Istanbul Technical University

Department of Civil Engineering

Hydraulics and Water Resources Engineering Graduate Program

Stochastic Modelling Techniques in Hydrology

Spring Semester

Assignment-2

Determination of correlation coefficient is based on two basic assumptions which are normal distribution and linearity. For the time series data you used in Assignment-1:

1. Plot a normal distribution function and check whether the data is normally distributed or not
2. Check the linearity of the data
3. Calculate autocorrelation coefficients for up to 12 lags (k) and plot the correlogram which is autocorrelation coefficient versus k. Also, comment on the relationship between autocorrelation coefficients and lags.