Eléments simples d'identification d'anomalies géochimiques par statistique: aspects miniers et environnementaux

The present paper discusses some useful criteria to identify natural or anthropogenic geochemical anomalies. Such an identification can be done with simple univariate statistical tools. First, simple statistical parameters are reminded. In order to determine the applicability of the normal and log-normal distributions, the signification of those distributions is discussed. The relation between the grades' histogram shape and the type of the anomaly and sampling support is emphasized. Histograms are considered to be a good approximation of the true distributions, thus allowing to try an identification of one or more populations with the probability plots. If an anomalous distribution is detected, it is possible to define criteria to delineate zones where the concentrations are abnormal. The problematic of this approach is shown through examples. Its efficiency is essentially due to its rapidity and well structured processes.