Using R as a GIS: A Beginner's Guide to Mapping and Spatial Analysis by Dr. Nick Bearman is a very timely book providing an accessible introduction to both GIS and R and how readers can develop their skills to use a script-based approach to GIS. While the book will be of greatest interest to readers with no existing R and/or GIS knowledge it also offers more experienced practitioners in R and/or GIS an opportunity to consider adopting a script-based approach to GIS to give more power and flexibility to their own GIS analysis and tasks.

The author brings a wealth of experience in the practical application, analysis, and research of GIS coupled with teaching and mentoring experience in R and GIS over many years. This is very evident in the way the book is structured and how the learning outcomes are delivered from start to finish. I believe that the book can function as a reference book, a source of material for self-learning, and has the potential to be used as a textbook in teaching courses which look to teach GIS using a programming-based approach where there may be a mixed cohort of skills and backgrounds. I will certainly be encouraging my students to use the book where applicable in their own research projects and learning.

I found the book easy to read and logically split into five parts. Nick's writing style is accessible and flows very well while moving at a pace that is very similar to a tutorial style or workshop learning experience. This enhances the book's potential as a learning tool for a wide variety of learners.

Part 1 introduces R and RStudio, introduces GIS and Spatial Data (including file formats and data types) and then looks at using R scripts to access spatial data libraries, read and import spatial data (CSV and Shapefile), and how to create simple maps. Part 2 is the main core of the book which looks at using raster and vector data, creating interactive maps in R, and introducing the two major spatial libraries in R (sf, sp). Part 3 looks at some programming constructs to expand the functionality of the R code. It also introduces spatial data wrangling by teaching the reader about the realities of spatial data handling - dealing with incorrect data, converting data, reclassifying data, and so on. Part 4 deals with project management issues which are often ignored by many similar texts. Here Nick motivates the need for this content by indicating that these topics are not necessarily related to GIS but are really useful things to know. Included in these are version control using Git and GitHub, using projects in RStudio, and using Markdown with the motivation of reproducible research and version control included. Part 5 is

the final section of the book and tackles the important practical issues of finding sources of spatial data and learning how to assess if the data is appropriate for a specific purpose.

Using R as a GIS has the potential to enhance the learning experience of many students by avoiding unnecessary jargon and theory and focusing on a practical outcomes-based style of teaching. Well done Nick on a fine piece of work.