Lattice Graphics Examples

Michael Malick

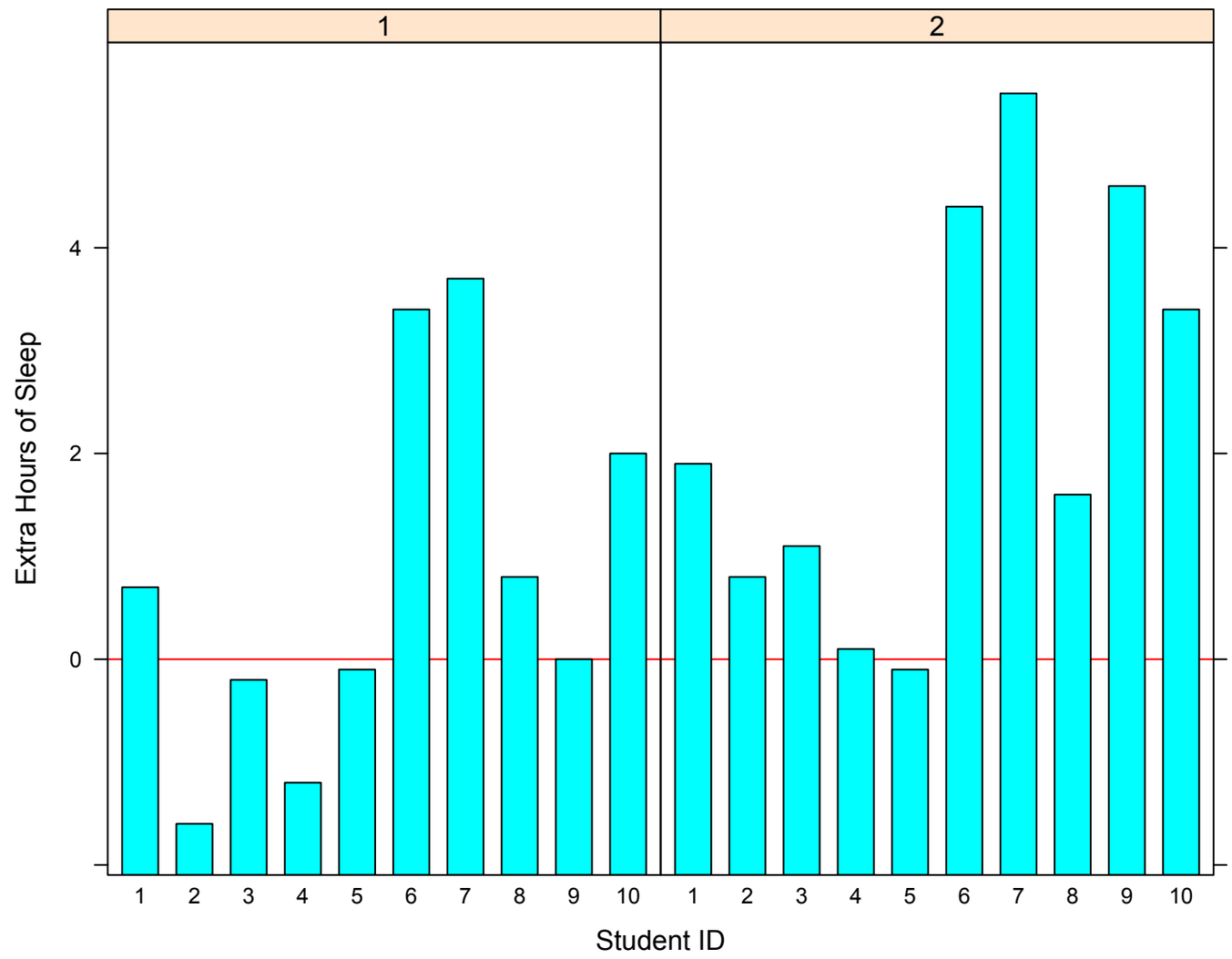
Updated: 4 June 2012

Lattice Graphics Functions

Lattice	Description	Slide
`barchart`	Bargraph	3
`bwplot`	Box and whisker plot	4
`contourplot`	Contour plot	5
`xyplot`	Scatter plot / conditional plot	6 & 7
`dotplot`	Cleveland dot chart	8
`histogram`	Histogram	9
`levelplot`	High-density image plot	10
`splom`	All pairwise plots between variables	11
`wireframe`	3D perspective plot	12
`cloud`	3D plot	13
`qqmath`	Normal QQ plot	14
`qq`	Quantile-Quantile plot	15

barchart()

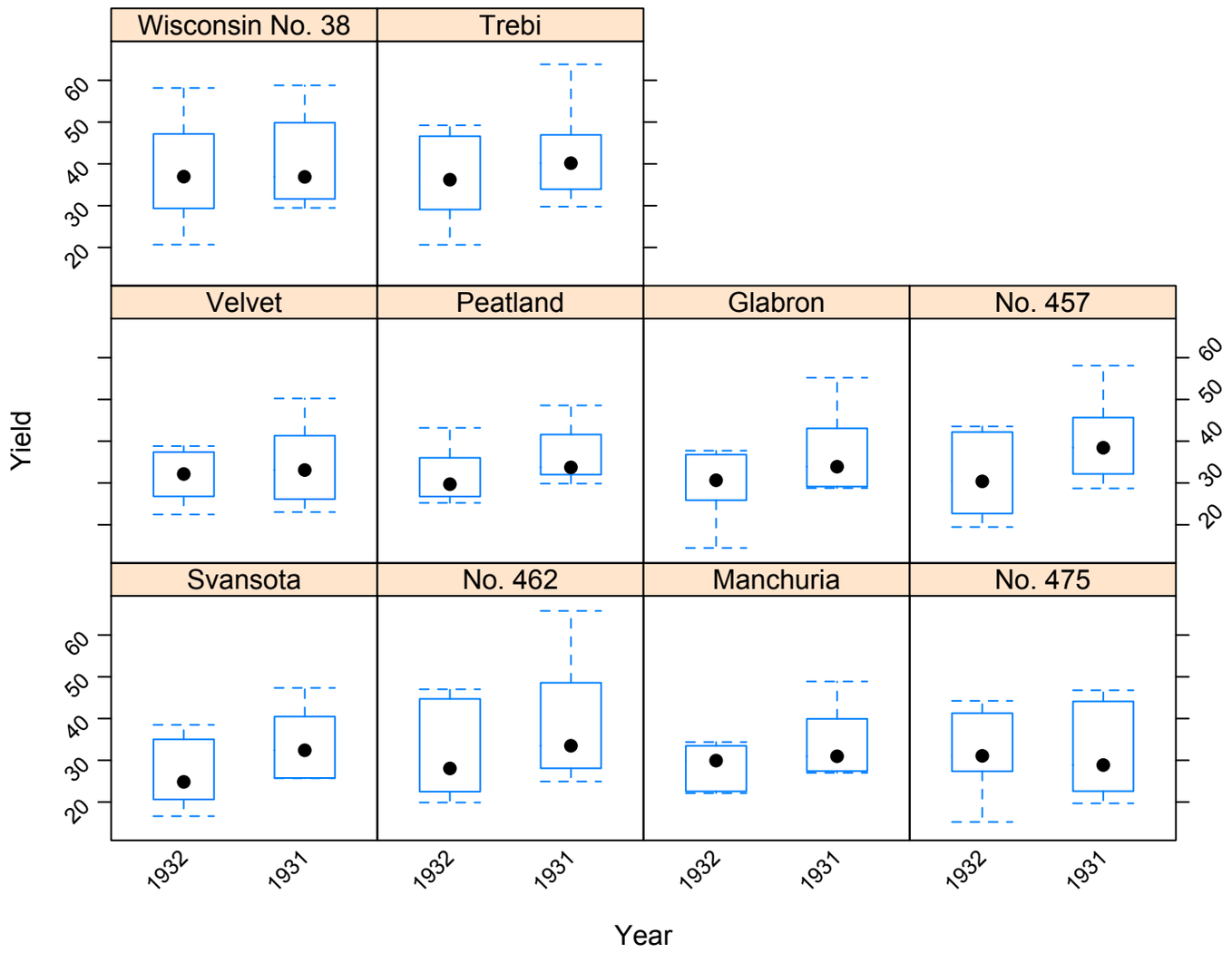

```
barchart(extra ~ ID | group, data = sleep,
        ylab = "Extra Hours of Sleep", xlab = "Student ID",
        panel = function(x, y, ...) {
        panel.abline(h = 0, col = 2)
        panel.barchart(x, y, ...)
        })
```



bwplot()

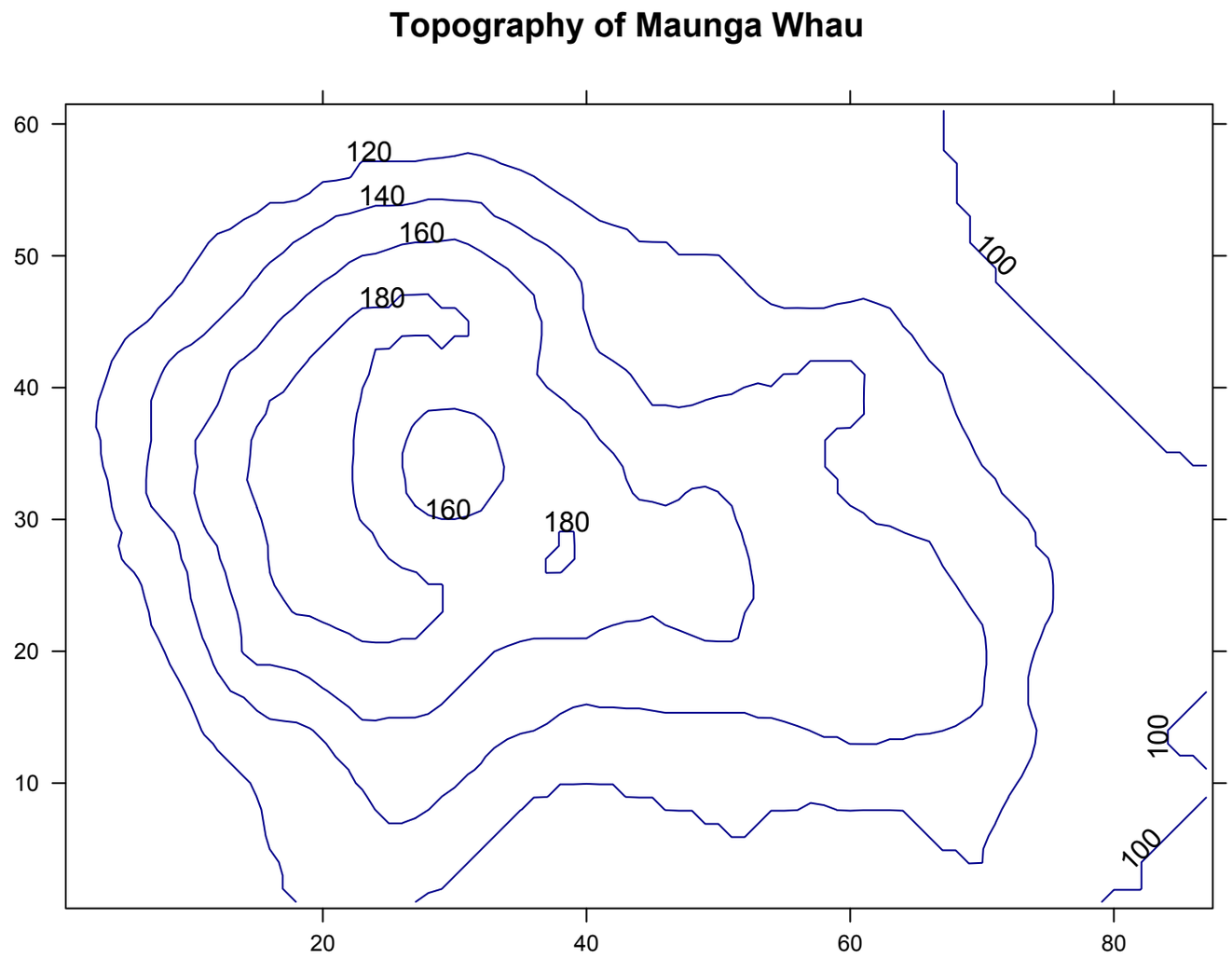
TOP

```
bwplot(yield ~ year | variety, data = barley,
       scales = list(rot = 45), xlab = "Year", ylab = "Yield")
```



contourplot()

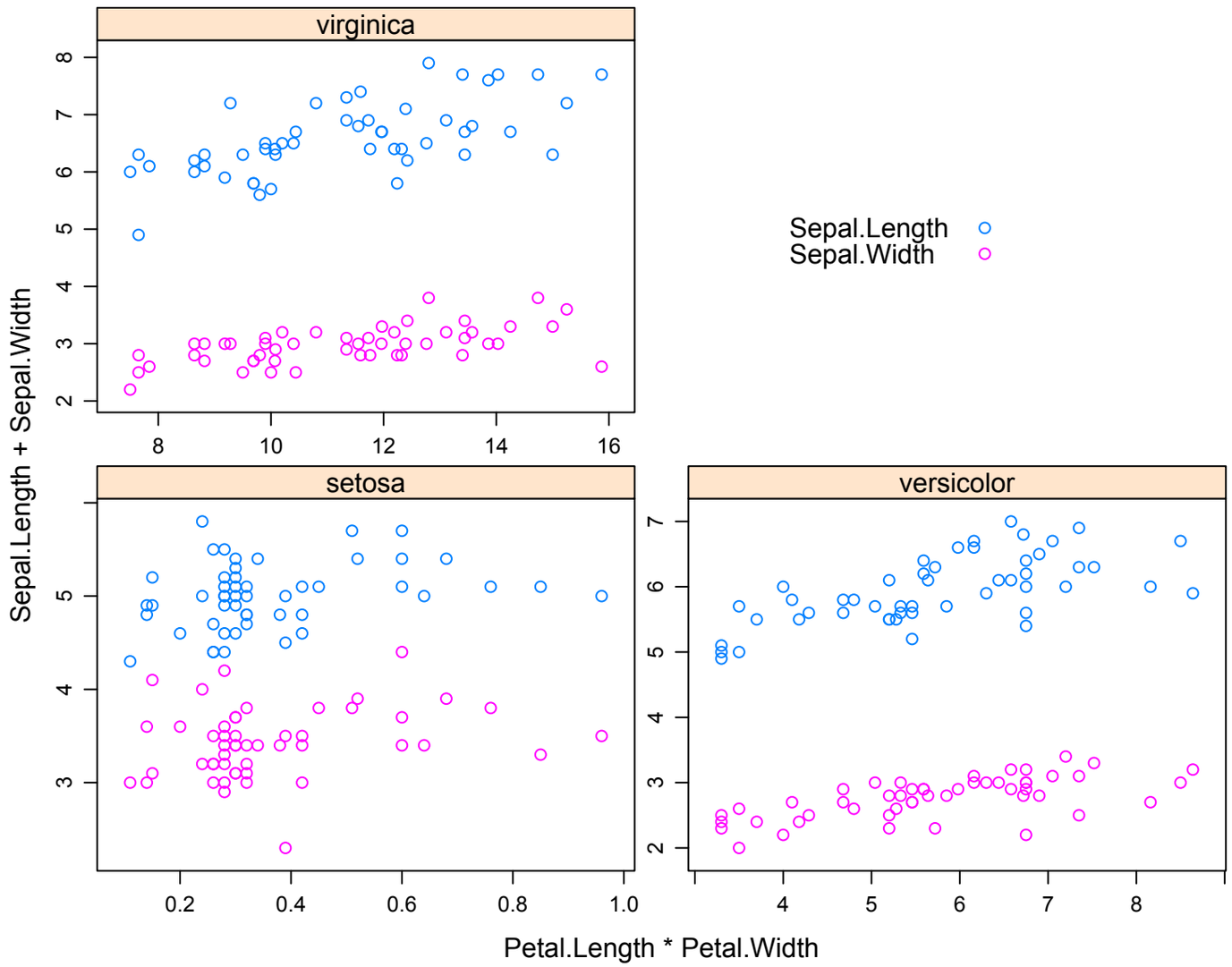

```
contourplot(volcano, col = "darkblue",
      main = "Topography of Maunga Whau", ylab = "", xlab = "")
```



xyplot()

TOP

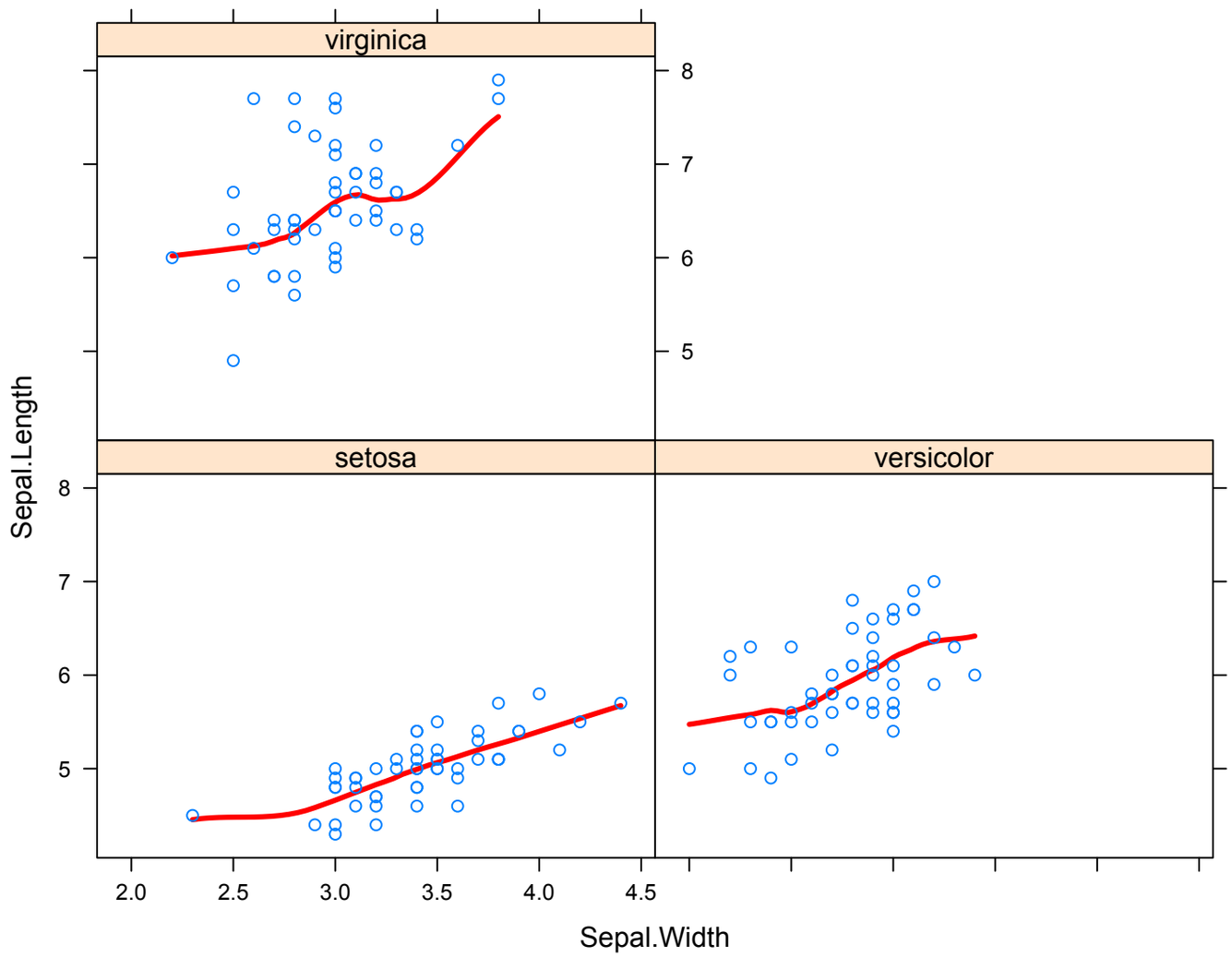
```
xyplot(Sepal.Length + Sepal.Width ~ Petal.Length * Petal.Width |
       Species, data = iris, scales = "free", layout = c(2, 2),
       auto.key = list(x = .6, y = .7, corner = c(0, 0)))
```



xyplot() (panel function)

TOP

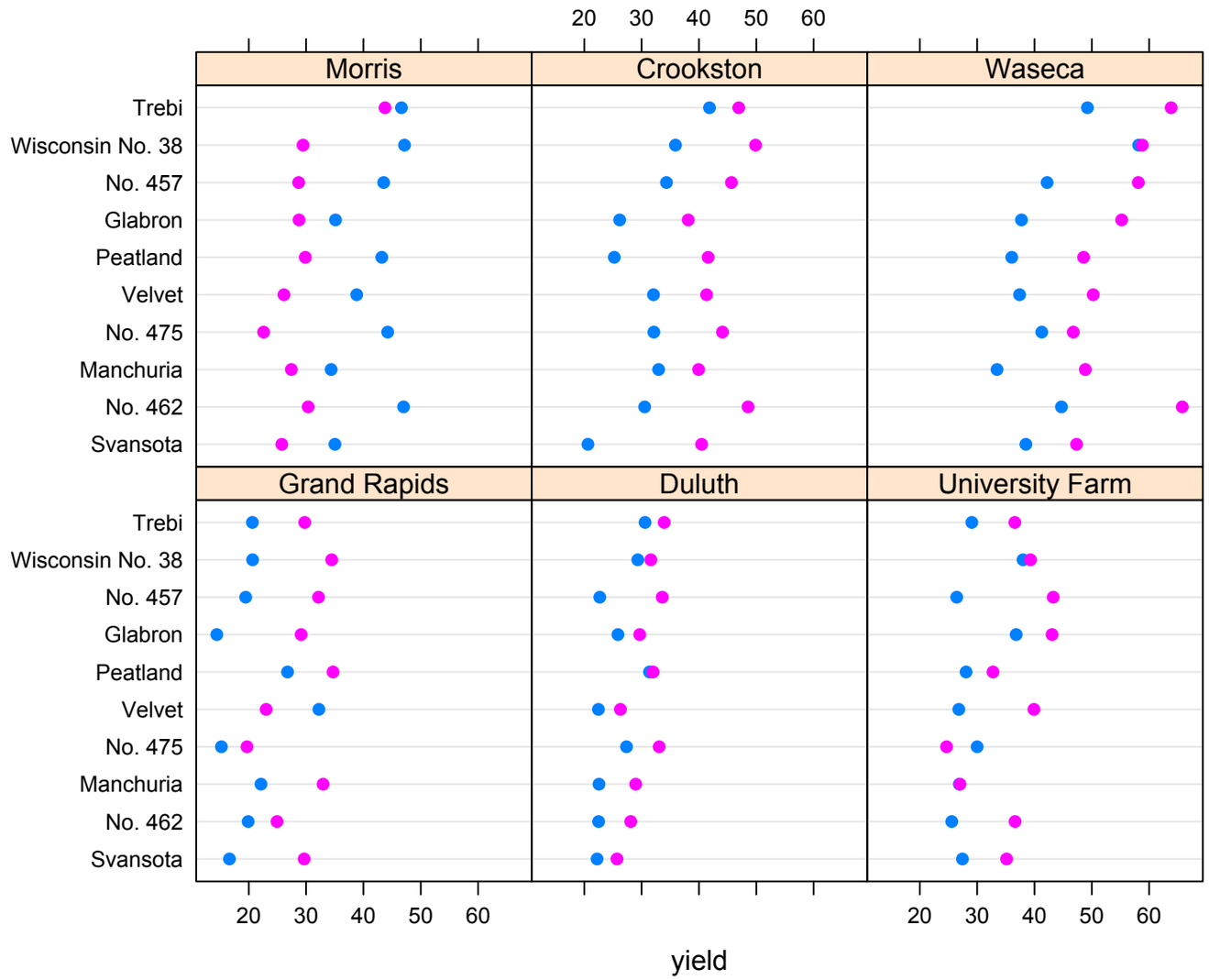
```
xyplot(Sepal.Length ~ Sepal.Width | Species, data = iris,
    panel = function(x, y, ...) {
        panel.loess(x, y, col = 2, lwd = 3)
        panel.xyplot(x, y)
        })
```



dotplot()

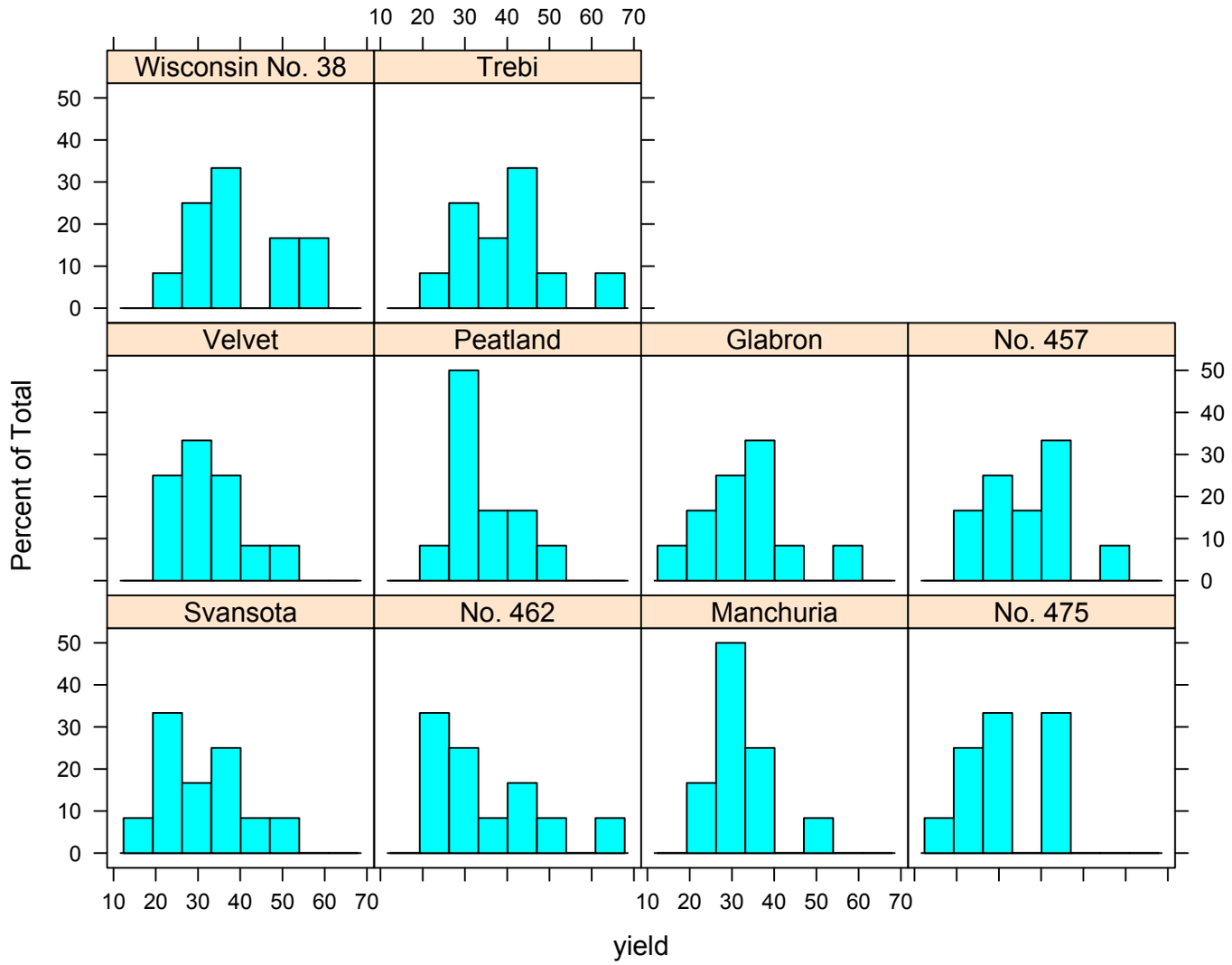
TOP

```
dotplot(variety ~ yield | site, data = barley, groups = year,
      pch = 19)
```



histogram()

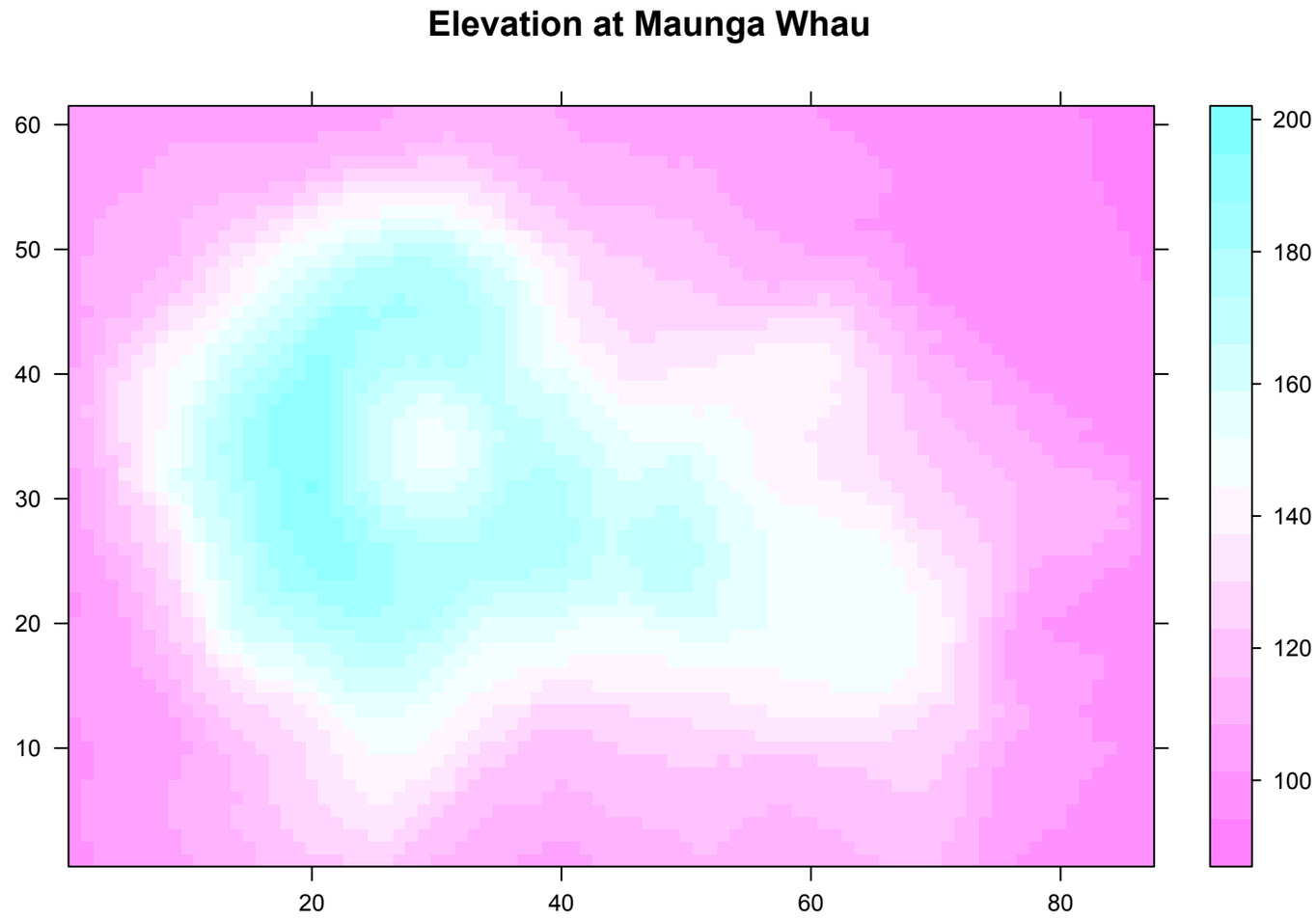

```
histogram(~ yield | variety, data = barley)
```



levelplot()

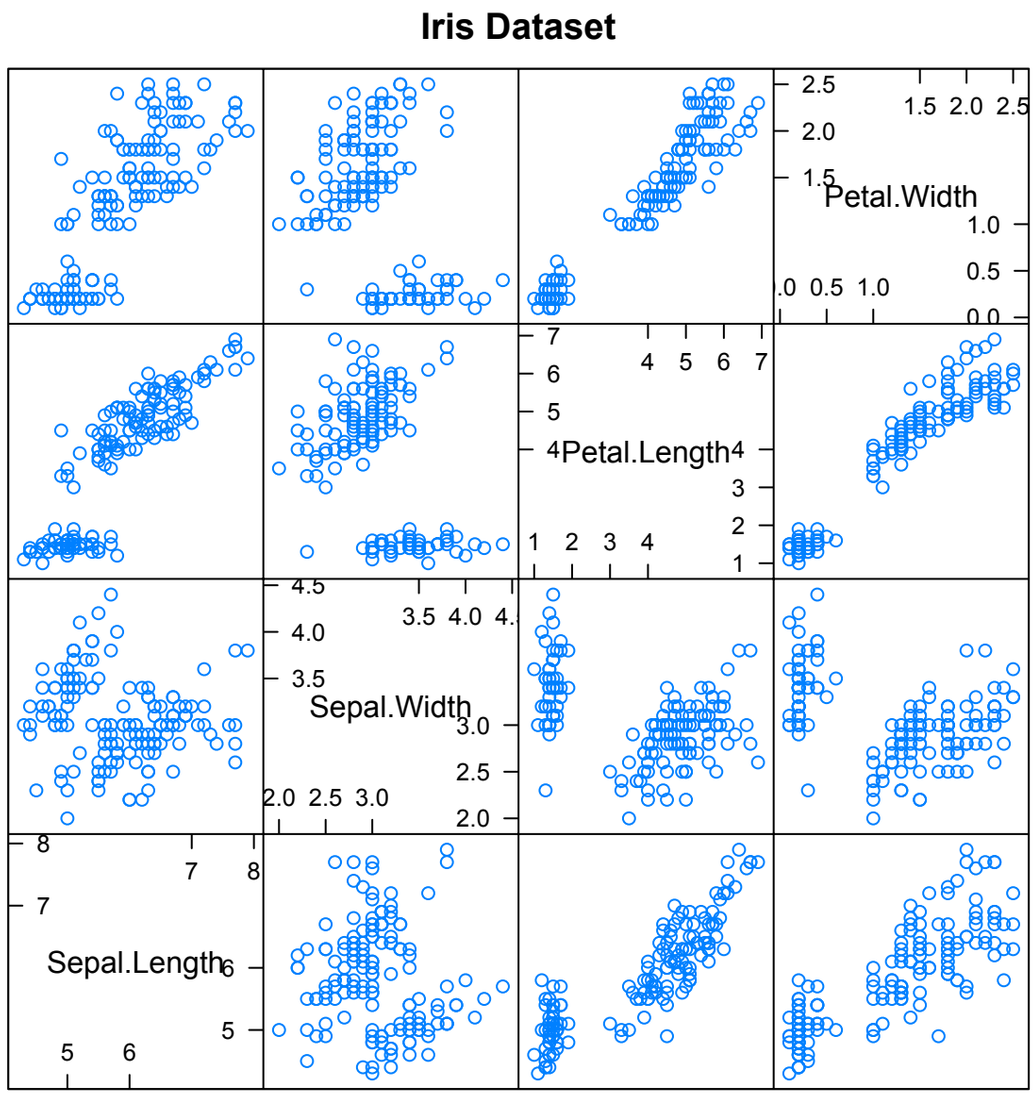
TOP

```
levelplot(volcano, xlab = "", ylab = "",
      main = "Elevation at Maunga Whau")
```



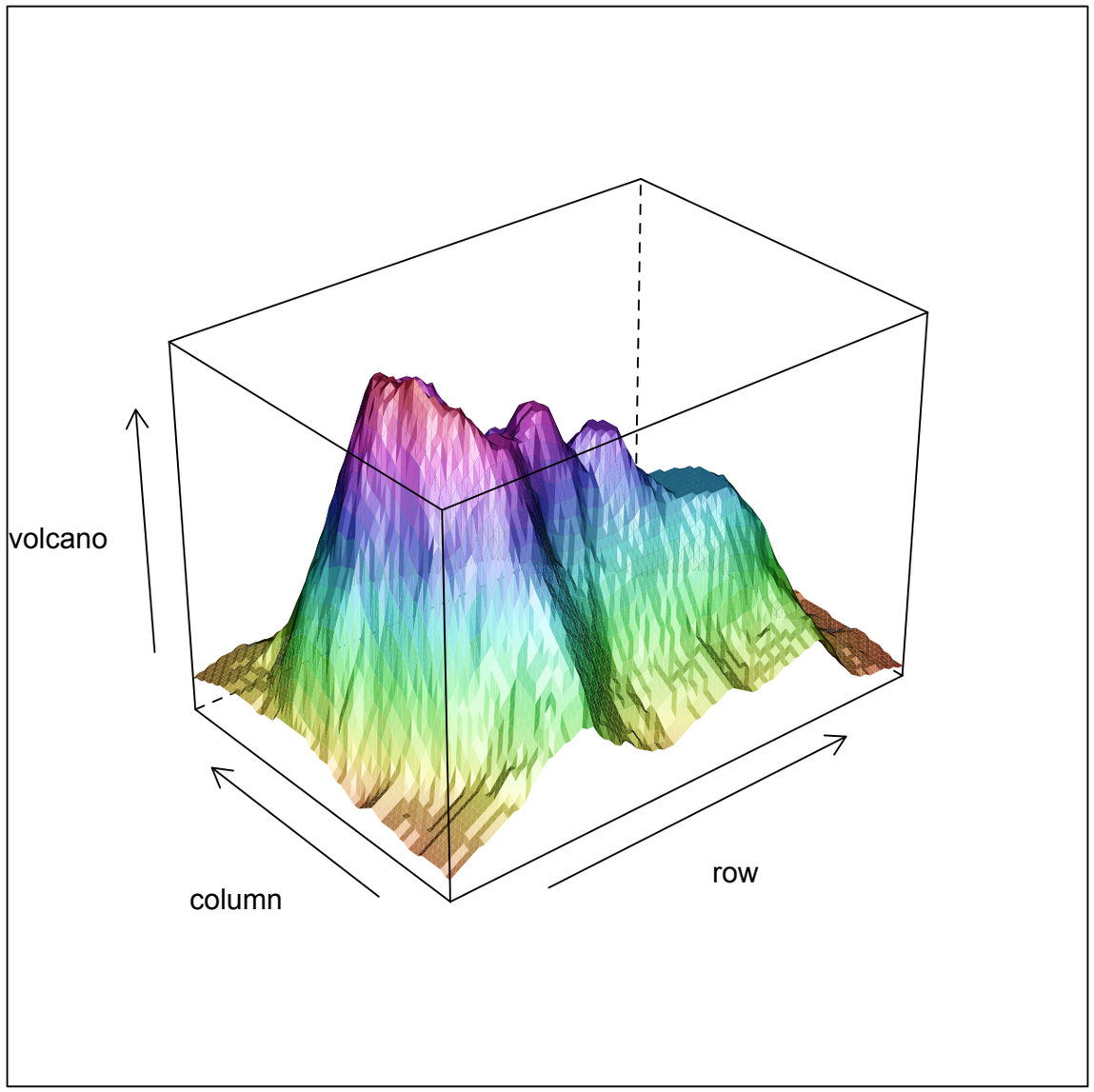
splom()


```
splom(iris[1:4], main = "Iris Dataset", xlab = "")
```



wireframe()

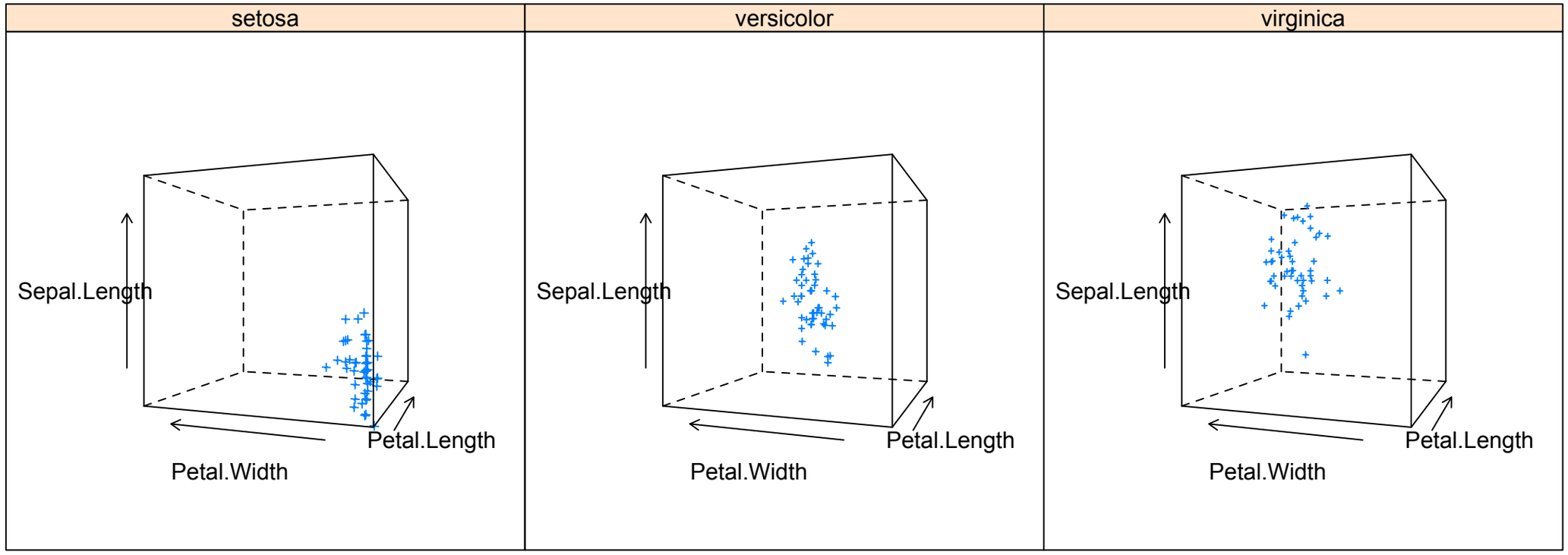

```
wireframe(volcano, shade = TRUE)
```



cloud()

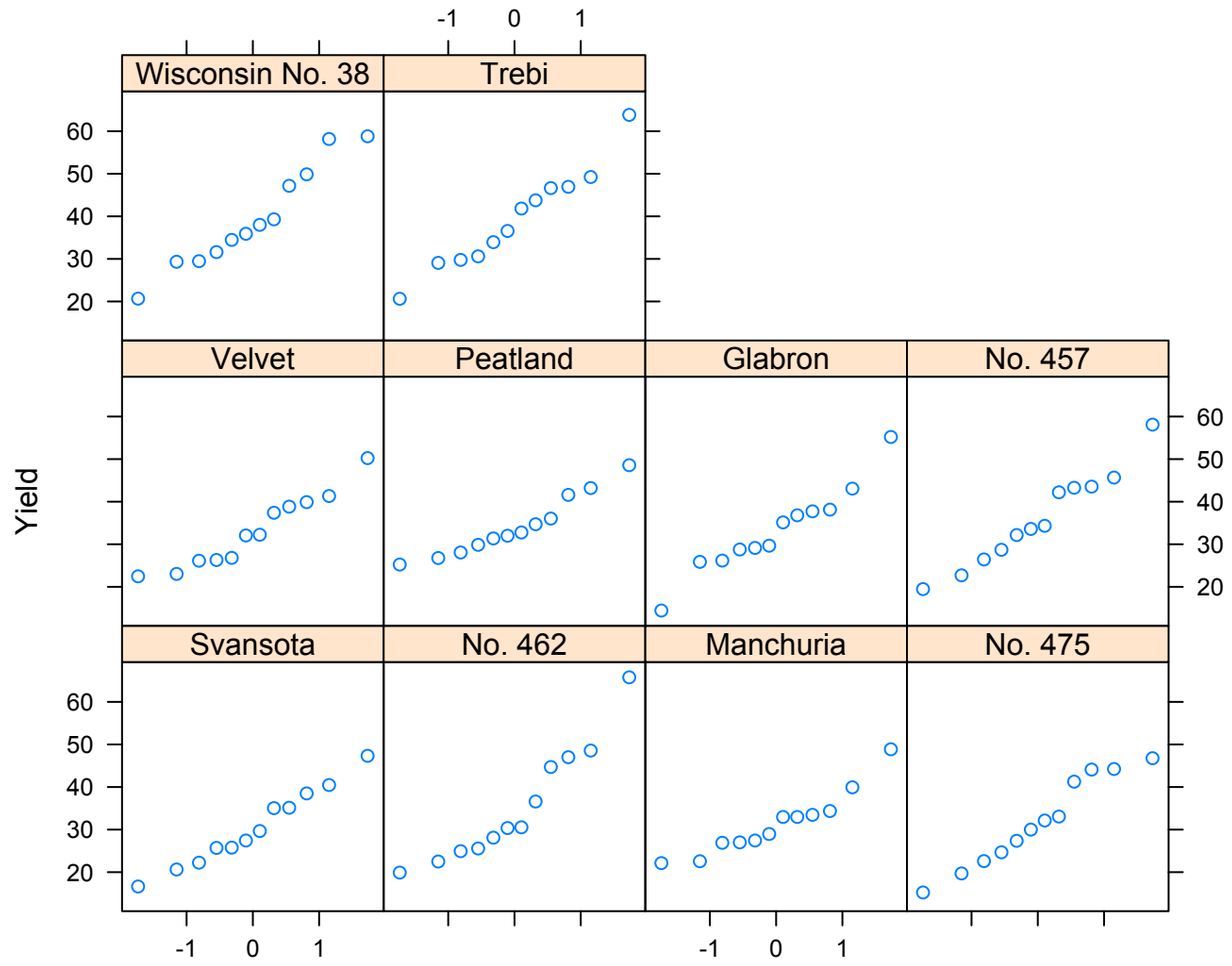
TOP

```
cloud(Sepal.Length ~ Petal.Length * Petal.Width | Species,
      data = iris, layout = c(3, 1),
      screen = list(x = -90, y = 70),
      distance = 0.4, zoom = 0.6)
```



qqmath()


```
qqmath(~ yield | variety, data = barley, ylab = "Yield",
       xlab = "")
```



qq()


```
qq(voice.part ~ height, aspect = 1, data = singer,
      subset = (voice.part == "Bass 2" | voice.part == "Tenor 1"))
```