

*STAT 464: Time Series Analysis and
Spectrum Estimation*

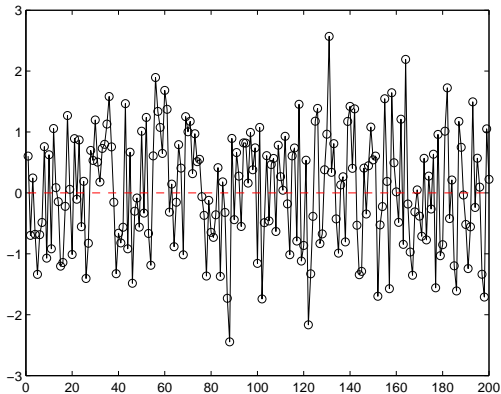
Lecture 3

September 15th, 2011



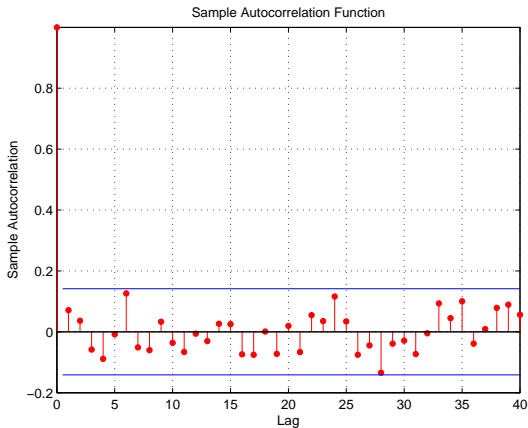
i.i.d. $N(0,1)$ sample

- A sample of 200 simulated points from an i.i.d. $N(0,1)$.



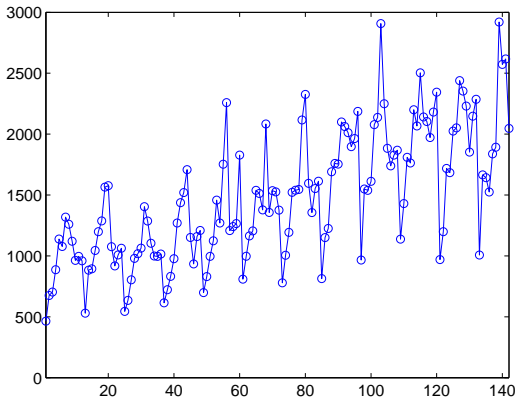
i.i.d. $N(0,1)$ sample (cont'd)

- Sample autocorrelation function (ACF) with lag 40 for a sample from an i.i.d. $N(0,1)$.



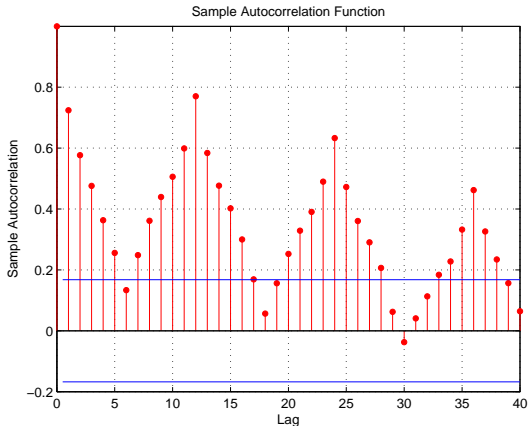
Australian Red Wine Sales

- Australian Red Wine Sales from January 1980 to October 1991.



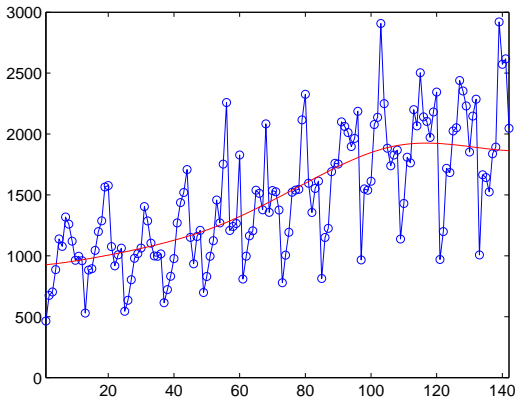
Australian Red Wine Sales (cont'd)

- Sample ACF with lag 40 for the Australian red wine sales data.



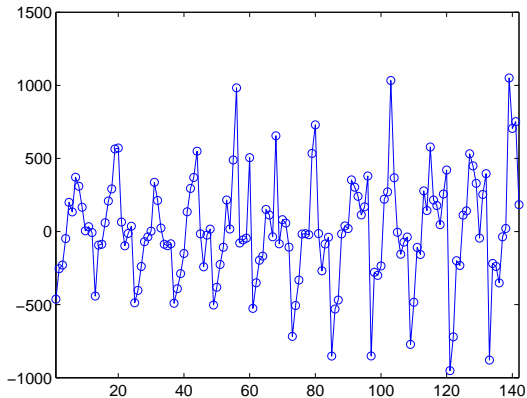
Australian Red Wine Sales (cont'd)

- Australian red wine sales data and its trend.



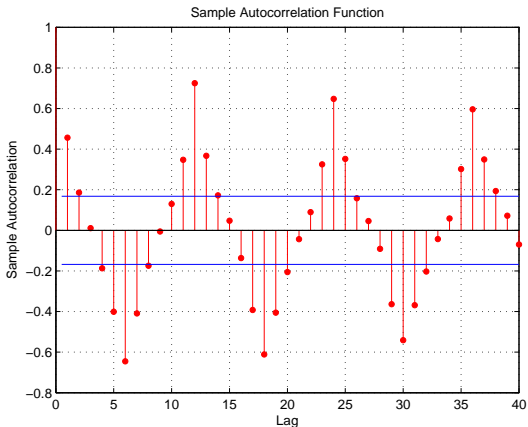
Australian Red Wine Sales (cont'd)

- Australian red wine sales data after subtracting the trend.



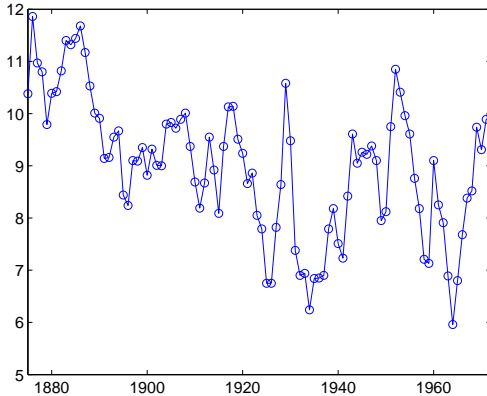
Australian Red Wine Sales (cont'd)

- The ACF with lag 40 for the detrended Australian red wine sales data.



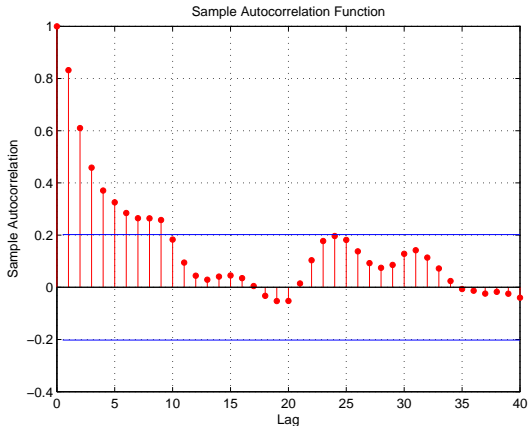
Lake Huron Level

- Lake Huron Level from 1875 to 1972 .



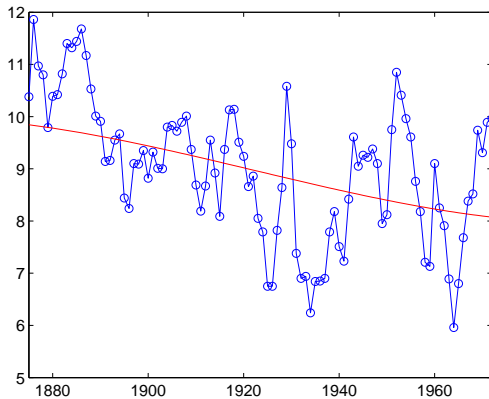
Lake Huron Level (cont'd)

- Sample ACF with lag 40 for the lake Huron level.



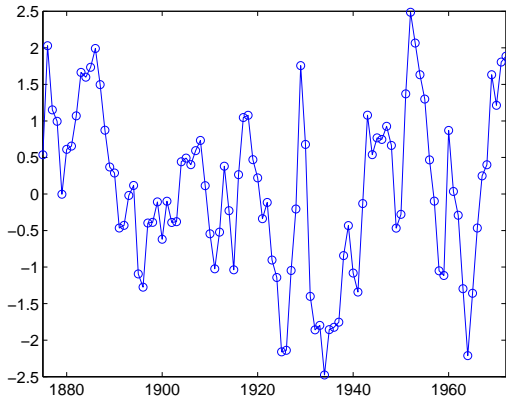
Lake Huron Level (cont'd)

- Lake Huron level and its trend.



Lake Huron Level (cont'd)

- Lake Huron level data after subtracting the trend.



Lake Huron Level (cont'd)

- The sample ACF with lag 40 for the detrended Lake Huron level.

