Visualising spatial data in R, from base to shiny

Robin Lovelace
University of Leeds

Abstract

This article traces the development spatial data visualisation methods and capabilities in statistical statistical software since the beginning of the 21st Century. Although the focus is on R, the progression from rudimentary and inflexible bitmap images to interactive online maps is applicable to other languages for statistical programming. The paper is primarily a historical review of the evolving state of the art, with the finding that making informative and aesthetically pleasing maps with R has become a more intuitive and interactive process over time. A secondary purpose of the paper is dissemination of best practice (with reproducible and extensible examples) in the field with a view to the future developments in the context of R's rapidly evolving spatial capabilities.

Keywords: visualisation, spatial data, R.

1. Introduction

This template demonstrates some of the basic latex you'll need to know to create a JSS article.

1.1. Code formatting

Don't use markdown, instead use the more precise latex commands:

- `Java`
- **plyr**
- `print("abc")`

2. R code

Can be inserted in regular R markdown blocks.

```
x <- 1:10
x
```

```
 [1]  1  2  3  4  5  6  7  8  9 10
```

Affiliation:

Robin Lovelace
University of Leeds
First line Second line
E-mail: r.lovelace@leeds.ac.uk
URL: http://www.robinlovelace.net