

Stat 463, Lab 9

November 10, 2006

This week we will be analyzing a number of data sets that are either monthly or quarterly. We are going to build SARIMA models using the steps outlined in class. Make sure to outline the steps used in analyzing the data. If there are two (or more) competing models, make sure you discuss each of these. Make a decision about which model you think is best and support this decision with plots and and other information. I suggest using the `sarima()` function to do these fits. Here are short summaries about the data sets to analyze.

1. The first data set (`labour.dat`) that we are going to analyze is the number of persons in the civilian labor force in Australia each month from Feb 1978 - Aug 1995. Take a look at the the data. You only need to do an analysis of the first 12 years (the first 144 observations), but discuss what you see in the full data set. There was a rather intense recession in Australia in 1990-1991.
2. The next data set (`ozone.dat`) is the monthly ozone concentration in Los Angeles from January 1955 to December 1972.
3. The final data set is `airline.dat`. This data consist of the monthly international airline passenger traffic from 1949-1956.

BONUS This time series (`fsales.dat`) is the company profits reported quarterly (NOT monthly) of a French company.