

Solutions to Selected Exercises
for
Braun and Murdoch's
A First Course in Statistical Programming with R

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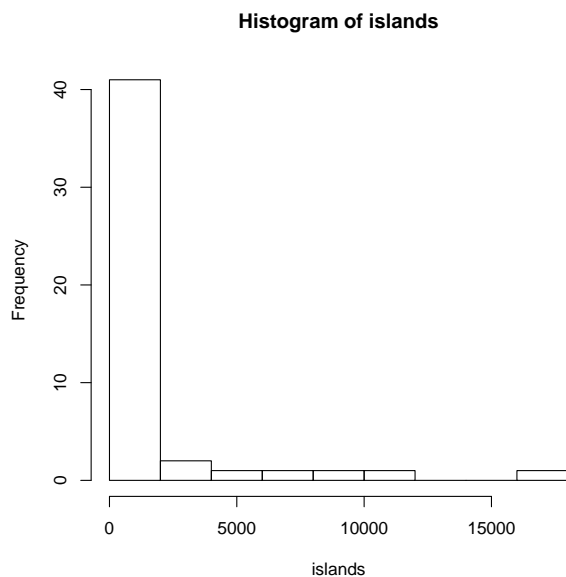
November 1, 2007

Chapter 3

Programming Statistical Graphics

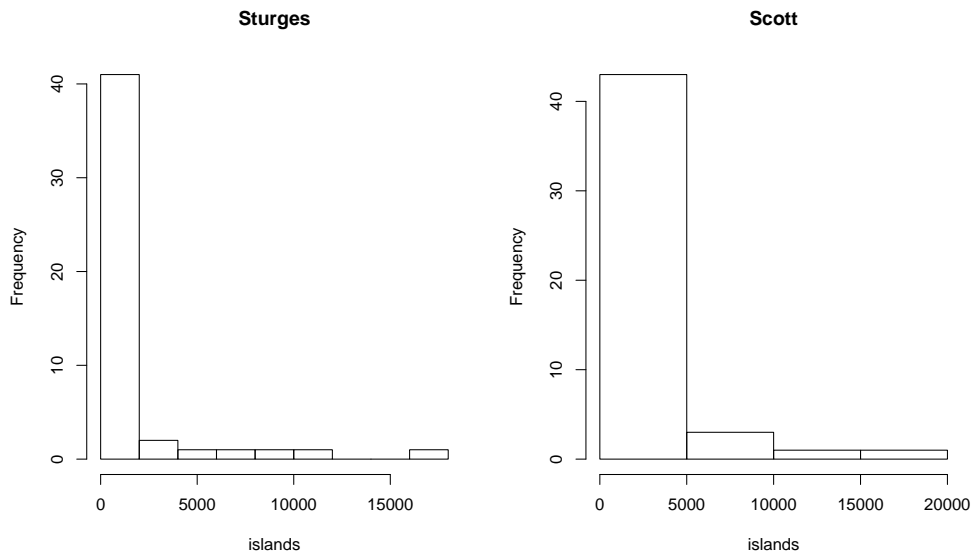
3.1 High level plots

- (a) `> hist(islands)`

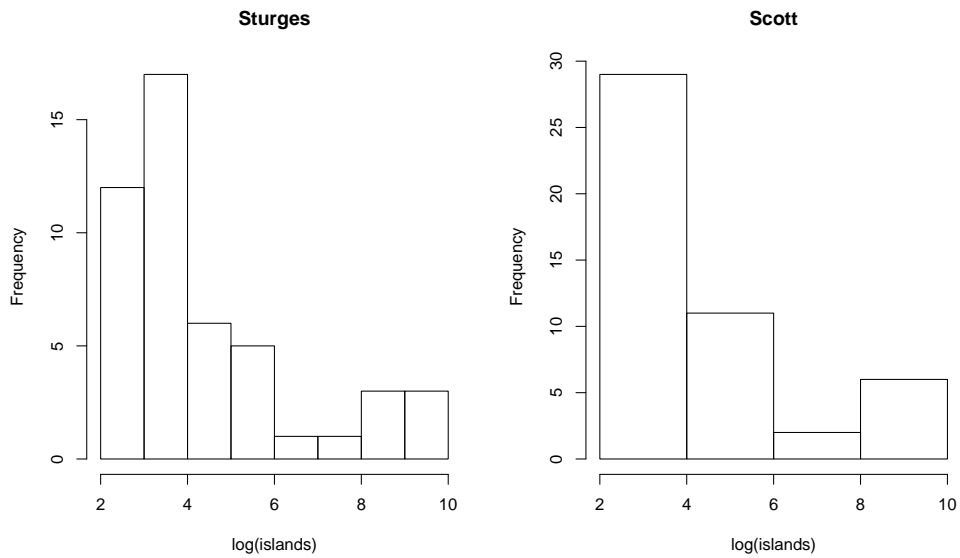


- (c)

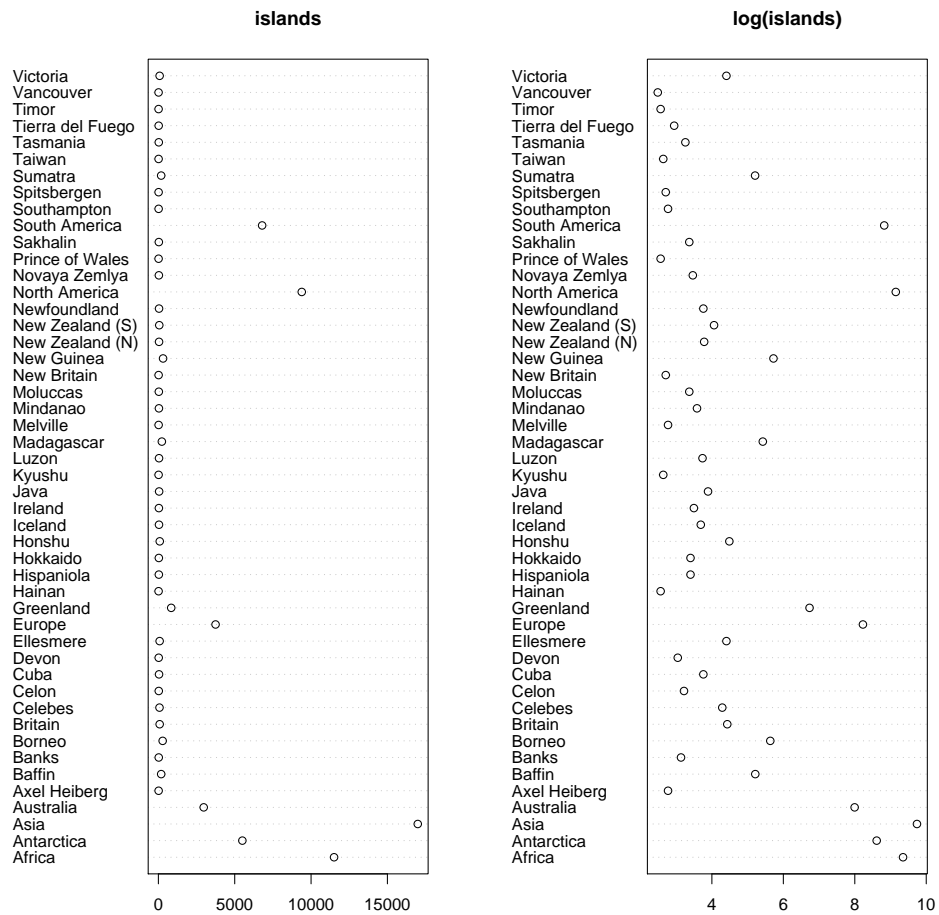
```
> par(mfrow=c(1,2))  
> hist(islands,breaks="Sturges",main="Sturges")  
> hist(islands,breaks="Scott",main="Scott")
```



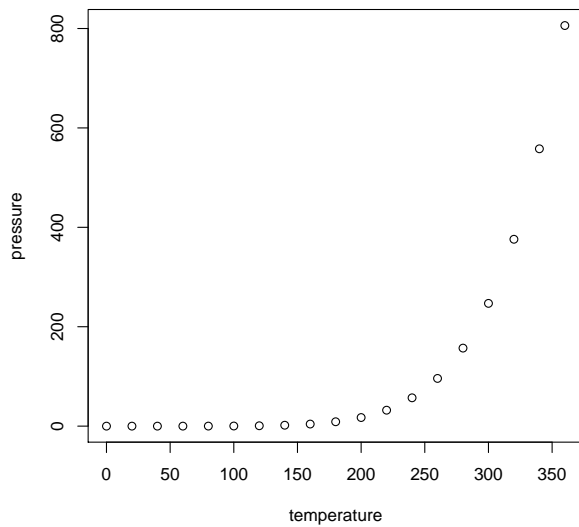
```
> par(mfrow=c(1,2))
> hist(log(islands),breaks="Sturges",main="Sturges")
> hist(log(islands),breaks="Scott",main="Scott")
```



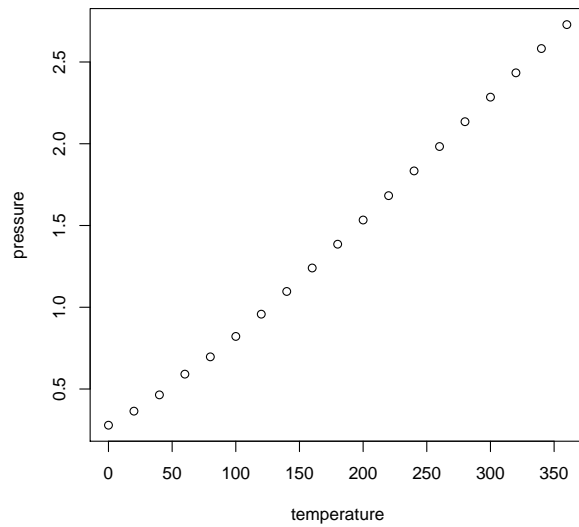
```
(e) > par(mfrow=c(1,2))
> dotchart(islands,main="islands")
> dotchart(log(islands),main="log(islands)")
```



3. (a) `> plot(pressure$temperature,pressure$pressure,xlab="temperature",ylab="pressure")`



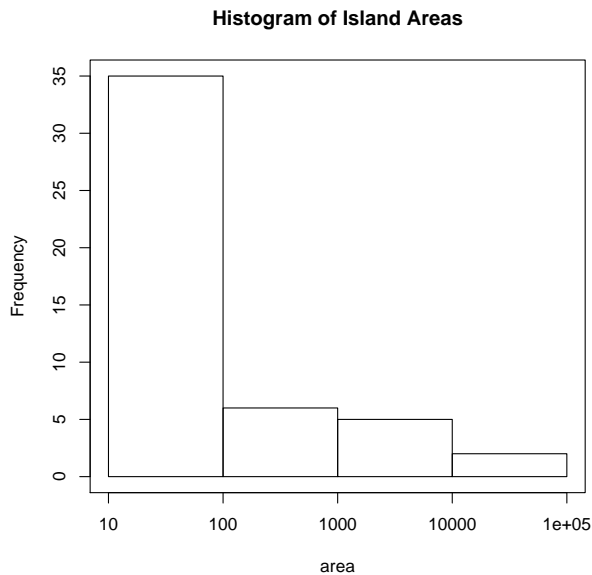
(c) `> plot(pressure$temperature,pressure$pressure^(3/20),xlab="temperature",ylab="pressure")`



Chapter Exercises

1. (a)

```
> hist(log(islands,10),breaks="Scott",axes=FALSE,xlab="area",main="Histogram of Island Areas")
> axis(1,at=1:5,labels=10^(1:5))
> axis(2)
> box()
```



- (c)

```
> hist(round(log(islands,10)),breaks="Sturges",axes=FALSE,xlab="area",
+ main="Histogram of Island Areas")
> axis(1,at=1:5,labels=10^(1:5))
> axis(2)
> box()
```

Histogram of Island Areas

