

R-reading time data from a text file

Question Link

Hi and thanks in advance,

So I'm currently trying to read a list of test dates from a text file that I want to try and plot on a graph with some test values (known as quantity).

The issue I'm having is that when the times are read from the file, they are not read correctly. When I plot them onto a graph, the values are very distorted and incorrect, and don't display anything remotely resembling a date.

Here is my code:

```
Frame <- read.table("...path.../Frame.txt")
Frame$Time <- as.Date(Frame$Time)
TheForecast <- naive(Frame)
plot(TheForecast, xlab="Time", ylab="Quantity", main="Stock Quantity vs Time", type='l')
```

I have tried all the different formats of dates in the text file that I can think of, but they all return the same issue or worse ones. Here's what I've tried:

```
Time <- c("01/01/2010", "07/02/2010", "08/03/2010", "02/04/2011", "11/05/2011",
         "12/06/2011", "06/07/2012", "08/30/2012", "04/16/2013", "03/18/2013", "02/22/2014",
         "01/27/2014", "12/15/2015", "09/28/2015", "05/04/2016", "11/07/2017", "09/22/2017",
         "04/04/2017")

Time <- c("2010-01-01", "2010-07-02", "2010-08-03", "2011-02-04", "2011-11-05",
         "2011-12-06", "2012-06-07", "2012-08-30", "2013-04-16", "2013-03-18", "2014-02-22",
         "2014-01-27", "2015-12-15", "2015-09-28", "2016-05-04", "2017-11-07", "2017-09-22",
         "2017-04-04")

Time <- c("1 January 2010", "7 February 2010", "8 March 2010", "2 April 2011",
         "11 May 2011", "12 June 2011", "6 July 2012", "30 August 2012", "16 April 2013",
         "18 March 2013", "22 February 2014", "27 January 2014", "15 December 2015",
         "28 September 2015", "4 May 2016", "7 November 2017", "22 September 2017",
         "4 April 2017")
```

Here's the test values for the y (quantity) axis, just for reference:

```
Quantity <- c(5,3,8,4,0,5,2,7,4,2,6,8,4,7,8,9,4,6)
```

Here is an example of the file before reading:

```
Time Quantity
1 2010-01-01 5
2 2010-07-02 3
3 2010-08-03 8
4 2011-02-04 4
5 2011-11-05 0
6 2011-12-06 5
7 2012-06-07 2
8 2012-08-30 7
9 2013-04-16 4
10 2013-03-18 2
11 2014-02-22 6
12 2014-01-27 8
13 2015-12-15 4
14 2015-09-28 7
15 2016-05-04 8
16 2017-11-07 9
17 2017-09-22 4
18 2017-04-04 6
```

Thank you

My Answer

The `naive` function needs an object of class `ts` or time-series to display graphics properly.

```
file_p <- paste0(getwd(), "/data/Frame.txt")
Frame <- read.table(file_p, stringsAsFactors = FALSE)
Frame$Time <- as.Date(Frame$Time, format = "%Y-%m-%d")
```

Here is your missing step:

```
Frame <- ts(Frame$Quantity, start = 1, end = NROW(Frame), frequency = 1)
```

Then proceed with the rest and your time scale should be much more accurate:

```
library(forecast)
TheForecast <- naive(Frame)
plot(TheForecast, xlab="Time", ylab="Quantity", main="Stock Quantity vs Time", type='l')
```

