

How to reproduce results from *Spatial Point Patterns: Methodology and Applications with R* Baddeley, Rubak and Turner

Readers who run the example code in the book will find that some of their results are now different from the results shown in the book.

This is caused by recent changes to the `spatstat` package and the R system.

The authors try to ensure, wherever possible, that statements in the book remain true, and R code in the book remains valid, using the current version of `spatstat`.

However, a few changes are unavoidable. Here is a list of actions that the user can take to ensure that the results are reproducible.

1. The `spatstat` package has now been split into several sub-packages. In order to execute all the code in the book, you may need to type

```
library(spatstat)
library(spatstat.utils)
library(spatstat.gui)
```

2. Data files that were in `spatstat` are now in the sub-package `spatstat.data`. If you use the command `system.file` to extract data files, use the argument `package="spatstat.data"`.
3. Use the following commands to ensure that simulations (and simulation-based calculations and figures) in the book are exactly reproducible using the chosen values of the random seed. They select the older, slower simulation algorithms that were in force when the book was written.

```
RNGkind(sample.kind="Rounding")
spatstat.options(fastthin=FALSE)
spatstat.options(fastpois=FALSE)
```

These should only be used to reproduce the output in the book. Please be warned that `RNGkind(sample.kind="Rounding")` is undesirable for new work, because it produces poor samples in large populations.

4. The function `lengths.psp` has been renamed `lengths_psp` to avoid a conflict with the new generic function `lengths` in R.
5. The new package `local` for local likelihood, mentioned in Sections 9.13, 12.5 and 13.11, has been renamed `spatstat.local`. It is available on CRAN.
6. Check the list of errata on book.spatstat.org.