

Errata and Notes for “Software for Data Analysis: Programming with R”

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The following are the known errors and significant changes, as of the date above. (Small typos and glitches that just involve layout, like too much or too little white space, are omitted to keep this document manageable.) The column “Fixed” either indicates that the fix was intended for the third printing, or gives the date of correction, since Springer’s print-on-demand approach now makes print numbers ill-defined. Since printings are not supposed to change the pagination of the book, errors requiring more extensive changes have sometimes not been fixed.

Many thanks to all the contributors of corrections, with special thanks to Dirk Eddelbuettel and Spencer Graves.

Chapter 1

Location		Fixed
page 1, section 1.1, line 3	“able”, not “ale”.	3rd Printing
pages 6 and 29	In describing licenses, it is “GNU General Public License”, since the <i>G</i> in <i>GPL</i> stands for <i>General</i> .	3rd Printing

Chapter 2

Location		Fixed
page 26	The <code>fit <- mgcv::gam()</code> example is trickier than suggested. One needs to copy <code>mgcv::s</code> to the global environment, and then call it as <code>s(Age, k=4)</code> .	

Chapter 3

Location		Fixed
page 72	Replace the non-existent class name "gpsPath" with "GPSTrack"	3rd Printing
page 75	In the <code>recoverHandler()</code> listing, the call to <code>deparse()</code> should be <code>deparse(call)</code> .	3rd Printing

Chapter 4

Location		Fixed
page 79	In the last sentence of the first paragraph of section 4.1, "channel for their work ..."	3rd Printing
page 92	Second paragraph, third sentence, "your installed package".	3rd Printing
page 96	In the first bullet point, "the <code>DESCRIPTION()</code> file" should be "the "DESCRIPTION" file" .	3rd Printing
page 99	In the last alias: <code>\alias{Matrix-package}</code>	3rd Printing
page 106	First sentence of the <code>NAMESPACE</code> section: "... of your package's source".	3rd Printing

Chapter 5

Location		Fixed
page 113	Should always be <code>lmFit</code> , not <code>lmfit</code>	3rd Printing
page 114	After the <code>wRead</code> listing, “The function <code>wRead()</code> ...”	3rd Printing
page 126	While it’s true that the two local assignment operators are equivalent, the grammar does limit the use of <code>`=`</code> , not allowing things like <code>if(x = 1) ...</code> .	
pages 127-130	To be consistent, all instances of <code>getQ</code> should capitalize <code>Q</code> . Also, the definition in both cases should call <code>doQuantile()</code> , not <code>recompute()</code> when the <code>dataBuf</code> is not empty, and on page 129, <code>probs</code> should be <code>IQ\$probs</code> . See the files “ <code>IQclosure.R</code> ” and “ <code>IQreplace.R</code> ” in the <code>Examples</code> directory of the <code>SoDA</code> package.	3rd Printing
page 133	Second paragraph, first sentence ends with an unwanted “.”.	3rd Printing
page 133	The <code>swivel.com</code> web site changed its setup, invalidating our example. The example has been changed to use my own web site.	3rd Printing

Chapter 6

Location		Fixed
page 165	Second last paragraph: “the largest integer power less than” should be “the smallest integer power greater than”	2010-04
page 173	Before the first <code>evalq()</code> example, “The strict way to evaluate <code>diff(Time)</code> ...”	3rd Printing
page 180	The SQL <code>WHERE</code> clause should use <code>=</code> , not <code>==</code> .	3rd Printing
page 209	Second paragraph, “... but only <code>ncol-1</code> otherwise.”	3rd Printing
page 232	In the example, <code>seqn2 <- seq(along = g21)</code>	3rd Printing
page 234	Last paragraph, “(pseudo-)random”, with the parentheses on the upper line.	3rd Printing

Chapter 7

Location		Fixed
page 239	After the bullet item: “the <code>lattice</code> package both ...”	3rd Printing
page 247	The example should subtract a small amount from the first element of the quantiles to avoid NA corresponding to <code>min(resids)</code> .	3rd Printing
page 249	In the example, <code>xy\$X</code> and <code>xy\$Y</code> should be <code>xy[, "X"]</code> and <code>xy[, "Y"]</code> .	3rd Printing
page 252	<code>plotGPSTrack()</code> should call <code>arrowColors()</code> to agree with the definition above.	3rd Printing
Pages 259-260	To be consistent with <code>ColorBrewer</code> , change all occurrences of <i>divergent scale</i> to <i>diverging scale</i> .	3rd Printing
page 273	Positioning ... section, second paragraph: “But within a particular graphics object, ...”	3rd Printing
page 276	The plot is slightly incorrect, in not maintaining the aspect ratio of 1 for x and y distances (should be about 20% higher). The <code>gridSegments.R</code> example in version 1.0-4 and later of the <code>SoDA</code> package gets it nearly right.	3rd Printing

Chapter 8

Location		Fixed
page 291, top	“objects provide one mechanism.”	3rd Printing
page 294, second line	“only used 7 of the bits”	3rd Printing
page 297, top	The function is <code>readLines()</code> , not <code>readLines()</code> .	3rd Printing
page 302	The definition of <code>nameRegexp</code> is not bullet-proof if the text in question could be a number starting with ".", such as .1. This doesn't affect the example on the next page, but where relevant, computations should first check that the text does <i>not</i> match the pattern for a number.	
page 318, top	Should say “... idiom of <code>\$\$tref{\$chunk}</code> ”.	3rd Printing
page 320	Should always be <code>scanText()</code> , not <code>scantext()</code>	3rd Printing

Chapter 9

Location		Fixed
page 339	Second line: “transforms x”	3rd Printing
section 9.6 and page 353	Various comments in this section deprecate S4 classes that extend (contain) S3 classes, in particular asserting that S3 methods won’t work. Starting with version 2.8.0 of R, support is provided for such extensions. The section will be rewritten to reflect this and give more encouragement for extending S3 classes. See ?Classes, ?S3Class and ?setOldClass.	3rd Printing
page 362	The definition of validTrackObject is missing braces and the first line, <pre>x <- object@x; y <- object@y</pre>	3rd Printing
page 365	After the paragraph “If you want to convert ...”, add the sentence: “Note that the function is used here as a function, not an S3 method; therefore, S3 mechanisms such as nextMethod() must be eliminated or changed to S4 mechanisms.”	
page 368-9	The entire discussion of POSIXt weirdness only applies through the 2.11 series of R, after which the ordering of the S3 classes was rationalized. Note also that an alternative S4 solution to the one proposed is to have conditional inheritance from POSIXt to the other classes.	2010-6

Chapter 10

Location		Fixed
pages 385-386 and 399	From version 2.8.0 on, the “...” argument can be used in some generic function signatures.	3rd Printing
page 392	Middle of the page, it’s “more reliable”, not “more more”	3rd Printing
page 399	Section on nonstandard generic functions: a more precise statement of the requirement is “a successful call eventually calls standardGeneric()”	3rd Printing
page 402, bottom	Note that the output of this example has been edited to remove printing. It will be more verbose if you run it.	
page 405	End of first paragraph: “in the SoDA package”.	3rd Printing

Chapter 11

Location		Fixed
page 416, bottom (and 482)	The author's correct name is "Dirk Eddelbuettel".	3rd Printing
page 423	After the sentence "To turn character <code>...</code> <code>mkChar()</code> ", add a footnote: "Readers who have followed the <code>.C()</code> version of this example in the previous section may now ask why that version works, since it casually assigns an arbitrary string in the output. Fortunately, the interface code for <code>.C()</code> arranges to call <code>mkchar()</code> on all strings before returning."	

Chapter 12

Location		Fixed
page 441	The code for the <code>gbm</code> package, including the C++ code, was all written by Greg Ridgeway.	3rd Printing

Chapter 13

Location		Fixed
page 456	For the regular expression see the correction for page 302	
page 469	Table 13.1, in the "Function" line, <i>expr</i> , not <code>expr</code> .	3rd Printing
page 470	Under <i>sublist</i> , last sentence: "because the interpretation ..."	3rd Printing