Using posterdown to generate reproducible conference posters via RMarkdown > Knitr > Markdown > Pandoc > Latex > PDF workflow

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Introduction

Welcome to `posterdown`! This is my attempt to provide a semi-smooth workflow for those who wish to take their `RMarkdown` skills to the conference world. Many creature comforts from `RMarkdown` are available in this package such as `Markdown` section notation, figure captioning, and even citations like this one [1] The rest of this example poster will show how you can insert typical conference poster features into your own document.

Study Site

Here is a map made to show the study site using `ggplot2`, `ggspatial`, and `sf`. Lorem ipsum dolor sit amet, [2] consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Phasellus vestibulum lorem sed risus ultricies tristique nulla. Mauris vitae ultricies leo integer malesuada nunc vel risus commodo. Suspendisse potenti nullam ac tortor vitae. Enim nunc faucibus a pellentesque sit amet porttitor eget.
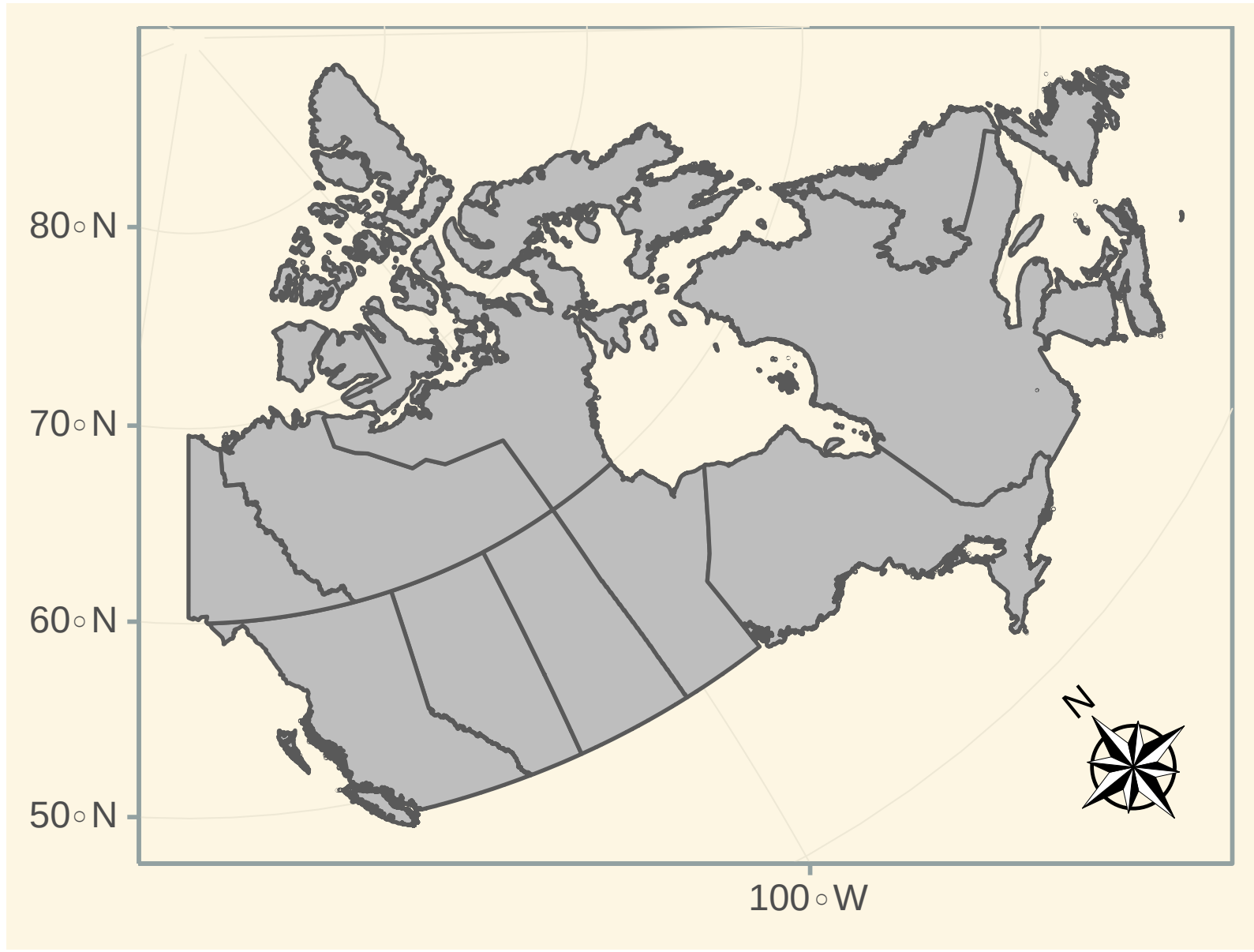

Figure 1: This is a map of Canada, the ggspatial package is great for GIS folks in R!

Objectives

1. Easy to use reproducible poster design.
2. Integration with `RMarkdown`.
3. Easy transition from `posterdown` to `thesisdown` or `rticles`

Methods

This package uses the same workflow approach as the `RMarkdown` you know and love. Basically it goes from RMarkdown > Knitr > Markdown > Pandoc > Latex > PDF

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Results

Usually you want to have a nice table displaying some important results that you have calcualated. In posterdown this is as easy as using the `kable` table formatting you are probably use to as per typical `RMarkdown` formatting. I suggesting checking out the `kableExtra` package and its in depth documentation on customizing these tables found here.

Table 1: Tables are a breeze with Kable and Kable extra package!

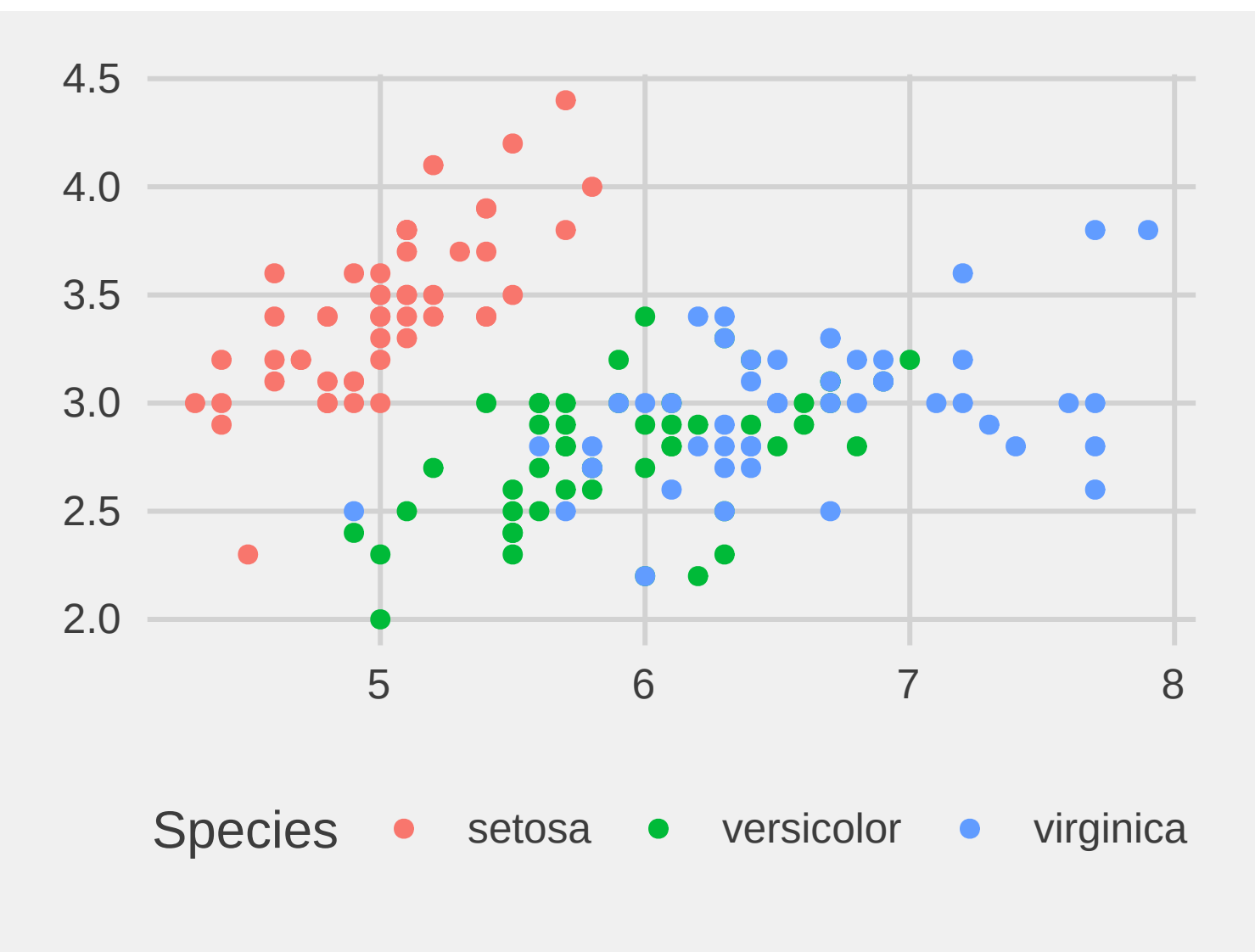| Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
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Figure 2: A typical plot using ggplot using the classic iris dataset.
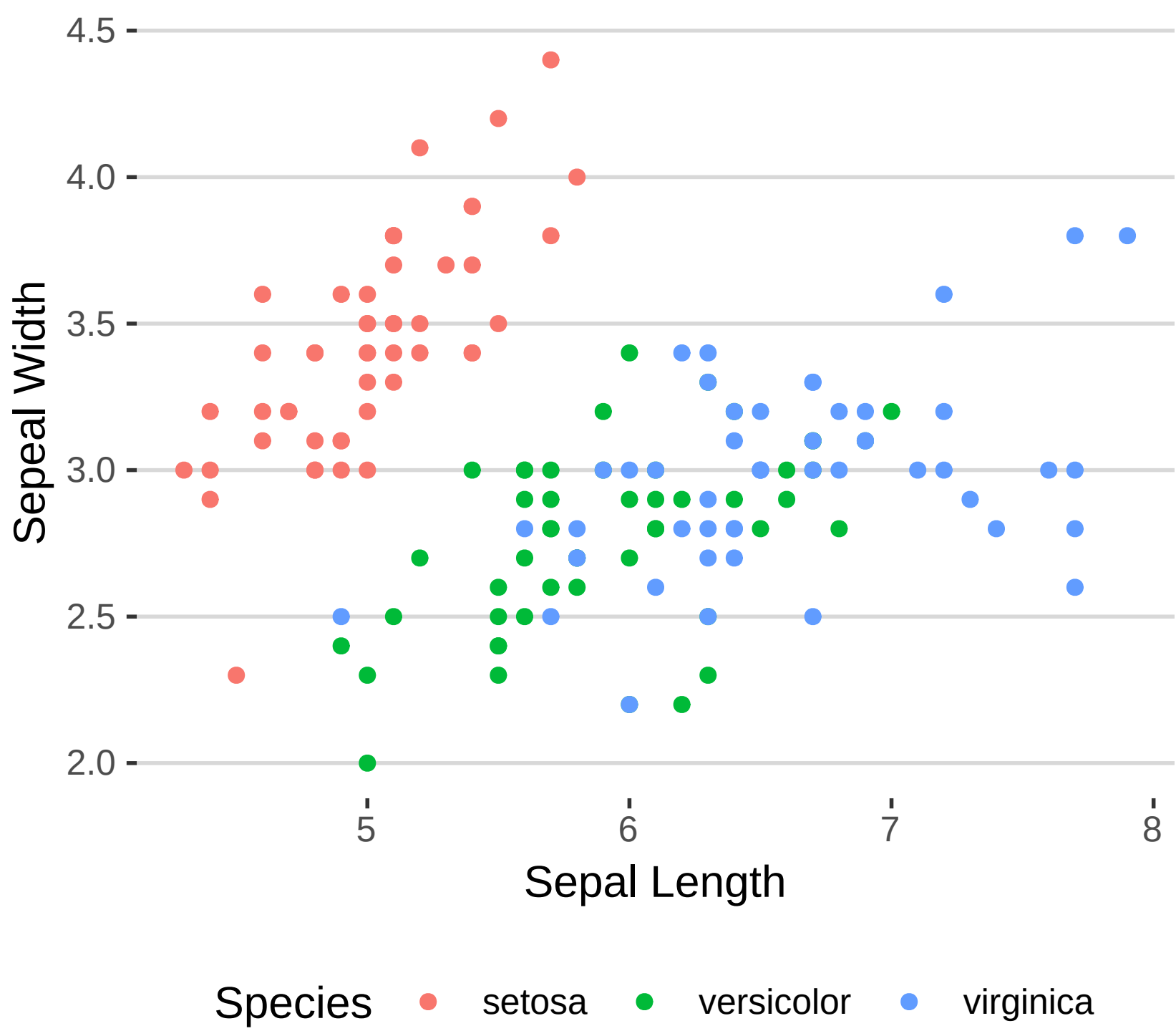

Figure 3: Another typical plot using ggplot, this time with a different theme and r code chunk options for fig.width and fig.height.

```
# Here is some code for people
# to look at and be in awe of!!!!
library(ggplot2)
library(ggthemes)

ggplot(data=iris,
       aes(x = Sepal.Width,
           y = Sepal.Length,
           colour = Species)) +
  geom_point() +
  theme_stata() +
  NULL
```
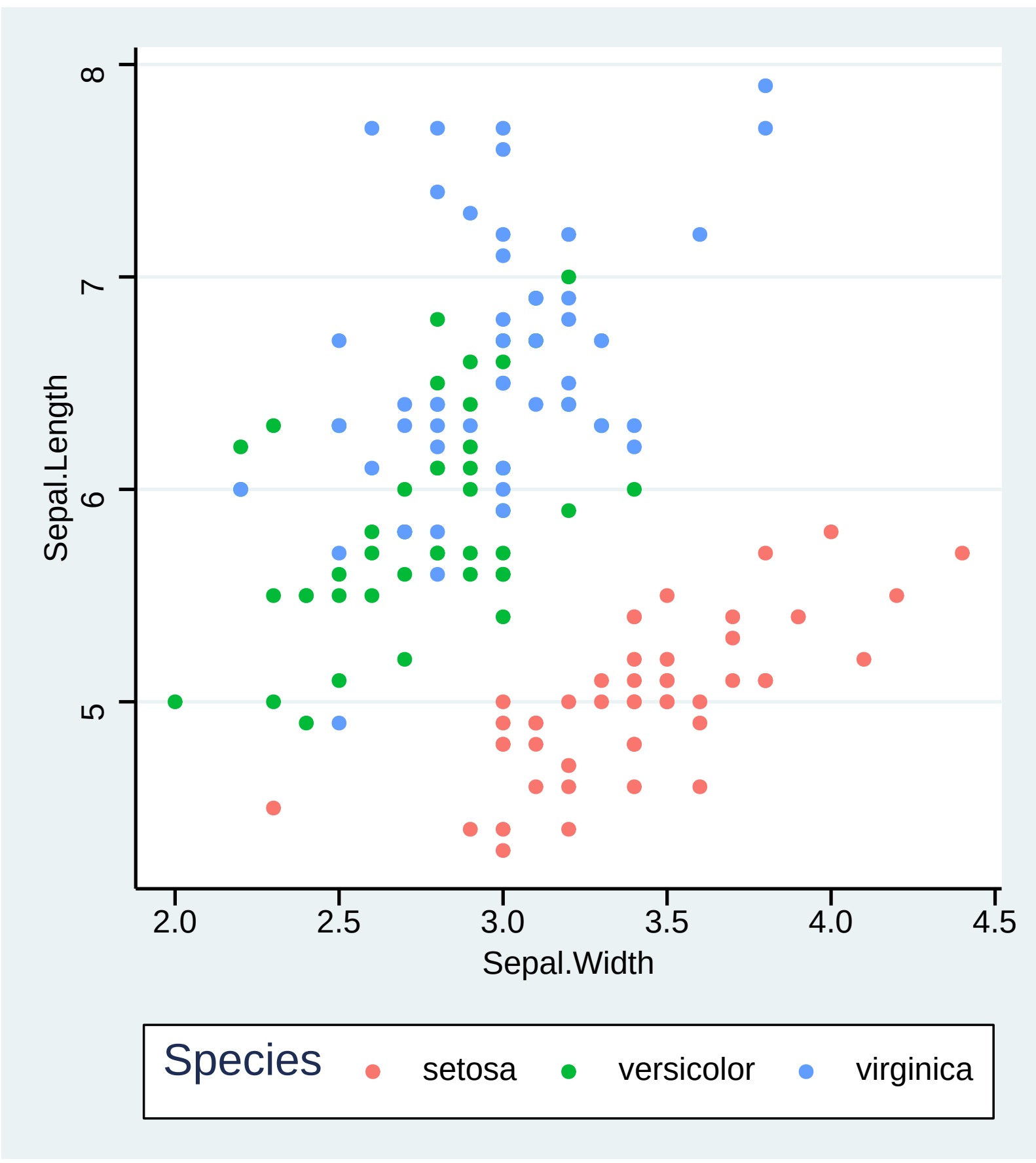

Figure 4: Another figure showing how base R plots might look on this poster!

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Next Steps

There is still **A LOT** of work to do on this package which include (but are note limited to):

- Better softcoding for front end user options in YAML
- Images in the title section for logo placement which is a common attribut to posters as far as I have come to know.
- Figure out compatibility with `natbib` which wasn't working during the initial set up.
- MUCH BETTER PACKAGE DOCUMENTATION. For example, there is nothing in the README…
- Include References section only if initiated by the user like in RMarkdown.

References

[1] Eun-Jung Holden et al. "Identifying structural complexity in aeromagnetic data: An image analysis approach to greenfields gold exploration". In: *Ore Geology Reviews* 46 (Aug. 2012), pp. 47–59. ISSN: 01691368. DOI: 10.1016/j.oregeorev.2011.11.002. URL: http://linkinghub.elsevier.com/retrieve/pii/S0169136811001454 (visited on 10/03/2018).

[2] Maarit Middleton, Tilo Schnur, and Peter Sorjonen-Ward. "GEOLOGICAL LINEAMENT INTERPRETATION USING THE OBJECT-BASED IMAGE ANALYSIS APPROACH: RESULTS OF SEMI-AUTOMATED ANALYSES VERSUS VISUAL INTERPRETATION". In: (), p. 20.