**Introduction to using R for Spatial Analysis**

This page contains useful links and information for the day.

**Learning Outcomes**

* Be able to use R to read in CSV and spatial data
* Know how to plot spatial data using R
* Join spatial data to attribute data
* Customize colour and classification methods
* Understand how to use loops to make multiple maps
* Know how to reproject spatial data
* Be able to perform point in polygon operations
* Know how create a 'heat-map' style map using point data

**Location**

Training Room 1 (IT Lab) & Meeting Room 2 (refreshments), Sydney Jones Library, University of Liverpool.

**Contact**

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**Outline of the day**

* 9:30am – 9:45am – Registration & Refreshments
* 9:45am – 10:20am – What is GIS & R?
* 10:20am – 11:15am – P Intro to GIS
* 11:15am – 11:45am – Classification
* 11:45am – 12:15pm – P Classification
* 12:15pm – 1pm – Lunch
* 1pm – 2:30pm – P Making Maps
* 2:30pm – 2:45pm – Coffee
* 2:45pm – 3:30pm – P Analysis
* 3:30pm - 4pm – Mapping Discussion

**Useful Links**

* Handout: <https://github.com/nickbearman/intro-r-spatial-analysis/blob/master/intro-r-spatial-analysis.pdf> or [bit.ly/1HzFzQx](http://bit.ly/1HzFzQx)
* Electronic versions of all resources: <https://github.com/nickbearman/intro-r-spatial-analysis/> or [bit.ly/1d8U82f](http://bit.ly/1d8U82f)
* Survey: [bit.ly/1OkpsMe](http://bit.ly/1OkpsMe)

**Useful Points:**

* Remember that while an electronic version of the notes is available, typing out the R code is a useful exercise for you.
* Remember that a green post it means you are progressing well, a red post it means you need help (particularly useful if I am busy with someone else, so can’t come to you straight away).
* If you have time, you can complete the optional exercises, but if you don’t have time you don’t need to.