Evidence of seawater incursion due to over-exploitation of groundwater in a small tropical island: A statistical multivariate analysis.

Abstract

In this paper, the differences of statistical outputs based on correlation analysis, cluster analysis and multiple linear stepwise regression analysis were useful to understand the seawater incursion due to over-exploitation of groundwater in Manukan Island. Therefore, the statistical multivariate analysis can be proposed and employed to hydrochemical data in order to see the changes due to anthropogenic activities in the future.

Keyword: Seawater incursion; Tropical island; Multivariate analysis.