

Casos de coronavirus a Espanya

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11 de març, 2020

Les dades

```
jhu_url <- paste("https://raw.githubusercontent.com/CSSEGISandData/",
                 "COVID-19/master/csse_covid_19_data/", "csse_covid_19_time_series/",
                 "time_series_19-covid-Confirmed.csv", sep = "")
confirmed_long_jhu <- read.csv(jhu_url)
```

Ara mirem el contingut i llegim les dades d'Espanya:

```
class(confirmed_long_jhu)
```

```
## [1] "data.frame"
```

```
dim(confirmed_long_jhu)
```

```
## [1] 347 53
```

```
str(confirmed_long_jhu[,1:6]) # mirem les primeres 6 variables
```

```
## 'data.frame': 347 obs. of 6 variables:
## $ Province.State: Factor w/ 241 levels "", "Adams, IN",...: 6 11 27 60 62 68 69 70 73 78 ...
## $ Country.Region: Factor w/ 115 levels "Afghanistan",...: 63 63 63 63 63 63 63 63 63 63 ...
## $ Lat : num 31.8 40.2 30.1 26.1 36.1 ...
## $ Long : num 117 116 108 118 104 ...
## $ X1.22.20 : int 1 14 6 1 0 26 2 1 4 1 ...
## $ X1.23.20 : int 9 22 9 5 2 32 5 3 5 1 ...
```

```
head(confirmed_long_jhu[,1:2]) # mirem la capçalera de les 2 primeres variables
```

```
## Province.State Country.Region
## 1 Anhui Mainland China
## 2 Beijing Mainland China
## 3 Chongqing Mainland China
## 4 Fujian Mainland China
## 5 Gansu Mainland China
## 6 Guangdong Mainland China
```

```
tail(confirmed_long_jhu[,1:2]) # mirem el final de les 2 primeres variables
```

```
## Province.State Country.Region
## 342 Boone, IN US
## 343 Dane, WI US
## 344 Pierce, WI US
## 345 Cuyahoga, OH US
## 346 Weber, UT US
```

```
## 347      Wilton, CT          US
spain <- which(confirmed_long_jhu[,2] == "Spain")
confirmed_long_jhu[spain,1:5]

##      Province.State Country.Region Lat Long X1.22.20
## 55              Spain    40    -4      0
```

El gràfic

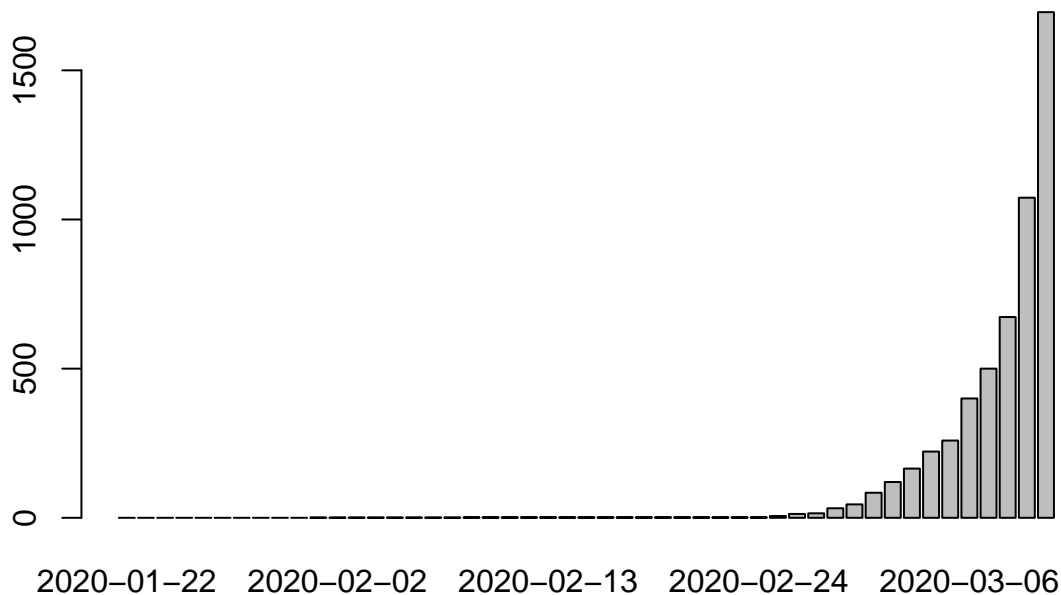
Per fer el gràfic hem de millorar la presentació de les dates:

```
num_dates <- dim(confirmed_long_jhu)[2] - 4
dates <- seq(as.Date("2020/1/22"), by = "days", length.out = num_dates)
dates <- seq(as.Date("22-1-2020", format="%d-%m-%Y"),
            by = "days", length.out = num_dates)
```

I ara fem el gràfic de barres:

```
casos <- confirmed_long_jhu[spain,-c(1:4)]
barplot(as.numeric(casos), names.arg = dates,
        main = paste("Casos de COVID-19 en Espanya (",
                      format(Sys.time(), '%d %B, %Y'), ")"), sep = ""),
        sub="Font: John Hopkins University")
```

Casos de COVID-19 en Espanya (11 de març, 2020)



Font: John Hopkins University