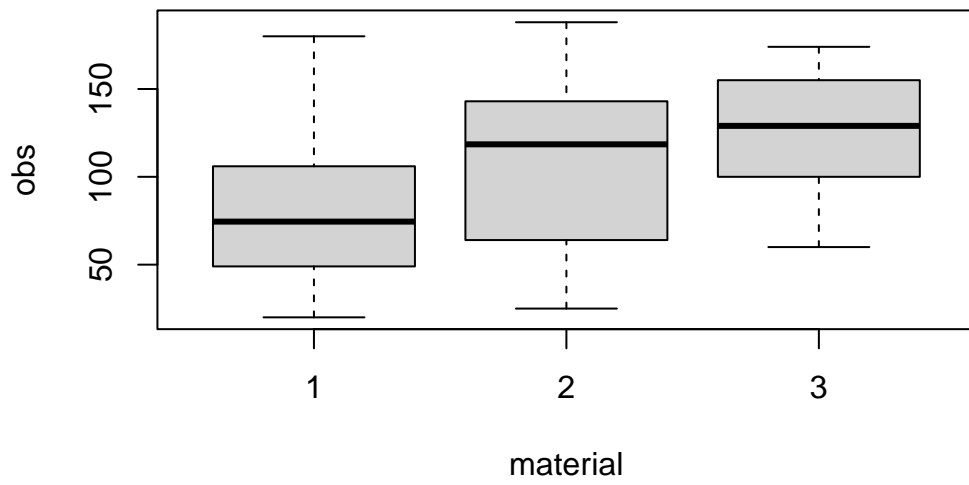
2023-10-27

Dados

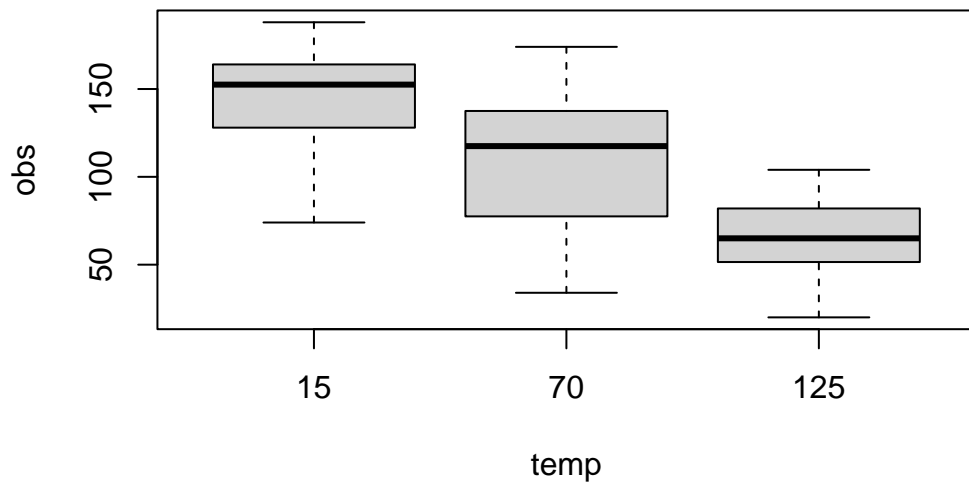
```
obs <- c(130,155,34,40,20,70,  
        74,180,80,75,82,58,  
        150,188,136,122,25,70,  
        159,126,106,115,58,45,  
        138,110,174,120,96,104,  
        168,160,150,139,82,60)  
  
temp <- as.factor(rep(c(15,15,70,70,125,125),times=6))  
  
material <- as.factor(rep(c(1:3), each=12))  
  
df <- data.frame(obs,temp,material)
```

Exploratoria

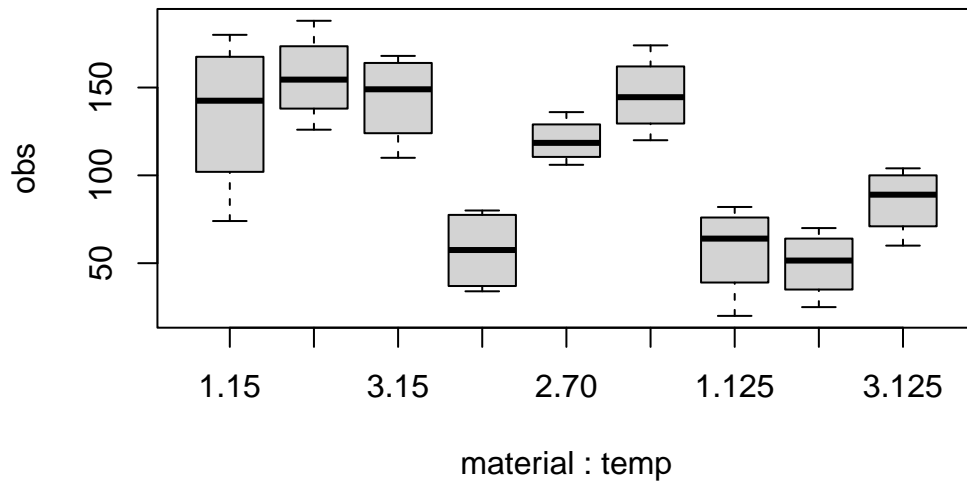
```
boxplot(obs~material)
```



```
boxplot(obs~temp)
```



```
boxplot(obs~material*temp)
```



Hipóteses

Do modelo de análise fatorial

- $h_0: \text{tao}_1 = \dots = \text{tao}_A = 0$
- $h_1: \text{taoi} \neq 0$
- $h_0: \text{beta}_1 = \dots = \text{beta}_A = 0$
- $h_1: \text{betai} \neq 0$
- $h_0: \text{taobeta}_1 = \dots = \text{taobeta}_A = 0$
- $h_1: \text{tao} * \text{betai} \neq 0$

Análise de Variâncias