Aquisição de Arquivos e Datasets

Sumarizando Dados

Delermando Branquinho Filho

Inicio siplificado

```
d1 = date()
d1
```

```
## [1] "Mon Mar 27 16:19:39 2017"
```

```
class(d1)
```

```
## [1] "character"
```

Classe Data

```
d2 = Sys.Date()
d2
```

```
## [1] "2017-03-27"
```

```
class(d2)
```

```
## [1] "Date"
```

Formatando Datas

%d = day as number (0-31), %a = abbreviated weekday,%A = unabbreviated weekday, %m = month (00-12), %b = abbreviated month, %B = unabbrevidated month, %y = 2 digit year, %Y = four digit year

```
format(d2,"%a %b %d")
```

```
## [1] "seg mar 27"
```

Criando Datas

```
x = c("1jan1960", "2jan1960", "31mar1960", "30jul1960"); z = as.Date(x, "%d%b%Y")
z
```

```
## [1] "1960-01-01" "1960-01-02" "1960-03-31" "1960-07-30"
```

```
z[1] - z[2]
```

```
## Time difference of -1 days
```

```
as.numeric(z[1]-z[2])
```

```
## [1] -1
```

CConvertendo datas julianas

```r
weekdays(d2)
```

```
## [1] "segunda-feira"
```

```r
months(d2)
```

```
## [1] "março"
```

```r
julian(d2)
```

```
## [1] 17252
## attr(,"origin")
## [1] "1970-01-01"
```

Lubridate

```r
library(lubridate); ymd("20140108")
```

```
##
## Attaching package: 'lubridate'
```

```
## The following object is masked from 'package:base':
##
##     date
```

```
## [1] "2014-01-08"
```

```r
mdy("08/04/2013")
```

```
## [1] "2013-08-04"
```

```r
dmy("03-04-2013")
```

```
## [1] "2013-04-03"
```

Lidando com tempos

```r
ymd_hms("2011-08-03 10:15:03")
```

```
## [1] "2011-08-03 10:15:03 UTC"
```

```r
ymd_hms("2011-08-03 10:15:03",tz="Pacific/Auckland")
```

```
## [1] "2011-08-03 10:15:03 NZST"
```

```r
?Sys.timezone
```

```
## starting httpd help server ...
```

```
##   done
```

Algumas funções têm uma sintaxe ligeiramente diferente

```r
x = dmy(c("1jan2013", "2jan2013", "31mar2013", "30jul2013"))
wday(x[1])
```

```
## [1] 3
```

```r
wday(x[1],label=TRUE)
```

```
## [1] Tues
## Levels: Sun < Mon < Tues < Wed < Thurs < Fri < Sat
```