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Abstract: Multivariate Statistical Process Control is used for monitoring and controlling a process, when the quality of the process is related $p > 1$ correlated variables. Furthermore, a rather interesting problem regarding multivariate statistical process control is the interpretation of an out-of-control signal which means the identification of the responsible variable(s) which led the process to be out-of-control. To overpass the identification problem, the researchers have proposed interesting techniques over the years. In this paper, we initially present an extensive literature review for monitoring the process dispersion and finally we describe different methods for interpreting the out-of-control signal of a multivariate control chart for process dispersion.

Keywords: Multivariate Control Charts, Multivariate Dispersion.