Stats: An R Package for Statistics

by Shylock and Antonio

Abstract An abstract of less than 150 words.

Introduction

This paper will highlight how modern day Shylock would love to use the **stats** for his actuarial and money lending interests . The same could be applicable for Antonio for managing his risk properly had he analyzed and predicted his ship routes and data well.

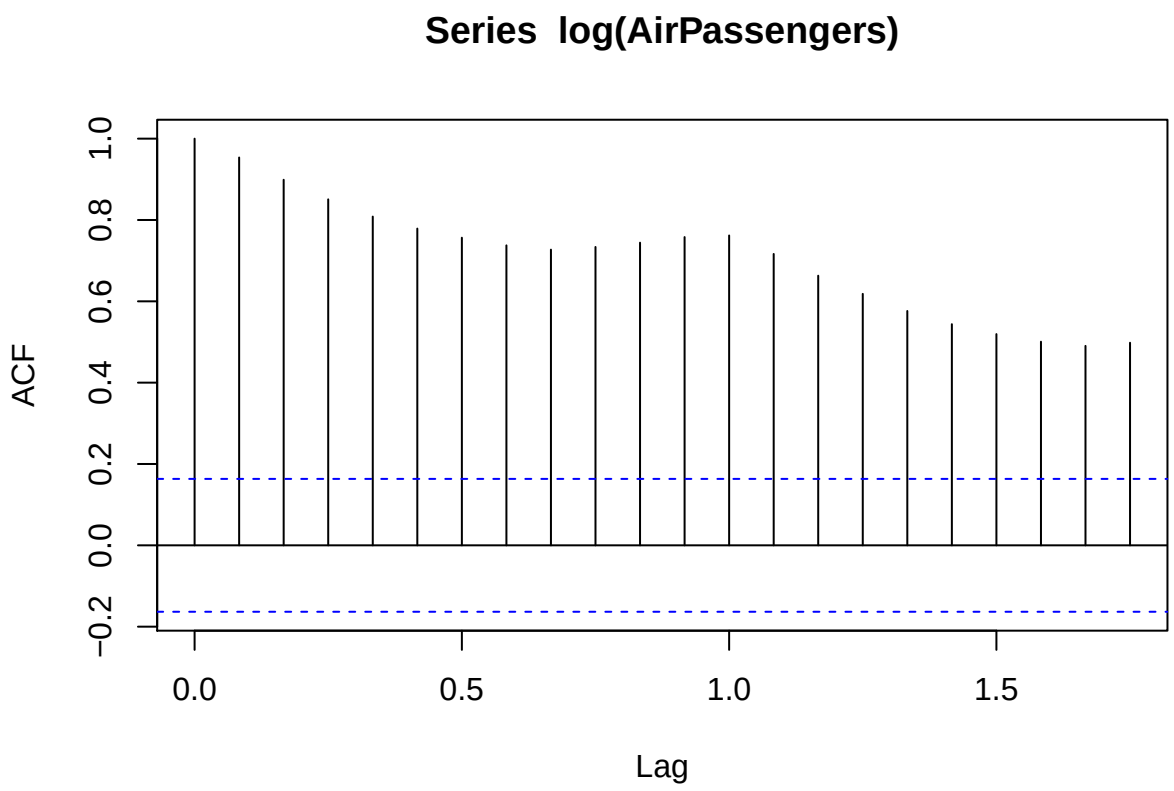
Background

I use the stats package a lot for my actuarial and general interest in data science. Hence this package is a daily driver for me. The various functions such as arima and acf help me in estimation and modelling of time series data.

Figure 1: A possible stat dashboard

A gallery of stats examples

1. The AutoCovariance of the log of AirPassengers data using the acf function.



2. Creating a ARIMA model for Air Passengers

```
#>
#> Call:
#> arima(x = log(AirPassengers), order = c(0, 1, 1), seasonal = list(order = c(0,
#>     1, 1), period = 12))
#>
#> Coefficients:
#>           ma1     sma1
#>       -0.4018  -0.5569
#> s.e.   0.0896   0.0731
#>
#> sigma^2 estimated as 0.001348:  log likelihood = 244.7,  aic = -483.4
```

Summary

We have demonstrated some Stat functions that are available in the package **stats**.

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