My first markdown file

Nikolay Iskrev

September 27, 2015

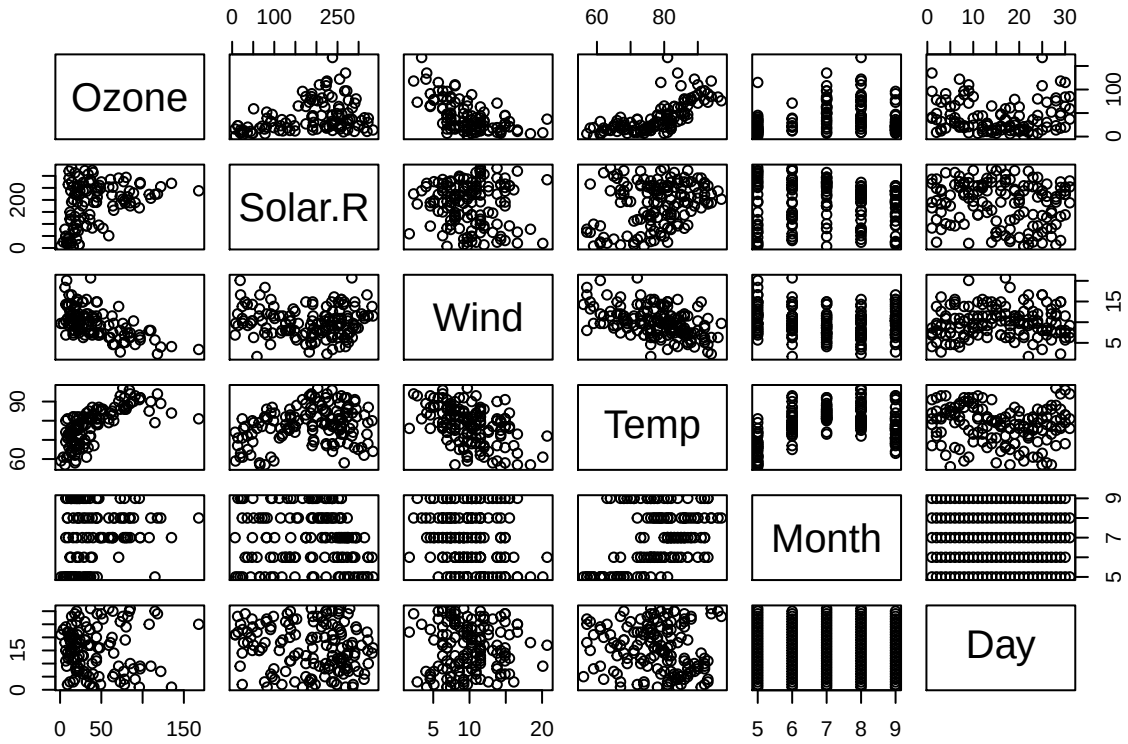
Here, I am going to load some data

```
library(datasets)
data("airquality")
summary(airquality)
```

```
##      Ozone           Solar.R          Wind             Temp      
##  Min.   :  1.00   Min.   :  7.0   Min.   : 1.700   Min.   :56.00  
##  1st Qu.: 18.00   1st Qu.:115.8   1st Qu.: 7.400   1st Qu.:72.00  
##  Median : 31.50   Median :205.0   Median : 9.700   Median :79.00  
##  Mean   : 42.13   Mean   :185.9   Mean   : 9.958   Mean   :77.88  
##  3rd Qu.: 63.25   3rd Qu.:258.8   3rd Qu.:11.500   3rd Qu.:85.00  
##  Max.   :168.00   Max.   :334.0   Max.   :20.700   Max.   :97.00  
##  NA's   :37       NA's   :7                                       
##      Month            Day      
##  Min.   :5.000   Min.   : 1.0  
##  1st Qu.:6.000   1st Qu.: 8.0  
##  Median :7.000   Median :16.0  
##  Mean   :6.993   Mean   :15.8  
##  3rd Qu.:8.000   3rd Qu.:23.0  
##  Max.   :9.000   Max.   :31.0  
##
```

First, make a pairs plot

```
pairs(airquality)
```



Here is a regression model of ozone on wind, solar radiation, and temperature

```
library(stats)
library(xtable)
fit <- lm(Ozone ~ Wind + Solar.R + Temp, data = airquality)
xt<-xtable(summary(fit))
print(xt, type = "html")
```

Estimate

Std. Error

t value

Pr(>|t|)

(Intercept)

-64.3421

23.0547

-2.79

0.0062

Wind

-3.3336

0.6544

-5.09

0.0000

Solar.R

0.0598

0.0232

2.58

0.0112

Temp

1.6521

0.2535

6.52

0.0000

$$\alpha_{t+1} = \beta\alpha_t + \gamma^3$$