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<u>résumé</u> :
This work proposes to generalize the method of kriging when data are spatially sampled curves. A spatial functional linear model is constructed including spatial dependencies between curves. Under some regularity conditions of the curves, an ordinary kriging system is established in the infinite dimensional case. From a practical point-of-view, the decomposition of the curves into a functional basis boils down the problem of kriging in infinite dimension to a standard cokriging on basis coefficients.
The methodological developments are illustrated with temperature profiles sampled with dives of elephant seals in the Antarctic Ocean. The projection of sampled profiles into a Legendre polynomial basis is performed with a regularization procedure based on spline smoothing which uses the variance of the sampling devices in order to estimate coefficients by quadrature.

<u>Réf</u> :
Nerini, D., Monestiez, P. & C., Mant e (2010) Cokriging for functional data, J. Mult. Anal. 101, 409-418