Abstract:

Kuelpnaj porphyry copper mineralization is situated in the Urmieh-Dokhtar volcano-plutonic arc in the Kerman copper belt and is located near Sarcheshmeh deposit (20 km SE of it). Geochemical data includes 612 rock samples that are analyzed for 43 elements. In this study, Data were normalized using a BOX-COX method. Univariate statistical techniques ([Medin+2MAD], [Median+2Std], [Median+3Std]) and multivariate statistical technique of principal component analysis have been used in this study over geochemical data. The results are compared with each other and it is shown that nonparametric method of MAD statistics can highlight more efficient the position of the anomalies. The PCA technique of the third factor is introduced as a factor Mineralization.

Keywords: EDA, Univariate statistical, Principal Components Analysis, Kouhpnj