About Writing Dynamic Documents with R

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Abstract

This is the abstract of the template document used to show how to write publications in R with R Markdown and the help of some packages. Based on a concrete usecase this document exemplifies some of the caveats that may occur when writing such document and publish it online on a GIT repository. It also presents typical usecases in MarkDown usage and presents some tricks.

Introduction

This example publication is aimed to serve as a motivation on how to create reproducible documents in R and to advocate in general reproducible research.

State of the Art

Various authors in qualitative and quantitive research argue for that as many parts of the research workflow reproducible. Brunsdon (2015) state "Reproducible quantitative research is research that has been documented sufficiently rigorously that a third party can replicate any quantitative results that arise".

To further motivate you, read (Healy 2016,LeVeque et al. (2012),Baker (2016),Editorial (2016),Pebesma et al. (2012),Vandewalle (2012),Nüst et al. (2011),Buckheit and Donoho (1995),Healy (2011)) or the short and to the point editorial of Editorial (2016).

Markdown

- lists (ordered, unordered)
- figures (figure captions)
- tables

Name	Value
Reproducible	is coool
Research	and fun!

R Markdown

Plots (include figures)

Example to generate and load created image from figure folder

Data tables

Figure 1: Reproducible Research Logo

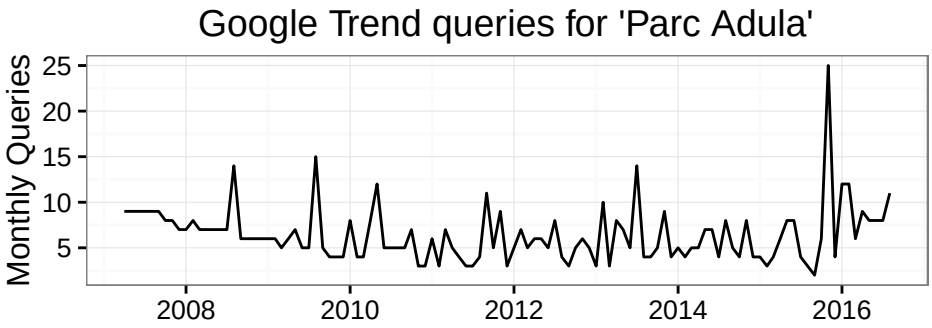

Figure 2: Timeline of queries for Parc Adula set in the Google search engine

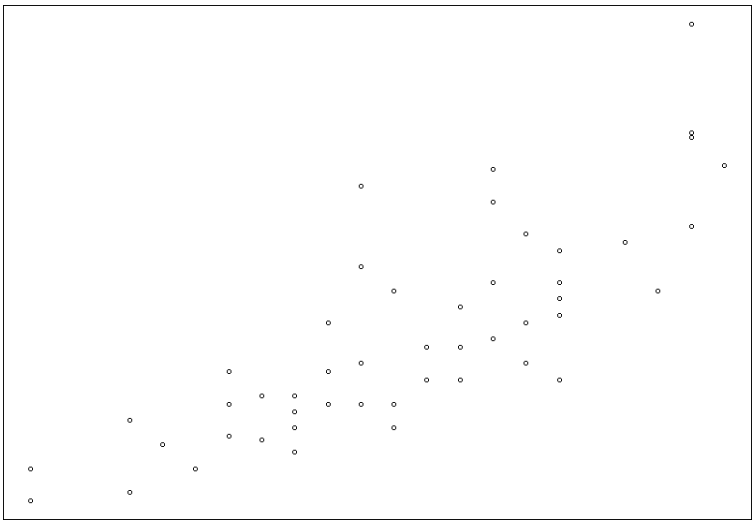

Figure 3: Planned perimeter of Parc Adula, Switzerland, Data source: Swisstopo

Table 2: Topic mentions.

Code	Mention
Biodiversitaet	5
Contra Argument	39
Pro Argument	68
Tourismus allgemein	48

Discussion and Conclusion

This template based on data of an ongoing presents some typical examples maybe used in a publication writen in RMarkdown. It presents the inclusion of data and analysis, features plots, tables, and various markdown elements and shows how to integrate literature. The generated files in *PDF*, *Word* or *HTML* often still need fine some fine-tuning afterwards (particularly in Latex). However, it still presents a great way documenting the research process, that is easily shareable and the generation of the initial drafts.

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