

Abstract

The term regionalized variable is used to designate any variable distributed in space. Almost all variables encountered in Earth Sciences can be considered as regionalized variables. Since such variables are characterized by spatial correlation, it is essential to take this correlation into account in estimation of these variables. Among numerous techniques applied to estimate regionalized variables, only kriging is fully based on the spatial correlation, leading to the minimum variance unbiased estimates.

This presentation will focus on the development and application of ordinary kriging technique. After introducing the properties of kriging, the derivation of kriging system and the step-by-step application involving two-sample case will be presented. This will be followed by a brief review of common types of kriging techniques.

Tea and Coffee will be served