

COA 615 Geostatistics in Environmental Sciences

Homework 3

Assigned: September 27, 2016

Due: Oct 4, 2016

In this homework, you will continue to examine data on atmospheric deposition in the upper Midwest and northeastern United States.

Perform a more detailed analysis of spatial variation in  $H^+$  deposition. You need to fit three different families of variograms model (Sph, Exp, Gau) to the empirical variogram computed by the `variogram()` function using weighted least squares. You may do the analysis on the original data or make a transformation (e.g. log data) if you like. Try different weight methods (`fit.method = 1, 2, 6, 7`). Choose the best model based on residual sum of squares.