## A LaTeX Example Using Warpbreaks Data

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#### Abstract

This is an abstract. This article is about warpbreaks data.

#### 1 This is a Section

RStudio can turn .Rnw code into a PDF. You must have TeX installed. MikTex is recommended for Windows.

LaTeX resources:

http://www.stdout.org/~winston/latex/latexsheet.pdf

http://en.wikibooks.org/wiki/LaTeX

http://tex.stackexchange.com/

To make a LaTeX file go to File then New File then R Sweave. Make sure that the file name does not have spaces.

If you want to force a break to the next line you should include two backslashes, like this.

paragraph starts a new paragraph.

This is a paragraph title This line includes an optional paragraph title.

#### 1.1 This is a subsection

#### 1.1.1 This is a subsubsection

#### Another subsubsection

This subsubsection has the numbering suppressed.

#### Some bold text

Some italic text

You can use the Format button in RStudio to do some simple formatting.

"Quotation marks in LaTeX are a little weird."

You can also control font size:

tiny font

small font

normal font

large font

# huge font

Note that I had to reset the font size here. You can also apply styles to specific text using curly braces.

Sans serif text applied using curly braces

Typewriter text

LaTeX can produce lists:

- The below analysis is a look at the Warpbreaks data
- Warpbreaks contains information on the number of breaks in thread
- The data is grouped by wool and tension

### 2 Tables!

With row names:

Without row names:

Wool	Tension	Average Breaks	Number of Samples
A	L	44.56	9
A	$\mathbf{M}$	24.00	9
A	H	24.56	9
В	L	28.22	9
В	M	28.78	9
В	H	18.78	9

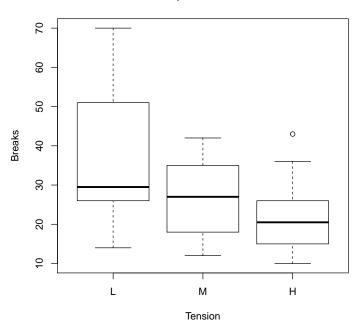
	Wool	Tension	Average Breaks	Number of Samples
1	A	L	44.56	9
2	A	$\mathbf{M}$	24.00	9
3	A	H	24.56	9
4	В	L	28.22	9
5	В	M	28.78	9
6	В	H	18.78	9

Notice how things didn't print in the order you expected? This is LaTex "helping" you. There are ways to control this but it is beyond the scope of this presentation.

## 3 A Chart!

Note that you can't use periods in the filename if you want to include a chart.

### Warpbreaks Data



### 4 Inline R Code

Add inline R code with Sexpr:

There are 157,464 rows cubed in the warpbreaks dataset.

prettyNum isn't necessary but it adds commas that improve readability.