

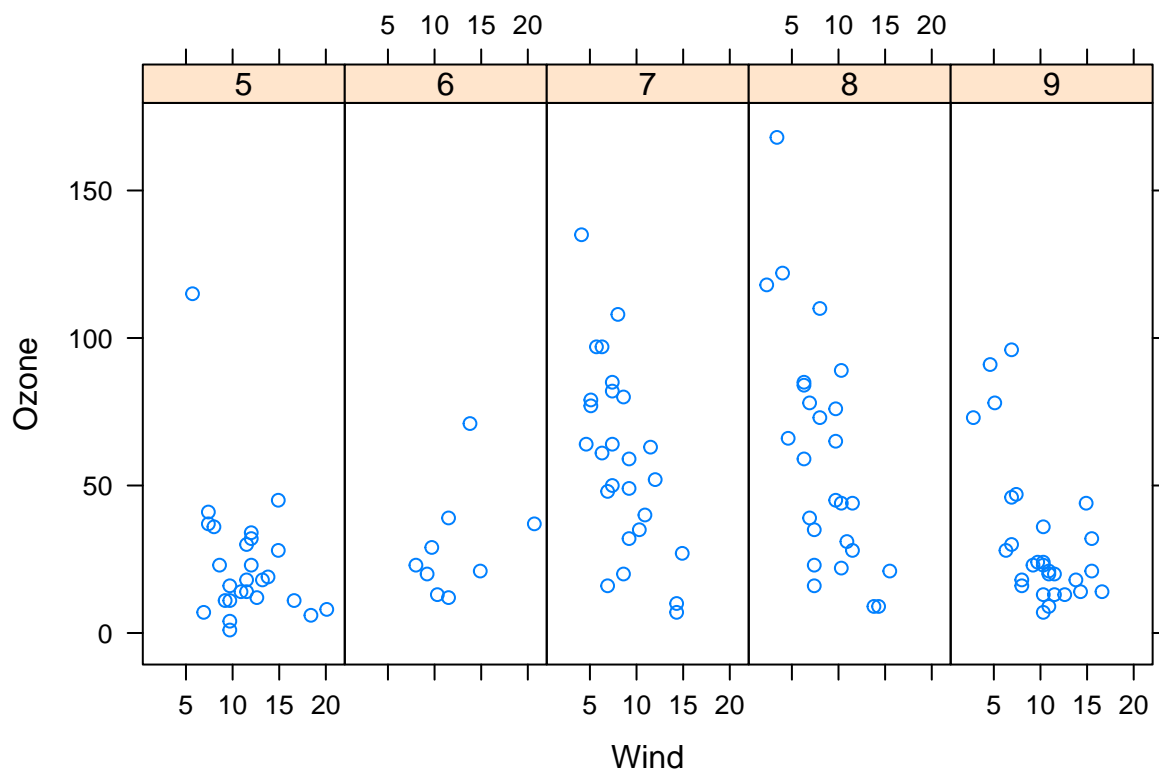
## Lattice plotting system

Lattice package for plotting is very efficient in visualizing data as large number of plots with few lines of code.

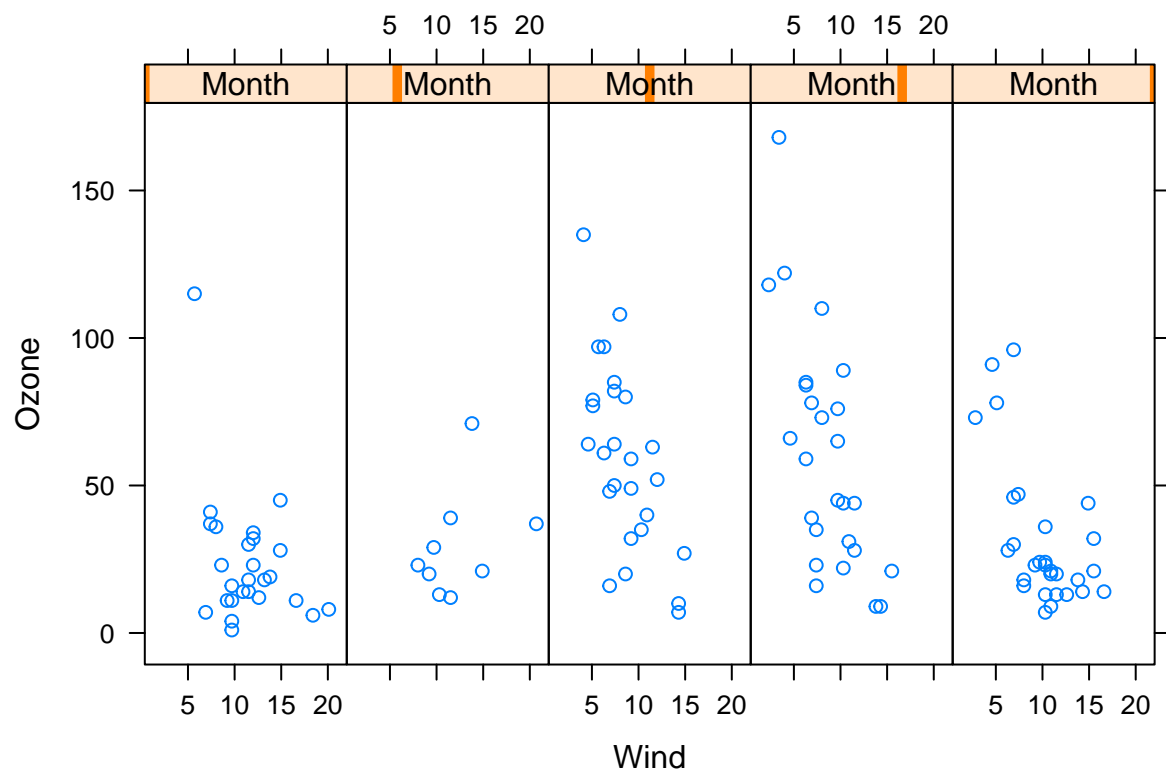
```
library(lattice)
library(datasets)
```

There is a difference in the plots if called with factor in lattice command. The first one which contains the argument `as.factor(Month)` plots the data with months as title for individual plots but without being a factor it misses the individual title.

```
xyplot(Ozone ~ Wind | as.factor(Month), data = airquality, layout = c(5,1))
```



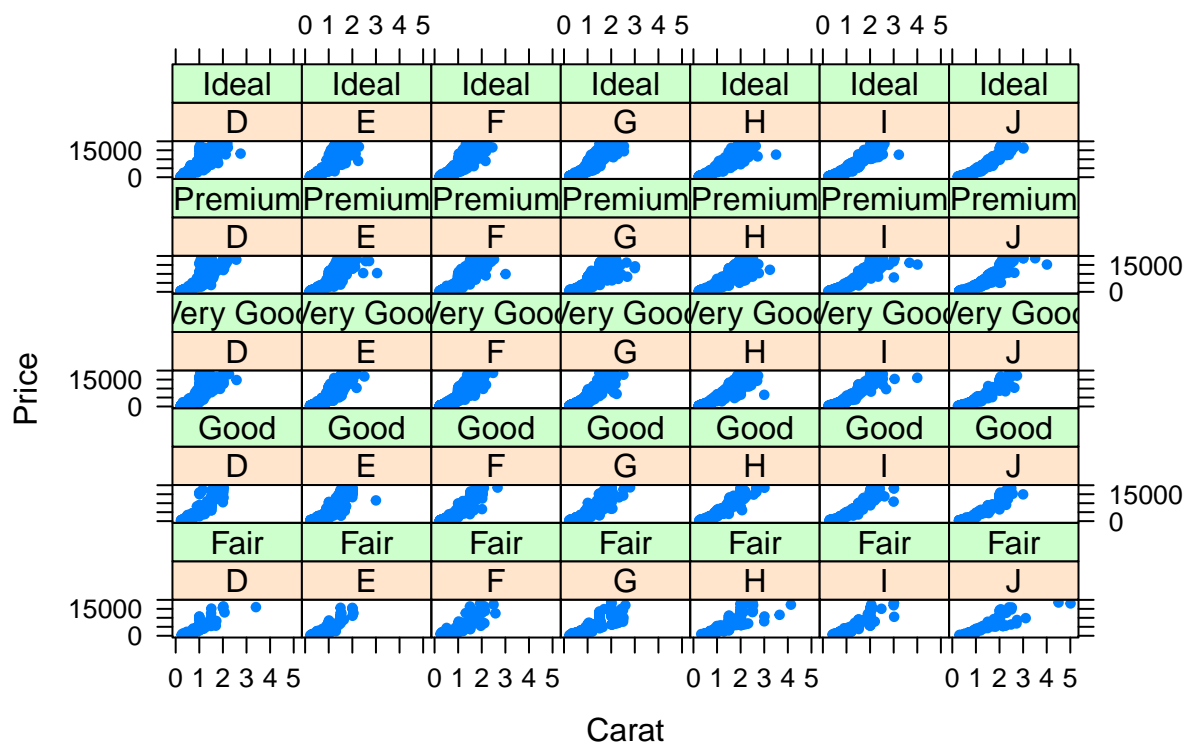
```
xyplot(Ozone ~ Wind | Month, data = airquality, layout = c(5,1))
```



It can be used even for generating plots for 2 conditions, price ~ carat conditioned on color and cut

```
library(ggplot2)
xyplot(price~carat | color*cut, data = diamonds, pch = 20, xlab = "Carat", ylab = "Price", main = "Price")
```

## Price vs carat conditioned on color and cut



*#argument strip = FALSE will remove the condition labels*

Mosaic plot: For plotting contingency tables

```
dat <- data.frame(
  "smoke_no" = c(7, 0),
  "smoke_yes" = c(2, 5),
  row.names = c("Athlete", "Non-athlete"),
  stringsAsFactors = FALSE
)
colnames(dat) <- c("Non-smoker", "Smoker")
mosaicplot(dat,
  main = "Mosaic plot",
  color = TRUE
)
```

## Mosaic plot

