

# Cokriging vs. Kriging

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June 10, 2021

## Abstract

There have been many studies for analysing univariate spatial data regarding modeling, estimation, and prediction, called kriging, in the past decades. Statistical modelling and estimation with multivariate spatial data have been also well developed. the spatial prediction using multivariate spatial data called co-kriging is relatively less investigated. The cokriging is usually considered as being superior to the kriging. But, how good is the cokriging ? In this work, through empirical and theoretical comparison, we found that the expected superiority did not obviously appear under some covariance model assumptions and sampling schemes.

*Keywords: multivariate; univariate; spatial prediction; kriging; co-kriging*