Panel de correlación

Performance Analyticis ——————————————————————

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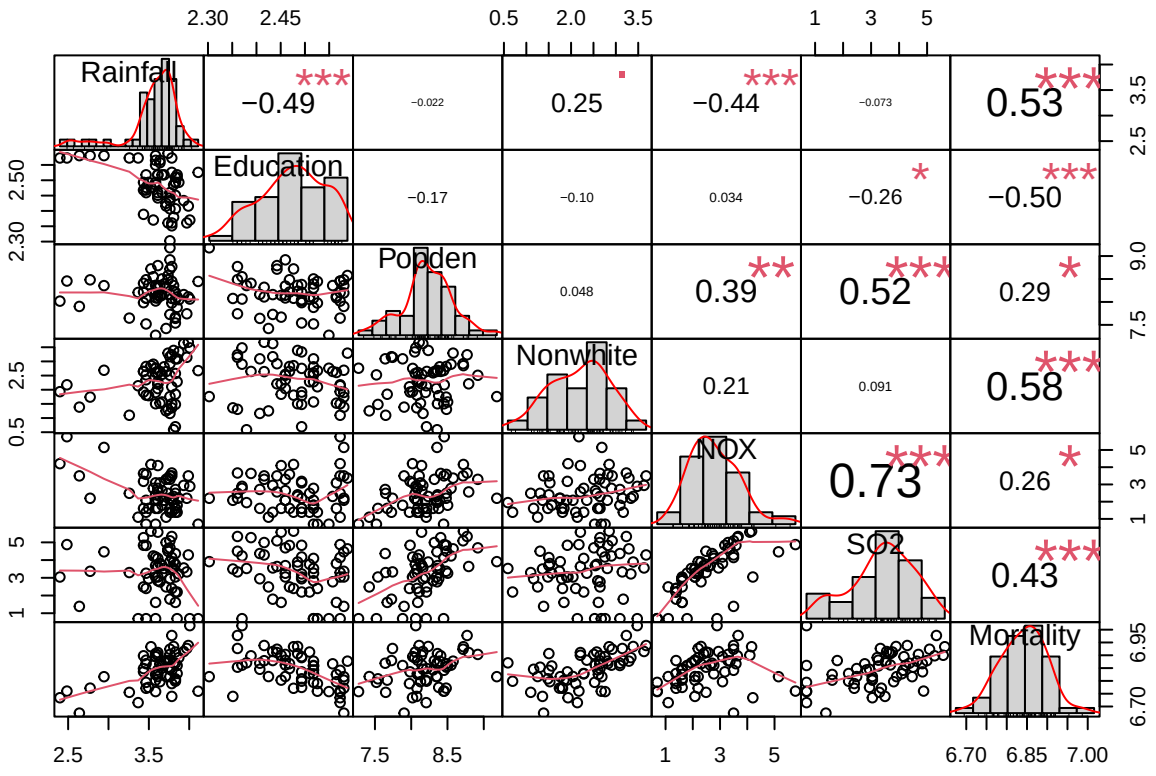
```
library(PerformanceAnalytics)
airpoll<-source("chap2airpoll.dat")$value



chart.Correlation(log(airpoll+1),
                  method="pearson",
                  histogram=TRUE,
                  pch=20)
```

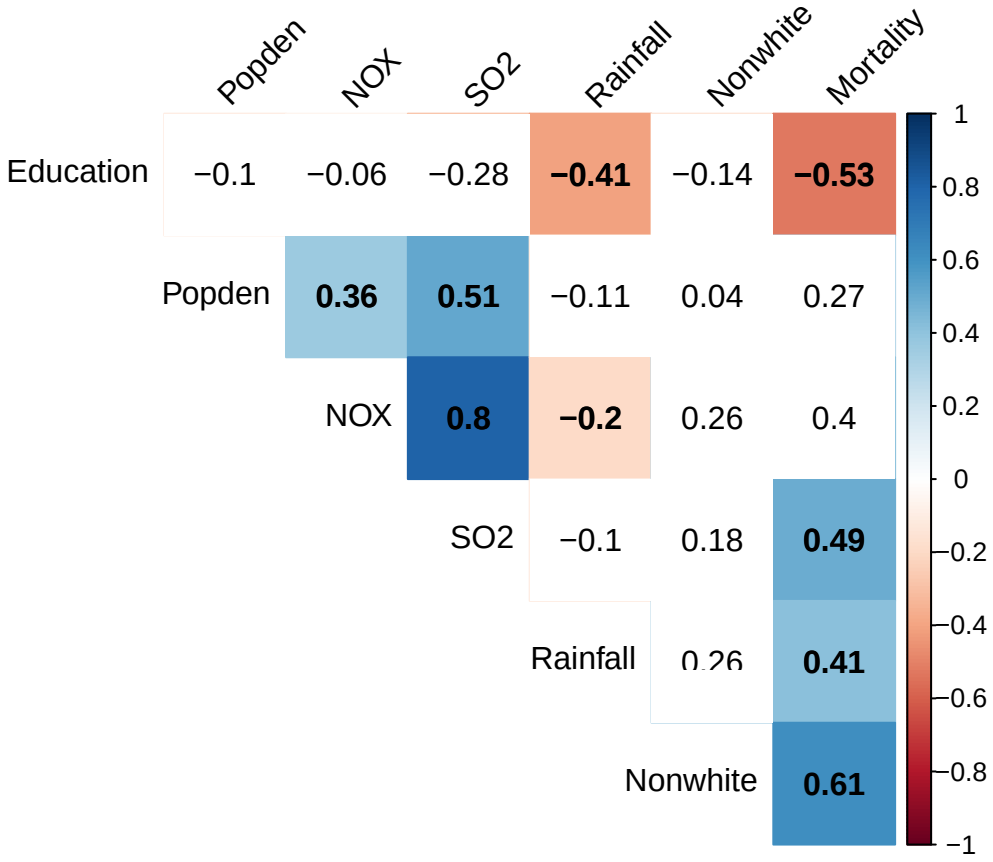


?chart.Correlation

Corrplot

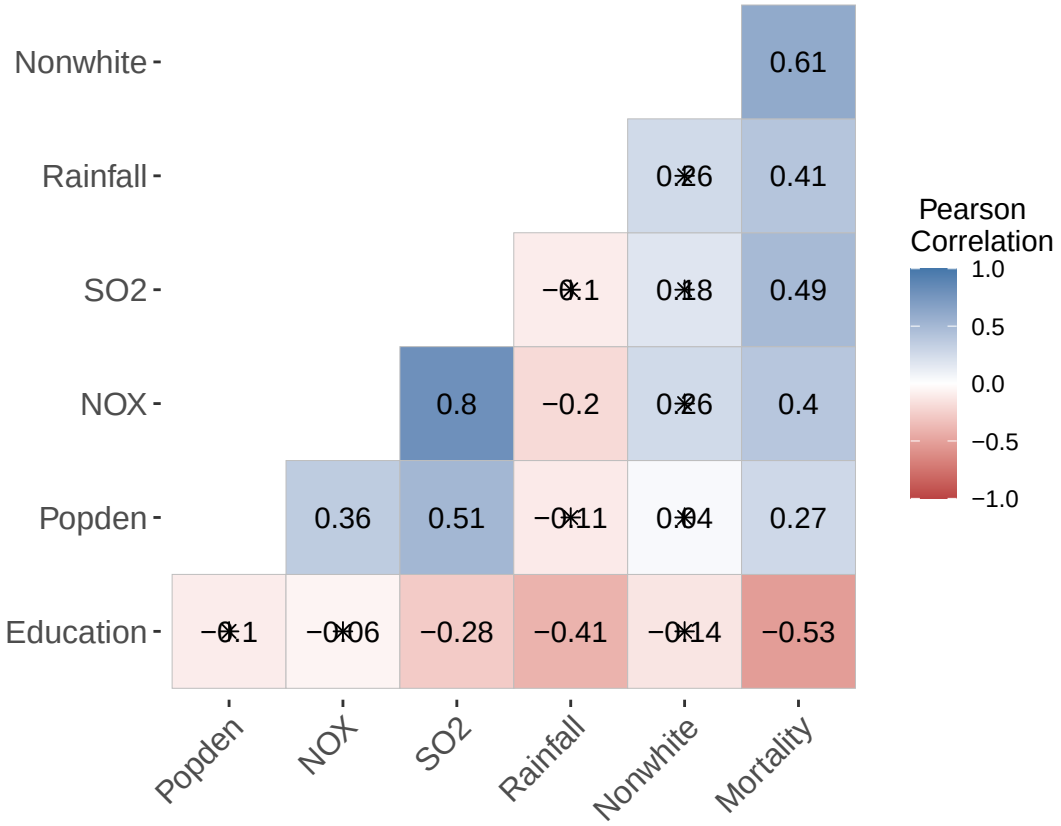
```
library(corrplot)


corr <- round(cor(log(airpoll+1), method = "spearman"),2)

cor.mat <- cor.mtest(log(airpoll+1), conf.level = 0.95)



p1 <- corrplot(corr, method="color",

         type="upper", order="hclust",
```

```
          addCoef.col = "black", # Add coefficient of correlation
          tl.col="black", tl.srt=45, #Text label color and rotation
          # Combine with significance
          p.mat= cor.mat$p, sig.level = 0.01, insig = "blank",
          # hide correlation coefficient on the principal diagonal
          diag=FALSE
)$corrPos
text(p1$x, p1$y, round(p1$corr, 2))
```



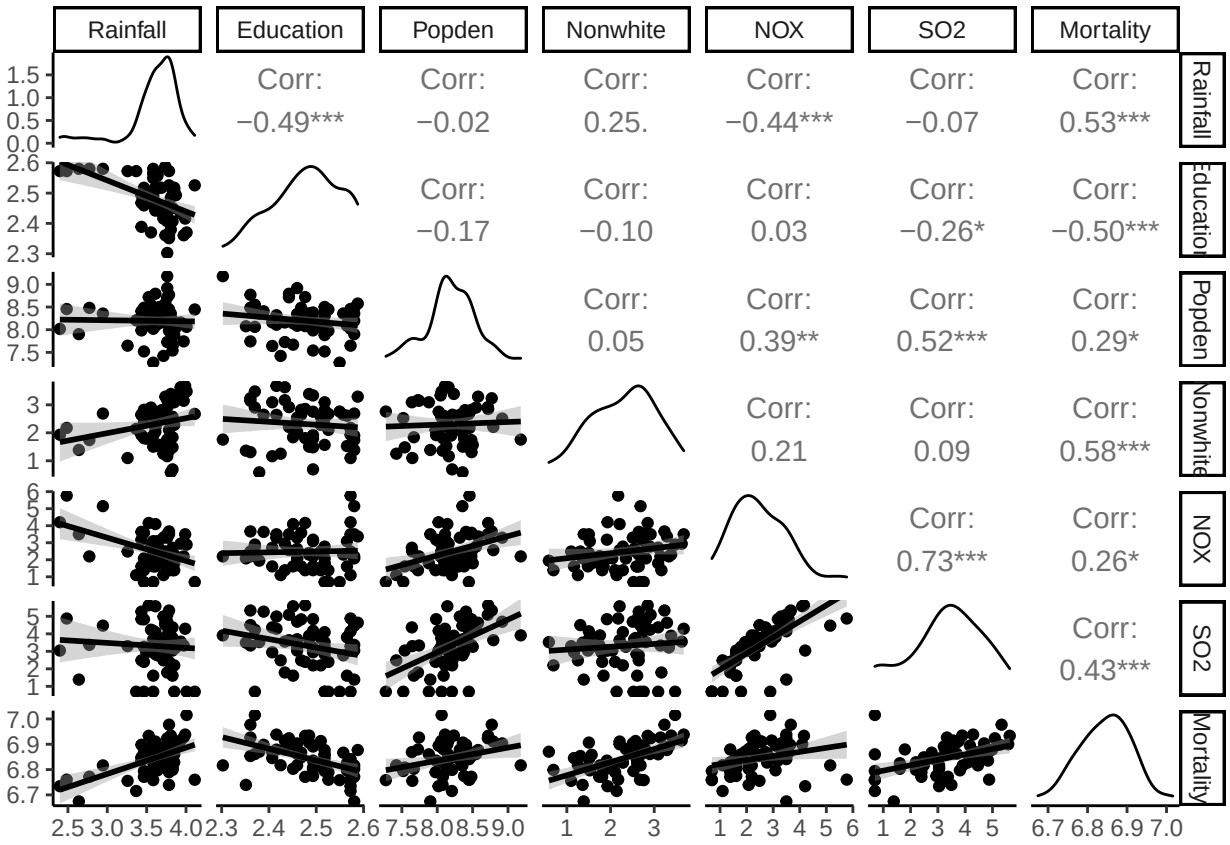
ggcorrplot

```
library(ggcorrplot)


ggcorrplot(corr,
           type = "lower",
           lab = T, show.diag = F,
           legend.title = " Pearson\nCorrelation",
           colors= c("#BB4444", "#FFFFFF", "#4477AA"),
           hc.order = T,
           sig.level = 0.05, insig = "pch", pch=8, pch.cex = 2,
           p.mat= cor.mat$p,
           ggtheme = ggplot2::theme(
            panel.background = element_blank()))
```



GGally

```
library(GGally)


pairs <- ggpairs(log(airpoll+1),
        upper = list(continuous= wrap("cor", method= "pearson", digits=2)),
        lower = list( continuous= "smooth")) +theme_classic()


pairs
```


Rainfall
Education
Popden
Nonwhite
NOX
SO2
Mortality
Corr: −0.49***
Corr: −0.02
Corr: 0.25.
Corr: −0.44***
Corr: −0.07
Corr: 0.53***
Corr: −0.17
Corr: −0.10
Corr: 0.03
Corr: −0.26*
Corr: −0.50***
Corr: 0.05
Corr: 0.39**
Corr: 0.52***
Corr: 0.29*
Corr: 0.21
Corr: 0.09
Corr: 0.58***
Corr: 0.73***
Corr: 0.26*
Corr: 0.43***