

Statistical Process Control and R: A cautious beginning

SVEN KNOTH

Department of Statistics, European University Viadrina, Frankfurt (Oder), Germany

A lot of monographs were written about the area of statistics called Statistical Process Control. Moreover, in nearly all commercial statistical packages some SPC routines are included. Up to now, it is not possible to call a R function for computing, e. g., the Average Run Length (ARL) of an EWMA control chart. Additionally, R provides a fine framework for timely incorporating new results of computing SPC relevant quantities. Thus, it is time for designing a SPC package for R. The talk will give an impression of a very early state of a SPC package, which allows to compute the (zero-state) ARL and steady-state ARL of EWMA and CUSUM control charts. Naturally, the ideas and solutions have to be discussed more intensively than for mature R packages and each SPC and/or R user/developer is invited to debate the whole thing.