

# GISUK 2012 R Workshop

James Cheshire

## Introduction

Many people harness the power of the R software platform for spatial and statistical analysis without. The workshop aims to cover this final step to demonstrate the ways in which R can produce compelling visualisations from a range of spatial data. It will largely focus on the ggplot2 visualisation package and attendees will work towards producing a number of maps from a variety of complex spatial datasets.

The morning session covers introductory material and may be skipped by those who attended the "Introduction to R for Geographers" course in Bristol last December and by those who have used R in the past. Participants are also more than welcome to bring examples of their own data if they would like advice on how best to visualise it.

## Timetable

10.30 Workshop Registration

11-1300 Using R with spatial data:

- Introduction to the R interface.
- Some useful basic functions.
- How to load point, line and polygon data.
- Simple plots with R and ggplot2.

1300-1400 Lunch

1400-1530 R and Spatial Data Visualisation

- Gallery of applications and best practice.
- Choropleth maps.
- Plots with multiple layers.
- Colour, transparency and layout.

1530-1600 Break

1600-1700 Advanced Mapping Exercise

- Creating a stylised map of historic shipping routes.
- Q+A for participant's own data.

*James Cheshire is a Lecturer at the UCL Centre for Advanced Spatial Analysis. His research interests lie in the spatial analysis and visualisation of large population datasets. Examples of some of the R-based maps James has produced can be found here: <http://spatialanalysis.co.uk/r>*

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