Assignment 2

Due Date: August 4, 2011, 14:00h

Data Set 2 contains the monthly beer consumption (thousands in liter) between years 1970-2009 in Neverland. Find the most appropriate stochastic time series model capturing the behavior of the beer consumption.

1. Analyze the level of the series by descriptive statistics (mean, standard deviation, kurtosis, skewness, Jargue-Bera etc.) and plot the graphs to determine certain patterns.
2. Analyze the structure of the series by checking correlogram (ACF, PACF, Q-Statistics and p-values) and check the cut-off points from these graphs.
3. Perform unit root test for stationarity.
4. Based on the steps above make any transformations or filtering (log, differencing) when necessary.
5. Estimate the model.
7. Forecast beer consumption for the first 6 months of 2010.
8. Interpret your results.

Remark: Each group should submit one set in draft and send a copy of the HW to the instructor by email (sevtap.kestel@vwl.uni-freiburg.de).