Discriminant analysis of water quality data in Langat River

ABSTRACT

River monitoring processes usually generate large databases of water quality variables. These water quality variables are important to identify the status of the river. Due to multidimensionality of complex characteristics in river water, meaningful information from a large database can be extracted by using multivariate statistical methods, i.e., discriminant analysis (DA). Appropriate univariate transformation and data screening for multivariate outlierøs detection were considered. The DA approach used in this study gave better information on river water quality, especially concerning the contribution of the variables in discriminating between the three spatial areas in Langat River.

Keyword: Discriminant analysis; Water quality; Cluster analysis; Langat River