Reproducible paper with R

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Sys_Date()

```
# install.packages(c("broom","captioner"))
```

```
library(ggplot2)
library(knitr)
library(captioner)
library(broom)
```

Abstract

Keywords

1. Introduction

I really like using R (R Core Team 2015) for science because of tools like RStudio (RStudio Team 2015) and RMarkdown (RMarkdown Team 2015). This document is a quick demonstration of writing an academic paper in RMarkdown. There's a lot of other resources available on the web but hopefully you'll find this document useful as an example.

2. Method

We can also put some more advanced math in our paper and it will be beautifully typeset:

$$\sum_{i=1}^{N} log(i) + \frac{\omega}{x}$$

3. Results

```
mod<-lm(price ~ carat, diamonds)
kable(tidy(mod), digits=2, caption=cap_themodel)
```

Table 1: Table 1: This is a broomed linear model summary table.

term	estimate	std.error	statistic	p.value
(Intercept)	-2256.36	13.06	-172.83	0
carat	7756.43	14.07	551.41	0

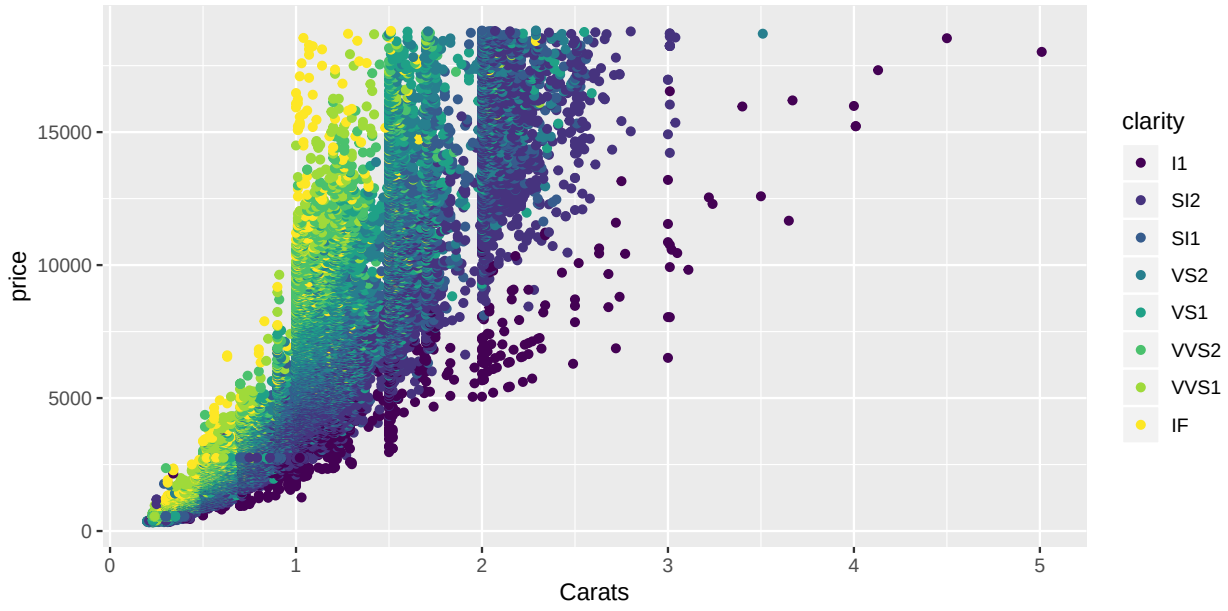

Figure 1: Figure 1: The relationship between price and carat for the diamonds dataset.

4. Discussion

Reference

R Core Team. 2015. "R: A Language and Environment for Statistical Computing." http://www.r-project.org.

RMarkdown Team. 2015. *Rmarkdown: R Markdown Document Conversion, R Package.* Boston, MA: RStudio, Inc. http://rmarkdown.rstudio.com/.

RStudio Team. 2015. *RStudio: Integrated Development Environment for R.* Boston, MA: RStudio, Inc. http://www.rstudio.com/.