

R Commander Basics

This R Commander walkthrough will guide you to:

1. verify your data file
2. import data through the menus
3. display summary statistics
4. make a boxplot

verify data

Use your favorite text editor (Notepad, TextEdit) to view the data. If you change anything, remember to save as plain text

- This data file has
- 3 data columns
 - 1 header row
 - 3 variable names
 - 1 extra ``token''

extra token

*	country	fertrate	contra
	"Benin"	7.1	9
	"Botswana"	5	33
	"Burundi"	6.8	9
	"Cameroon"	6.4	2
	"Cote_d"	7.4	3
	"Ghana"	6.4	13
	"Kenya"	6.7	27
	"Lesotho"	5.8	7
	"Liberia"	6.6	7
	"Mali"	6.7	5
	"Nigeria"	6.2	6
	"Rwanda"	8.5	10
	"Senegal"	6.6	11
	"Sudan"	5.9	6
	"Togo"	6.2	34
	"Uganda"	7.3	5
	"Zimbabwe"	5.7	43

import data

start R Commander by typing:
`library(Rcmdr)`

```
xterm

R version 2.9.2 (2009-08-24)
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ISBN 3-900051-07-0

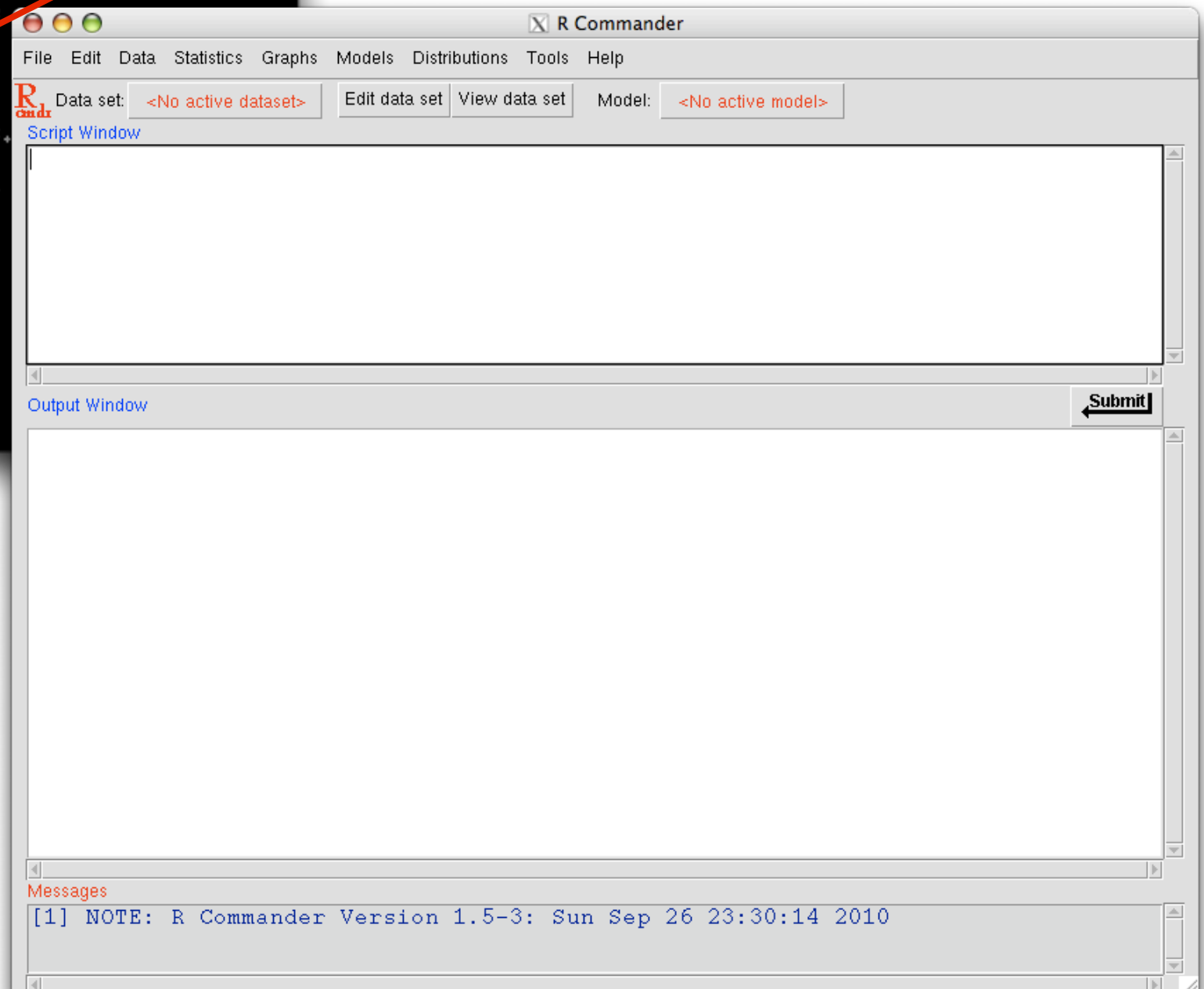
R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

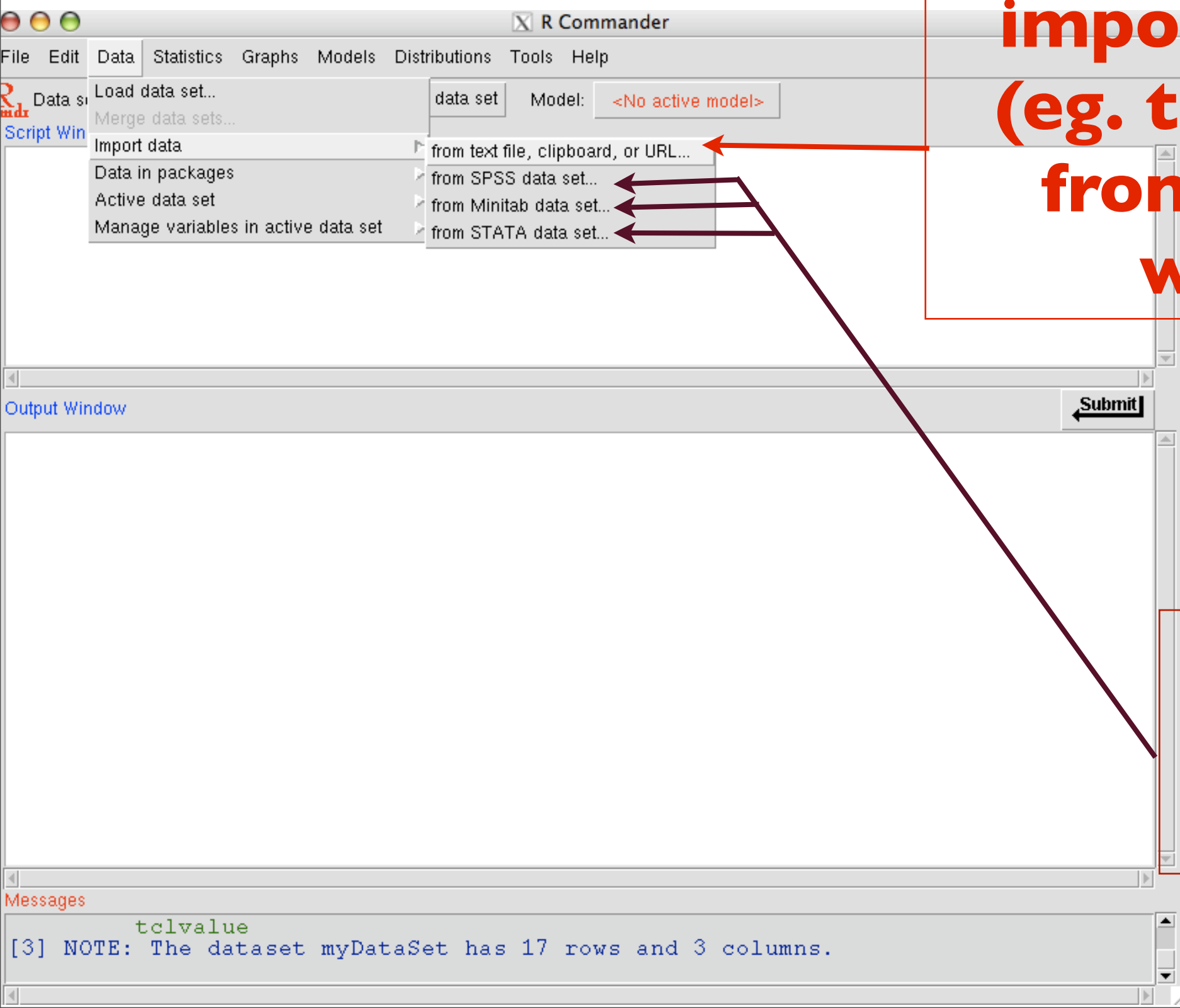
R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> library(Rcmdr)
Loading required package: tcltk
Loading Tcl/Tk interface ... done
Loading required package: car
> 
```



import data

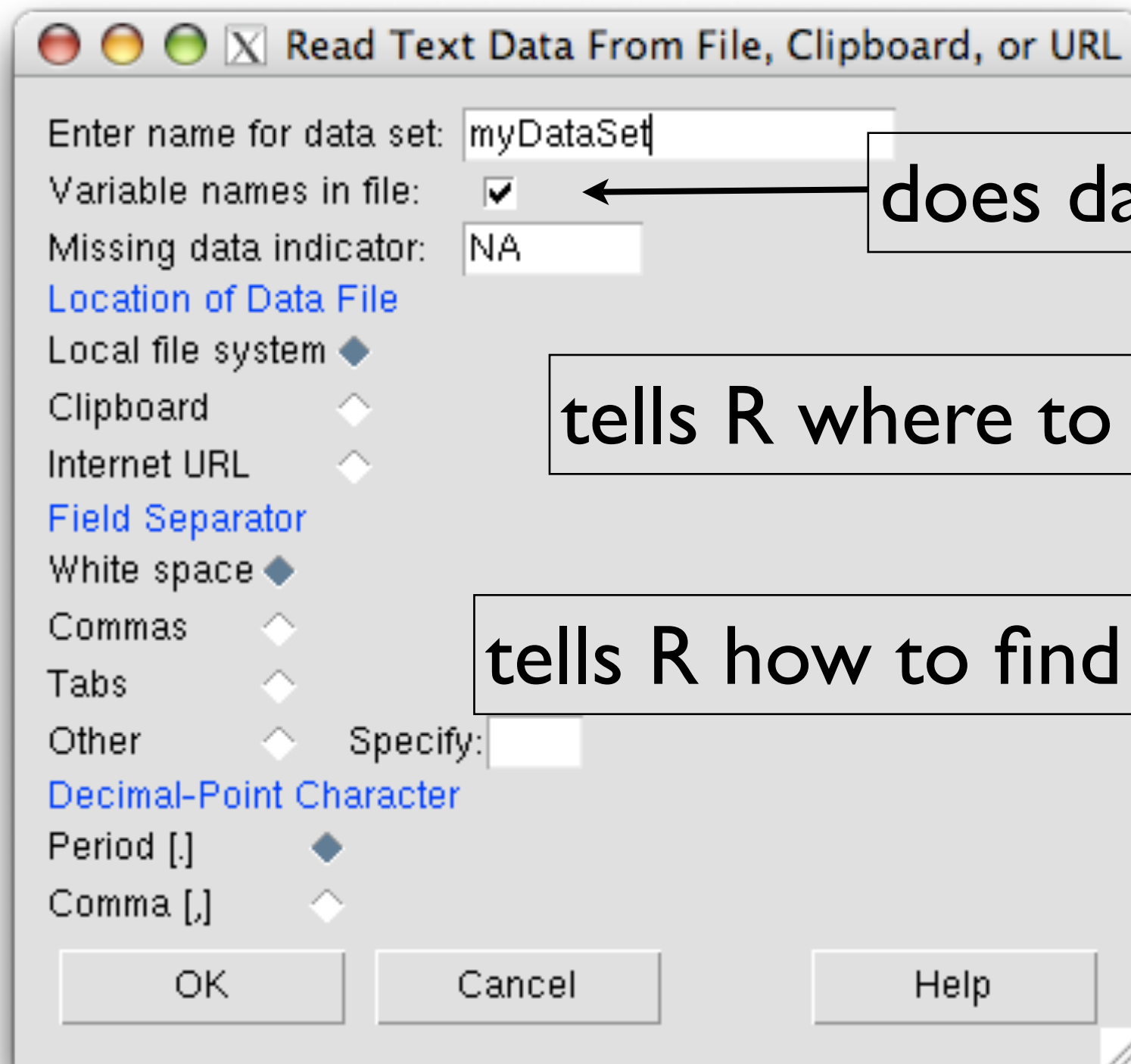


**import text files
(eg. the datasets
from the class
website)**

**import files
formatted for
other programs**

import data

This window pops up



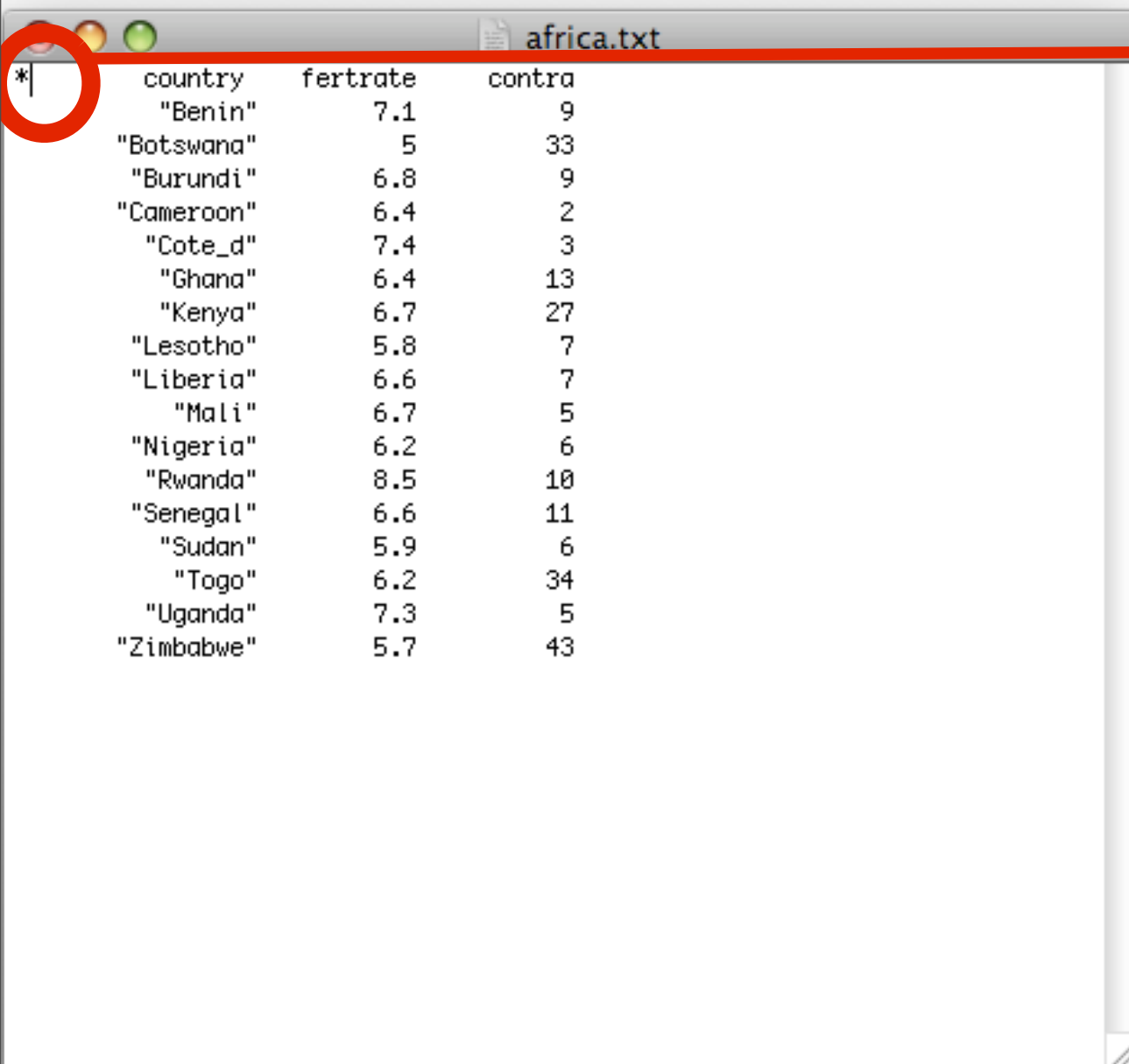
does data set have a header?

tells R where to find file

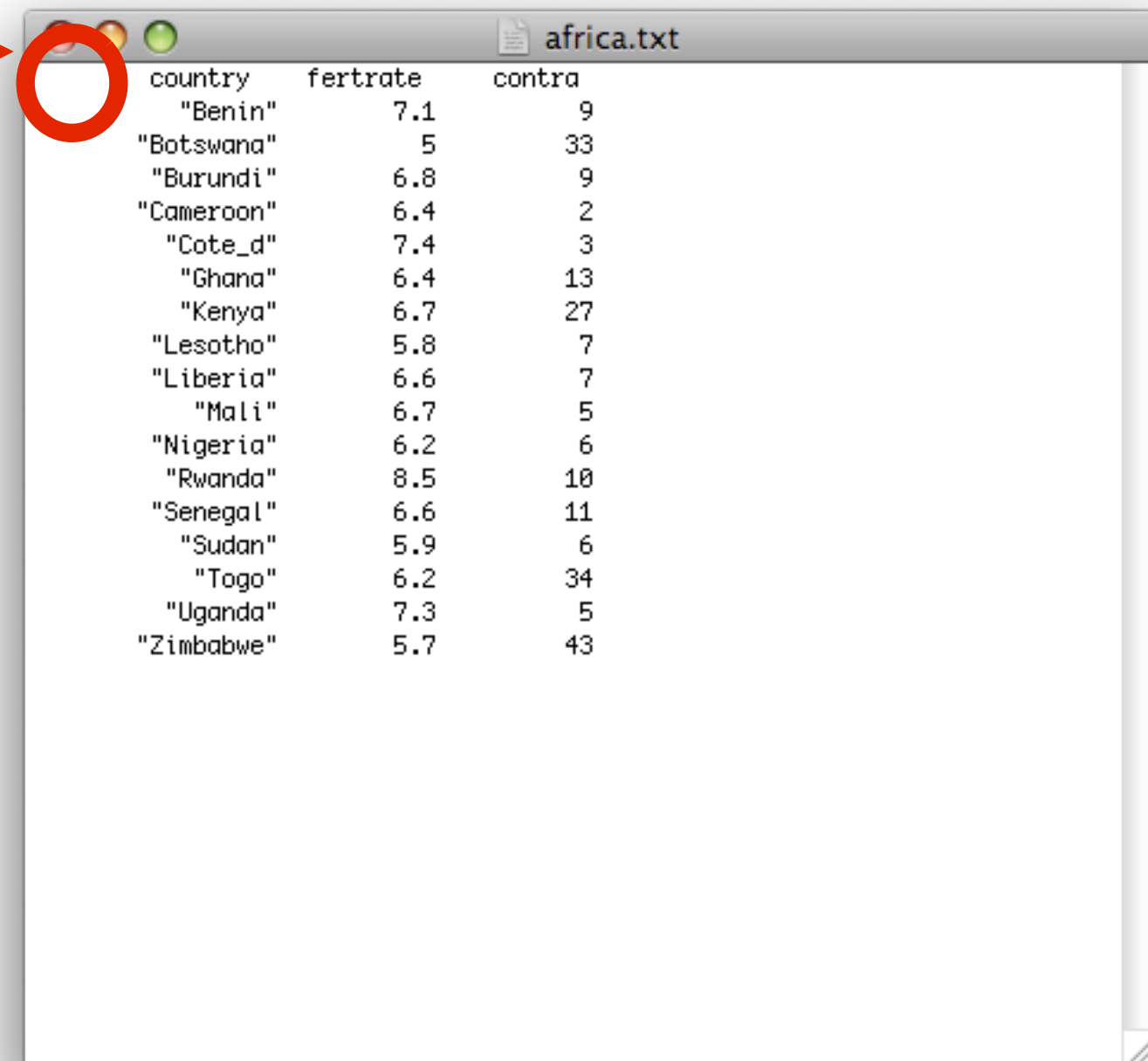
tells R how to find data columns

If you tell R Commander that your data set has a header:

- make sure that the header names match the data columns
- edit the data file (with Notepad or TextEdit) before importing

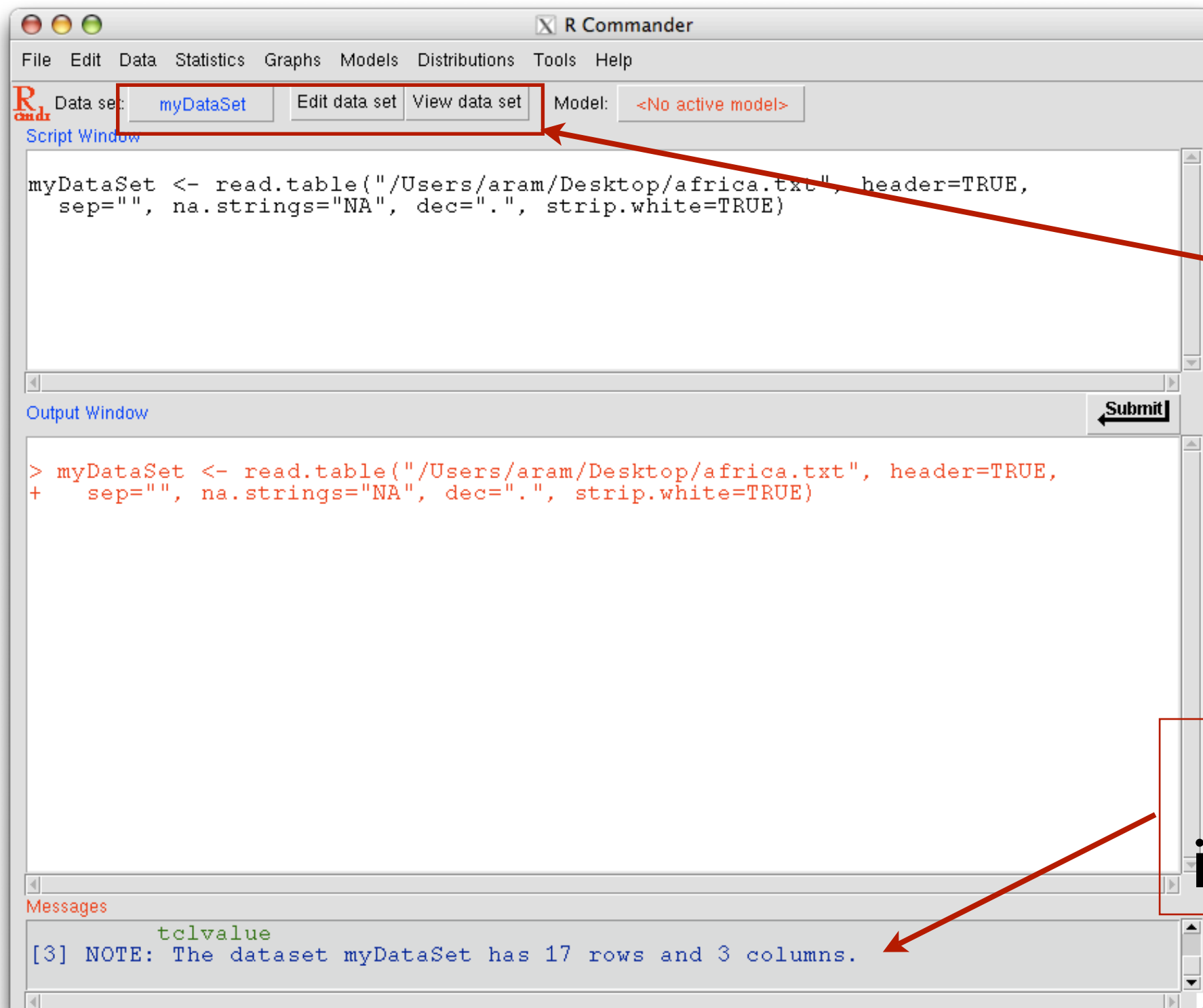


```
*| country fertrate contra
"Benin" 7.1 9
"Botswana" 5 33
"Burundi" 6.8 9
"Cameroon" 6.4 2
"Cote_d" 7.4 3
"Ghana" 6.4 13
"Kenya" 6.7 27
"Lesotho" 5.8 7
"Liberia" 6.6 7
"Mali" 6.7 5
"Nigeria" 6.2 6
"Rwanda" 8.5 10
"Senegal" 6.6 11
"Sudan" 5.9 6
"Togo" 6.2 34
"Uganda" 7.3 5
"Zimbabwe" 5.7 43
```



```
country fertrate contra
"Benin" 7.1 9
"Botswana" 5 33
"Burundi" 6.8 9
"Cameroon" 6.4 2
"Cote_d" 7.4 3
"Ghana" 6.4 13
"Kenya" 6.7 27
"Lesotho" 5.8 7
"Liberia" 6.6 7
"Mali" 6.7 5
"Nigeria" 6.2 6
"Rwanda" 8.5 10
"Senegal" 6.6 11
"Sudan" 5.9 6
"Togo" 6.2 34
"Uganda" 7.3 5
"Zimbabwe" 5.7 43
```

import data

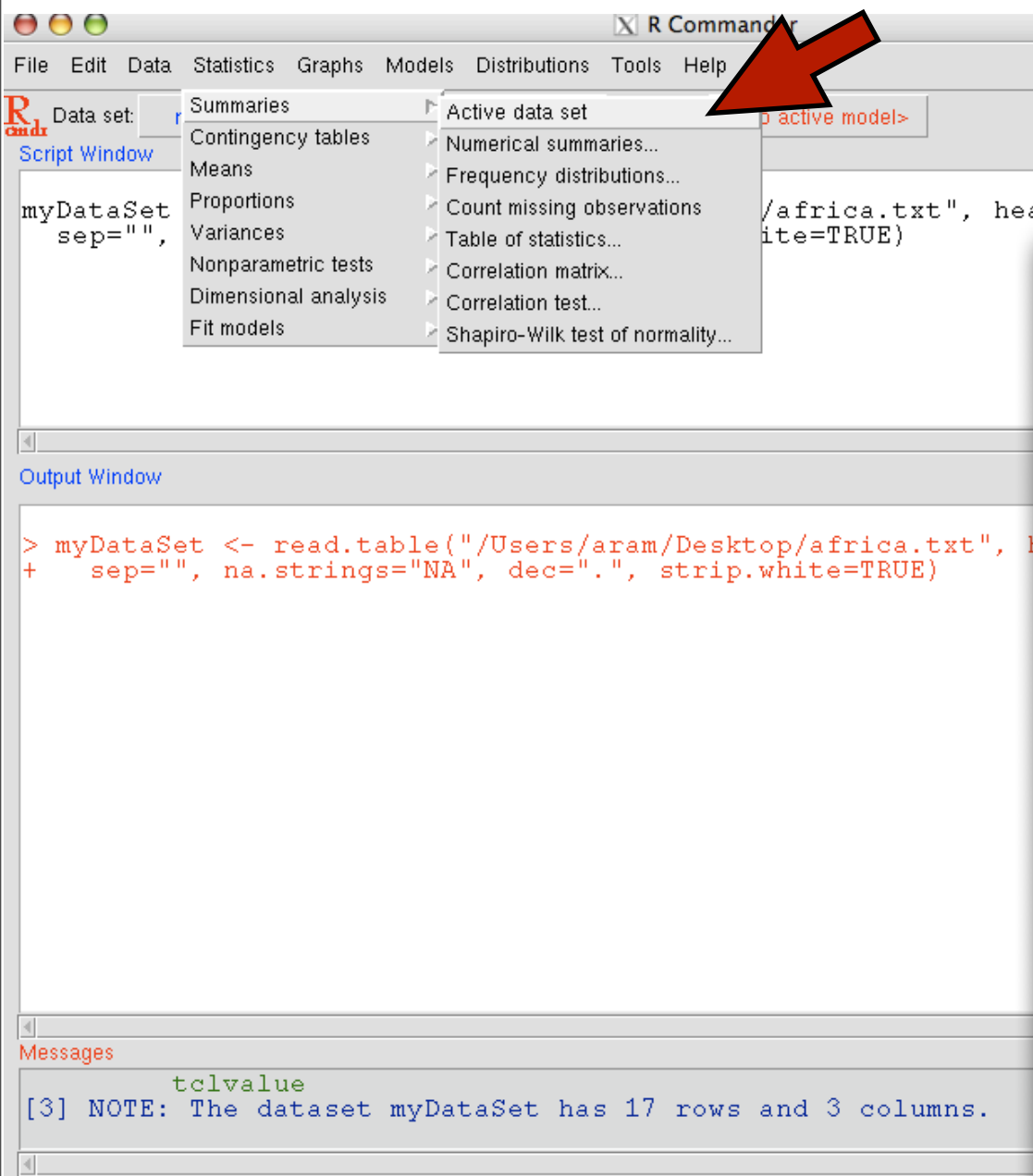


data set buttons

- select among imported data sets
- edit selected data set
- view selected data set

successfully
imported data set!

summary statistics



R Commander

File Edit Data Statistics Graphs Models Distributions Tools Help

Data set: myDataSet

Script Window

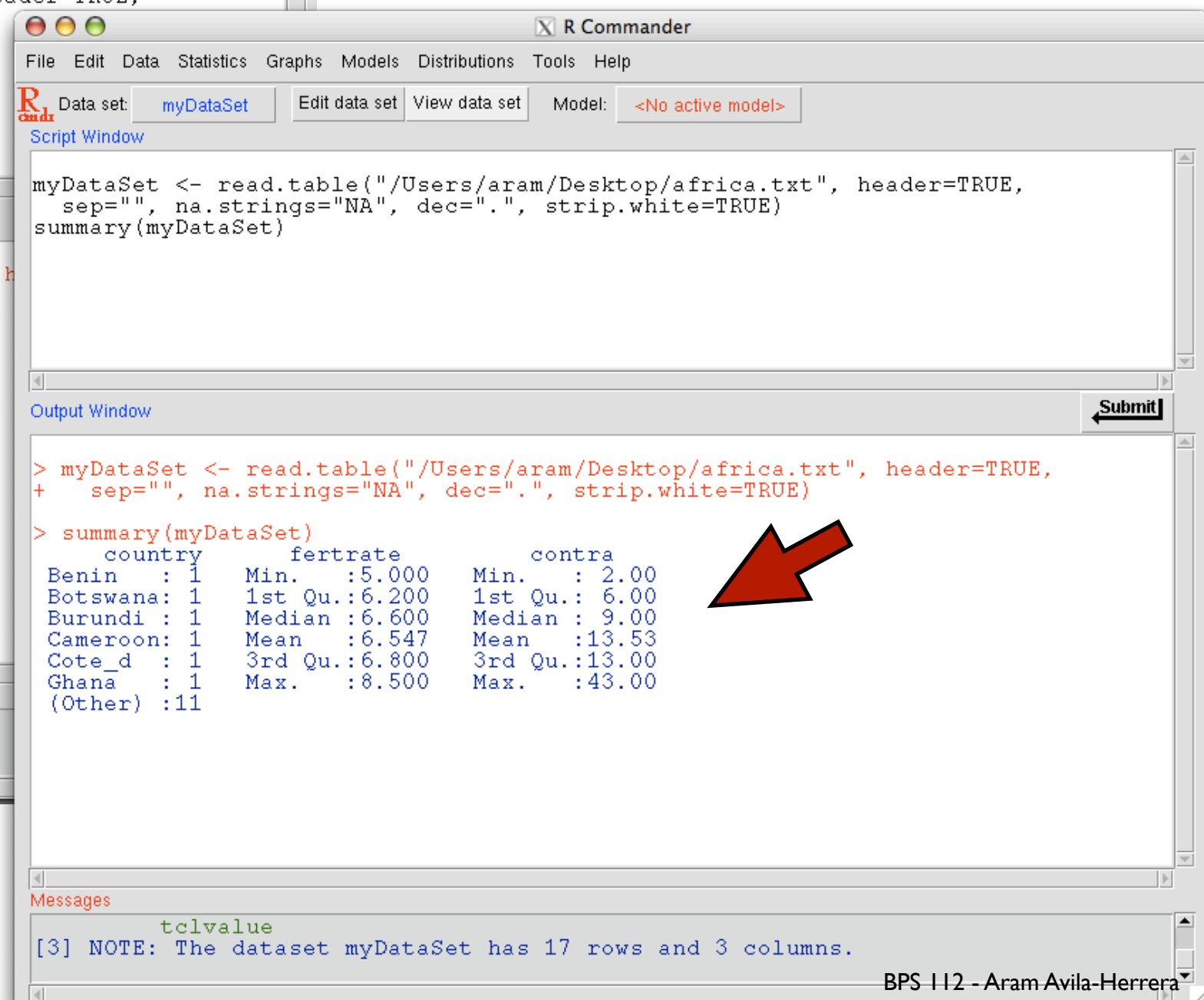
```
myDataSet <- read.table("/Users/aram/Desktop/africa.txt", header=TRUE, sep=" ", na.strings="NA", dec=".", strip.white=TRUE)
```

Output Window

```
> myDataSet <- read.table("/Users/aram/Desktop/africa.txt", header=TRUE, sep=" ", na.strings="NA", dec=".", strip.white=TRUE)
```

Messages

```
tclvalue  
[3] NOTE: The dataset myDataSet has 17 rows and 3 columns.
```



R Commander

File Edit Data Statistics Graphs Models Distributions Tools Help

Data set: myDataSet

Script Window

```
myDataSet <- read.table("/Users/aram/Desktop/africa.txt", header=TRUE, sep=" ", na.strings="NA", dec=".", strip.white=TRUE)  
summary(myDataSet)
```

Output Window

```
> myDataSet <- read.table("/Users/aram/Desktop/africa.txt", header=TRUE, sep=" ", na.strings="NA", dec=".", strip.white=TRUE)  
  
> summary(myDataSet)
```

country	fertrate	contra
Benin : 1	Min. :5.000	Min. : 2.00
Botswana: 1	1st Qu.:6.200	1st Qu.: 6.00
Burundi : 1	Median :6.600	Median : 9.00
Cameroon: 1	Mean :6.547	Mean :13.53
Cote_d : 1	3rd Qu.:6.800	3rd Qu.:13.00
Ghana : 1	Max. :8.500	Max. :43.00
(Other) :11		

Messages

```
tclvalue  
[3] NOTE: The dataset myDataSet has 17 rows and 3 columns.
```


boxplot

R Commander

File Edit Data Statistics Graphs Models Distributions Tools Help

Data set: myDataSet Model: <No active model>

Script Window

```
myDataSet <- read.csv("Desktop/africa.txt", header=TRUE,
  sep=";", na.strings=c("NA"))
summary(myDataSet)
boxplot(myDataSet$fertrate, ylab="fertrate")
```

Output Window

```
> myDataSet <- read.csv("C:/Users/aram/Desktop/africa.txt", header=TRUE,
+   sep=";", na.strings=c("NA"))
> summary(myDataSet)
  country fertrate contra
Benin    : 1   Min. :5.000   Min.    : 2.00
Botswana: 1   1st Qu.:6.200   1st Qu. : 6.00
Burundi  : 1   Median :6.600   Median  : 9.00
Cameroon: 1   Mean    :6.547   Mean    :13.53
Cote_d   : 1   3rd Qu.:6.800   3rd Qu. :13.00
Ghana    : 1   Max.    :8.500   Max.    :43.00
(Other)  :11

> boxplot(myDataSet$fertrate, ylab="fertrate")
```

Messages

```
tclvalue
[3] NOTE: The dataset myDataSet has 17 rows and 3 columns.
```

