

Lecture 8: Rmarkdown - a tool for reporting results from R

Yanfei Kang

16 Apr, 2017

Contents

Packages required in this lecture	1
Why R markdown?	1
Header 1	2
Header 2	2
Creation of lists	2
unordered	2
ordered	2
Inline codes	2
Blockquotes	2
Equations	2
Hyperlink	2
R code chunks with plot	2
R code chunks with table	3
Plain code block	3
References	3

Packages required in this lecture

```
install.packages(c("rmarkdown", "forecast"))
```

Why R markdown?

- Much **easier** *syntax* ~~syntax~~ than LaTeX or Html
- Dynamic: easy to update and work with the R codes
- Multiple output formats
- Makes presentation easy
- Keep me organized of weekly research progress reports

Header 1

Header 2

Creation of lists

unordered

- Item 1
- Item 2

ordered

1. Item 1
2. Item 2
 - item 2a
 - item 2b

Inline codes

Write inline **R** code using backtick quotes: `forecast()`

Blockquotes

It's always better to give than to receive.

Equations

- $x + y = z$ for inline equations
-

$$x + y = z$$

Hyperlink

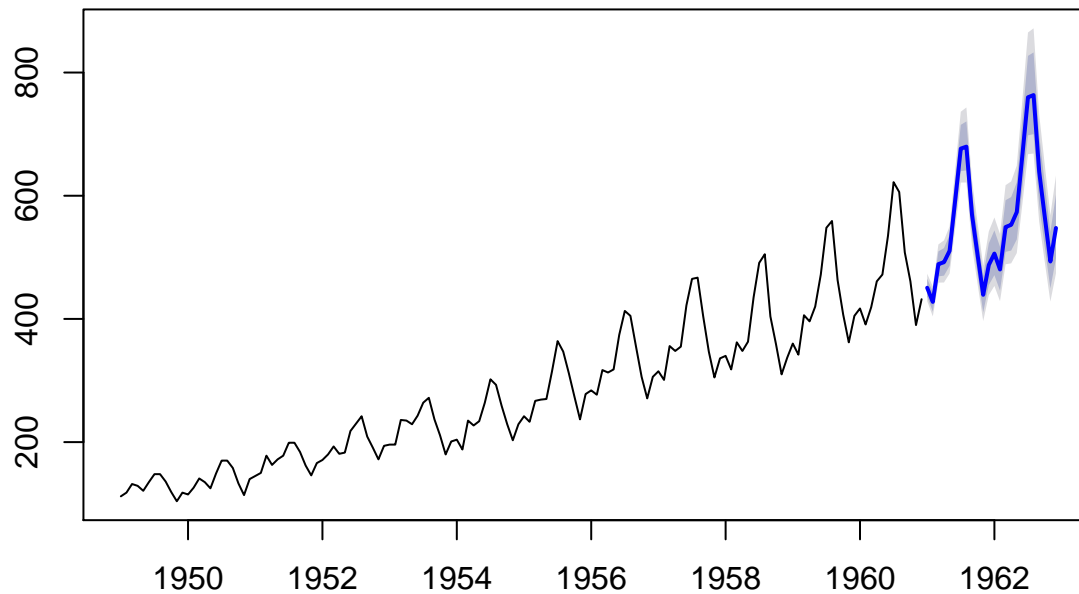
R markdown tutorial

R code chunks with plot

See Hyndman and Athanasopoulos (2014).

```
library(forecast)
plot(stlf(AirPassengers, lambda=0))
```

Forecasts from STL + ETS(A,A,N)



R code chunks with table

```
knitr::kable(head(iris))
```

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa

Plain code block

```
library(forecast)
plot(stlf(AirPassengers, lambda=0))
```

References

Hyndman, Rob J, and George Athanasopoulos. 2014. *Forecasting: Principles and Practice*. OTexts.