Updates and Corrections to the 2011 printing Data Analysis and Graphics Using R – An Example-Based Approach, 3^{rd} edn

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Webpage: `http://www.maths.anu.edu.au/~johnm/r-book/r-book.html`.

Chapter 1, p.31, subsection *Panels of scatterplots – the use of* `xyplot()`:

lines -12 to -8: Replace by:

```
trellis.device(color=FALSE)
xyplot(ht ~ wt | sport, groups=sex, data=ais, aspect=1,
       subset=sport%in%c("Row","Swim"), auto.key=list(space="right"))
## To close graphics window, enter dev.off()
## To start new device, by default with color=TRUE, enter trellis.device()
```

final 3 lines: Replace with:
The setting `auto.key=list(space="right")` generates a simple key that is placed on the right of the graph, with the two key entries one under another in a single column.
(but add to the end of the previous paragraph.)

[This generates a Figure 1.3 that is slightly different from what appears in the text.]

Chapter 3, p.88, lines -6 and -5 (final 2 lines of Section 3.3.2): Replace by

```
matplot(roller$weight, roller.sim, pch=1,
        ylim=range(roller$depression))
points(roller, pch=16)
```

[The existing text had scrambled the formatting.]

p.101, lines 3 and 4 below the matrix *Pb* in Exercise 13: Amend to read:
Sun Cloud Rain
0.429 0.286 0.286

Chapter 4, p.133, line 3: Insert a comma following "Bayesian".

Chapter 6, p.177, line 2: Replace 0.00070 by 0.0070

p.191: Following line -10, a further bullet point can usefully be added:

- If observations follow a time sequence, check for sequential correlation in the residuals. The function `acf()` (see Section 9.2) may be used for such a check.

Chapter 7, p.239, following line 6: Add:
Both $f_1(x_1)$ and $f_2(x_2)$ are determined, in the model `ds.gam`, using the roughness penalty method that was described in Subsections 7.5.2 and 7.5.3.

lines 8 and 9: Omit
In Figure 7.11, both $f_1(x_1)$ and $f_2(x_2)$ are modeled by spline functions with five degrees of freedom.

Chapter 10, p.332, lines 1-3: Replace by:
The t-statistics for interactions involving `tint.Q` are 0.46, -0.15, 1.34 and 1.10. The output can be simplified by omitting these interactions.

p.332, lines 14 and 15: Replace by:

```
> subs <- with(tinting, match(unique(id), id))
```

p.332, Section 10.5, line 4: Replace the sentence:
For this, a random term is associated with each transect.
by the more informative:
The model incorporates a term that allows for normally distributed random variation, additional to the poisson variation at each observation. Technically, this is an example of the use of "observation level random effects".

Chapter 12, Section 12.5, p.407: Replace the final 4 lines by:

```
names(possumsites)[1:2] <- c("long", "lat")
with(possumsites, {
    points(long, lat)
    text(long, lat, row.names(possumsites), pos=c(2,4,2,2,4,2,2))
})
```

Index of R Symbols and Functions, p.509, column 2: Replace
layer, layer_(*latticeExtra), 483*
by
layer, layer_ (*latticeExtra), 483*
(there should be a space following 'layer_')

Index of terms, p.517, column 1: Under "lattice graphics", insert
layers (using functions from *latticeExtra*), 483-484

p.518, column 2: Under "model", insert
generalized linear mixed model, 332-334
  observation level random effects, 332