Gaussian Processes for Optimal Sensor Position
Master Project
Background and Progress Report

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1 Project Description

1.1 Summary

Gaussian processes (GP) have been widely used since the 1970's in the fields of geostatistics and meteorology. Current applications are in diverse fields including sensor placement In this project, we propose the employment of a GP model to calculate the optimal spatial positioning of sensors to study and collect air pollution data in big cities. We will then validate the results by means of a data assimilation software with the data at the proposed positions.

1.2 Data

London South Bank University (LSBU) air pollution data (velocity, tracer)