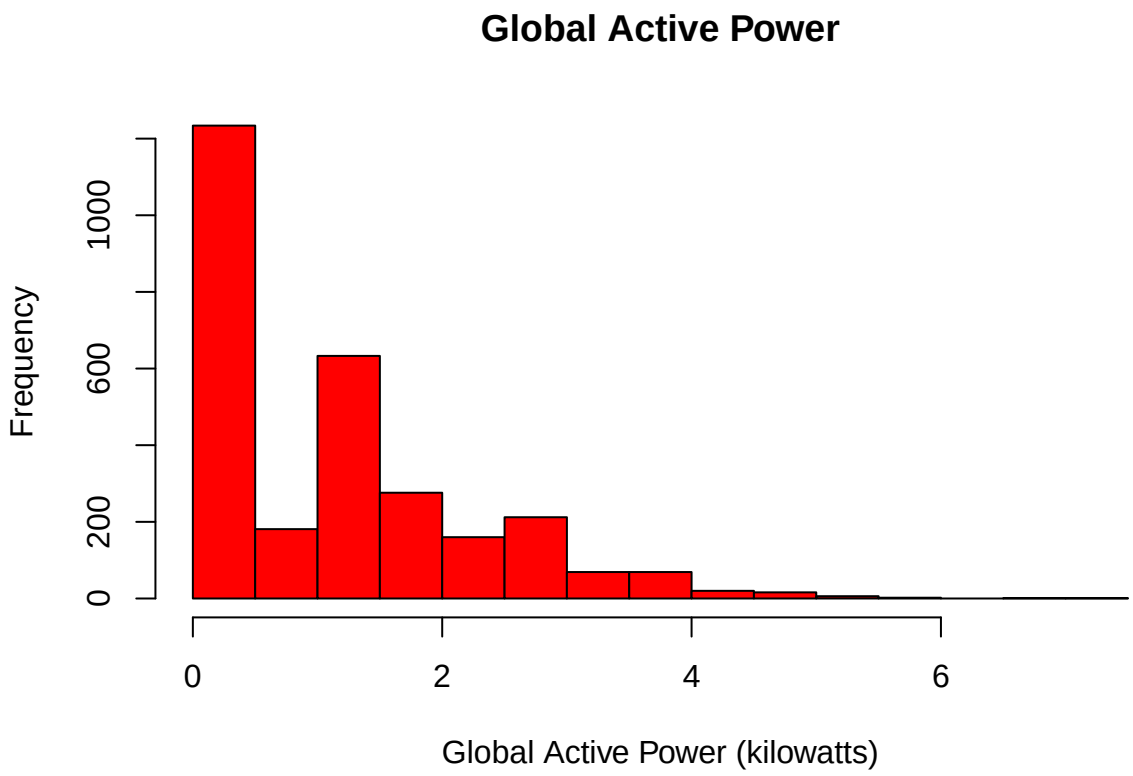
Plotting household consumption data for exploratory analysis

In this work I plot exploratory graphs about a household energy consumption over two days in a per minute basis.

I will repeat all the code in each plot, in case someone wants to plot just one of them, if not, just take the code you need.

First I plot the global active power to understand how much power does it consume ussually.

```
household_consumption <- read.table("household_power_consumption.txt", sep = ";", header = TRUE, colCla
# We change the name of the non-descriptive variables
names(household_consumption)[7:9] <- c("kitchen", "laundryRoom", "waterAndAir")

# Select our important dates
ourDates1 <- household_consumption$Date == "1/2/2007"
ourDates2 <- household_consumption$Date == "2/2/2007"
ourDates <- c(ourDates1 | ourDates2)
household_consumption <- household_consumption[ourDates, ]
# Here we plot
hist(as.numeric(household_consumption$Global_active_power), col = "red", main = "Global Active Power", 
```



Then I plot the kilowatts consumed over the two days.

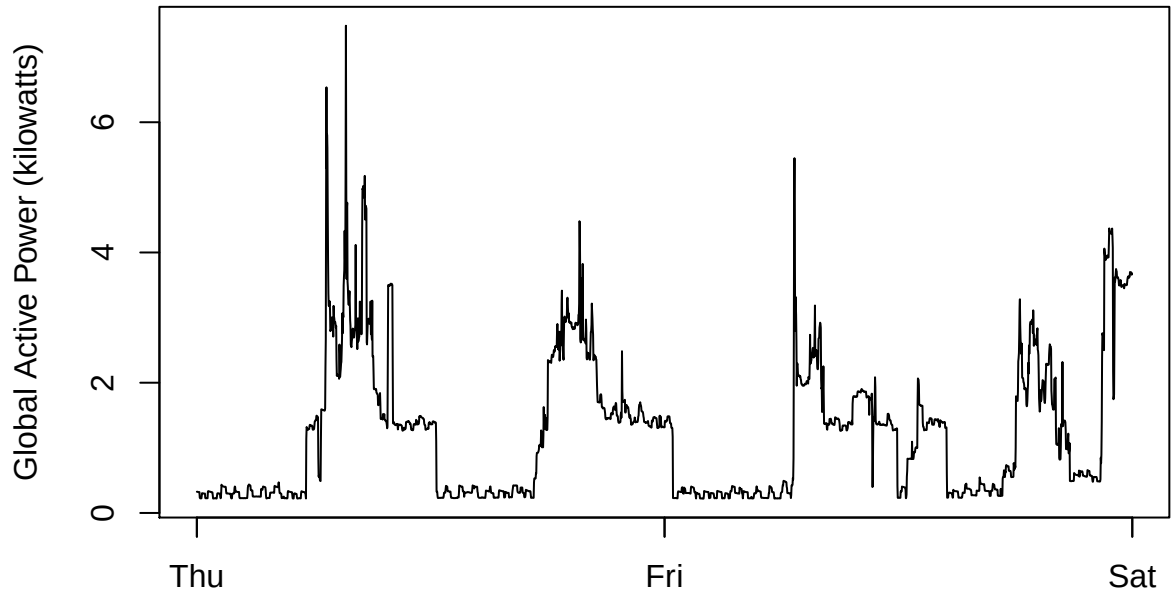
```
household_consumption <- read.table("household_power_consumption.txt", sep = ";", header = TRUE, colCla
# We change the name of the non-descriptive variables
```

```r
names(household_consumption)[7:9] <- c("kitchen", "laundryRoom", "waterAndAir")

# Select our important dates
ourDates1 <- household_consumption$Date == "1/2/2007"
ourDates2 <- household_consumption$Date == "2/2/2007"
ourDates <- c(ourDates1 | ourDates2)
household_consumption <- household_consumption[ourDates, ]
# We join date and time and set them to the time column
library(lubridate)
```

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

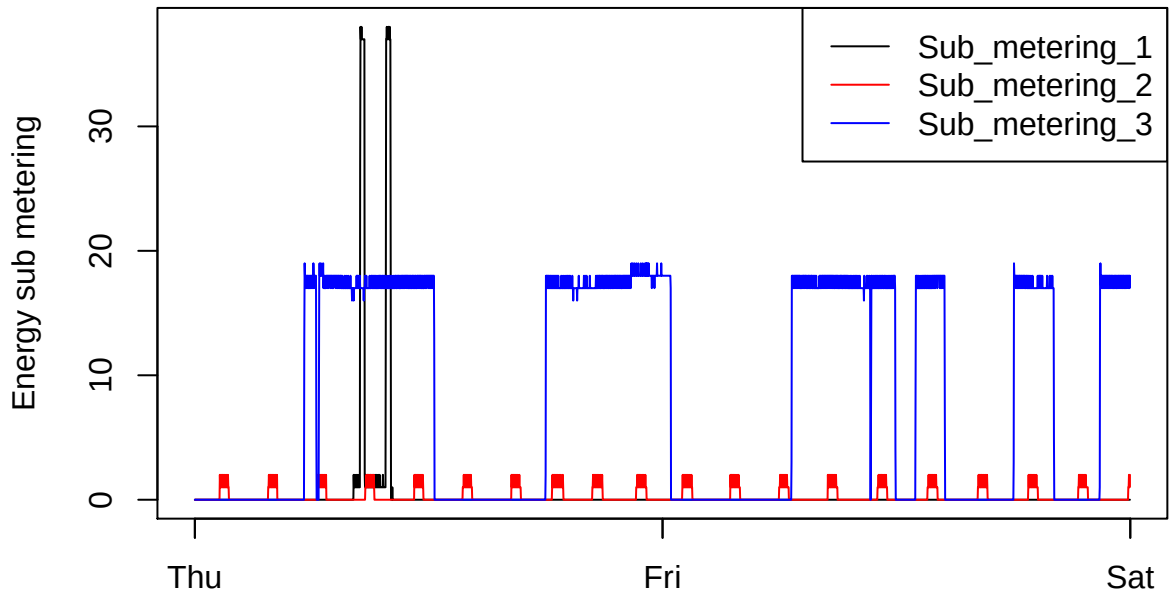
```
## The following objects are masked from 'package:base':
##
##     date, intersect, setdiff, union
```

```r
newTime <- paste(household_consumption$Date, household_consumption$Time)
newTime <- dmy_hms(newTime,tz=Sys.timezone())
household_consumption$Time <- newTime
# We plot
plot(household_consumption$Time, household_consumption$Global_active_power, xlab = "", ylab = "Global A
lines(household_consumption$Time, household_consumption$Global_active_power)
```



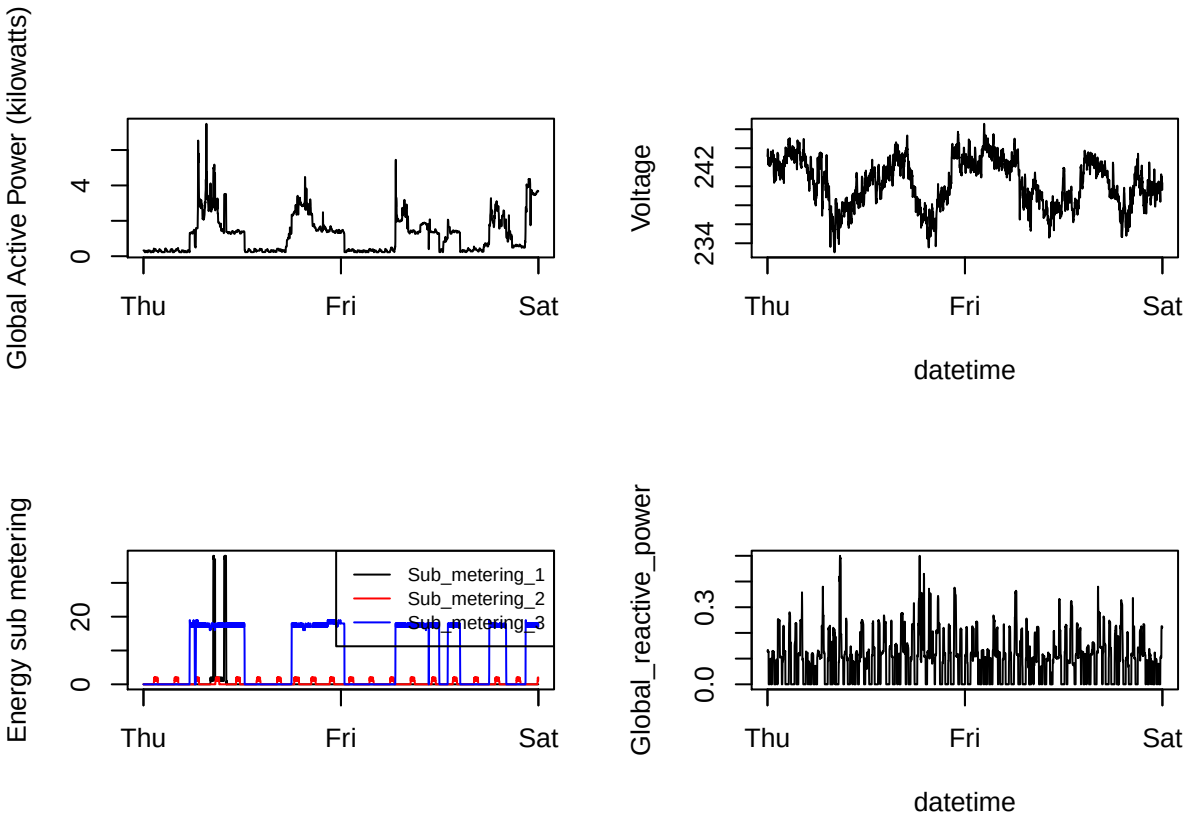
After, we plot some energy sub-meterings, the first corresponds to the consumption just by the kitchen, the second in the laundry room, and the third by the water heater and air conditioner.

```r
household_consumption <- read.table("household_power_consumption.txt", sep = ";", header = TRUE, colCla
# We change the name of the non-descriptive variables
names(household_consumption)[7:9] <- c("kitchen", "laundryRoom", "waterAndAir")

# Select our important dates
ourDates1 <- household_consumption$Date == "1/2/2007"
ourDates2 <- household_consumption$Date == "2/2/2007"
ourDates <- c(ourDates1 | ourDates2)
household_consumption <- household_consumption[ourDates, ]

# Plot 2
# We join date and time and set them to the time column
library(lubridate)
newTime <- paste(household_consumption$Date, household_consumption$Time)
newTime <- dmy_hms(newTime,tz=Sys.timezone())
household_consumption$Time <- newTime
# We plot
plot(household_consumption$Time, household_consumption$kitchen, xlab = "", ylab = "Energy sub metering"
lines(household_consumption$Time, household_consumption$kitchen)
points(household_consumption$laundryRoom)
lines(household_consumption$Time, household_consumption$laundryRoom, col = "red")
points(household_consumption$waterAndAir)
lines(household_consumption$Time, household_consumption$waterAndAir, col = "blue")
legend("topright", legend = c("Sub_metering_1", "Sub_metering_2", "Sub_metering_3"), col = c("black", "
```



Finally, we add some more plots in just one image to have a better picture of it.

```r
household_consumption <- read.table("household_power_consumption.txt", sep = ";", header = TRUE, colCla
# We change the name of the non-descriptive variables
names(household_consumption)[7:9] <- c("kitchen", "laundryRoom", "waterAndAir")

# Select our important dates
ourDates1 <- household_consumption$Date == "1/2/2007"
ourDates2 <- household_consumption$Date == "2/2/2007"
ourDates <- c(ourDates1 | ourDates2)
household_consumption <- household_consumption[ourDates, ]

# Plot 2
# We join date and time and set them to the time column
library(lubridate)
newTime <- paste(household_consumption$Date, household_consumption$Time)
newTime <- dmy_hms(newTime,tz=Sys.timezone())
household_consumption$Time <- newTime

# We plot
par(mfrow = c(2,2))

plot(household_consumption$Time, household_consumption$Global_active_power, xlab = "", ylab = "Global A
lines(household_consumption$Time, household_consumption$Global_active_power)

plot(household_consumption$Time, household_consumption$Voltage, xlab = "datetime", ylab = "Voltage", ty
lines(household_consumption$Time, household_consumption$Voltage)

plot(household_consumption$Time, household_consumption$kitchen, xlab = "", ylab = "Energy sub metering"
lines(household_consumption$Time, household_consumption$kitchen)
points(household_consumption$laundryRoom)
lines(household_consumption$Time, household_consumption$laundryRoom, col = "red")
points(household_consumption$waterAndAir)
lines(household_consumption$Time, household_consumption$waterAndAir, col = "blue")
legend("topright", legend = c("Sub_metering_1", "Sub_metering_2", "Sub_metering_3"), col = c("black", "

plot(household_consumption$Time, household_consumption$Global_reactive_power, xlab = "datetime", ylab =
lines(household_consumption$Time, household_consumption$Global_reactive_power)
```


Global Active Power (kilowatts)
0
4
Thu
Fri
Sat
Voltage
234
242
Thu
Fri
Sat
datetime
Energy sub metering
0
20
Sub_metering_1
Sub_metering_2
Sub_metering_3
Thu
Fri
Sat
Global_reactive_power
0.0
0.3
Thu
Fri
Sat
datetime