Home Assignment 6

The file lynx.txt provides annual numbers of lynx trappings for 1821–1934 in the Mackenzie River basin (the actual data form the third column of the file).

Do one of the following:

A. Take the logarithms of the data and fit a seasonal model to the logarithmic series.

– or –

B. Fit a seasonal model to the original time series.

– or –

C. Try fitting an AR(2) model <u>plus</u> a simple harmonic wave to the original data, as suggested in Campbell, M. J. and Walker, A. M. (1977). A Survey of statistical work on the Mackenzie River series of annual Canadian lynx trappings for the years 1821–1934 and a new analysis. *Journal of the Royal Statistical Society* series A, 140, 411–431.

(We do not appear to have a free access to this paper.)

You can do all three parts, but just one will be enough to complete this Assignment.

Have fun, PFG