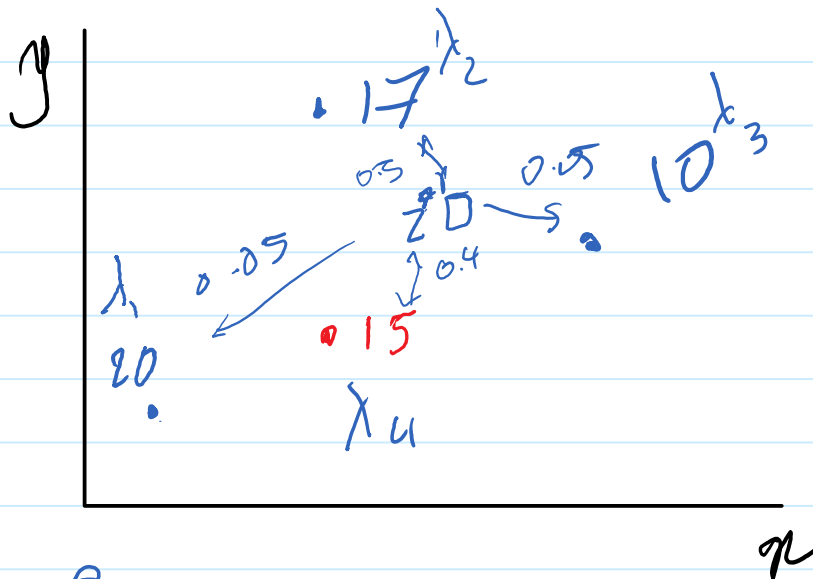


Gaussian Process (Kriging) Geostatistics

Sunday, September 6, 2020

6:05 PM

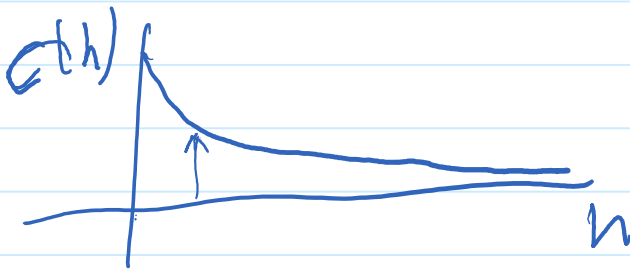


$$\gamma(h) = 1 - C(h)$$

Variogram

$$\sum \lambda_i = 1$$

$$Z^p = \sum \lambda_i Z_i = \lambda_1(20) + \lambda_2(17) + \lambda_3(10) + \lambda_4(15)$$



$$Z^* = \sum \lambda_i Z_i$$

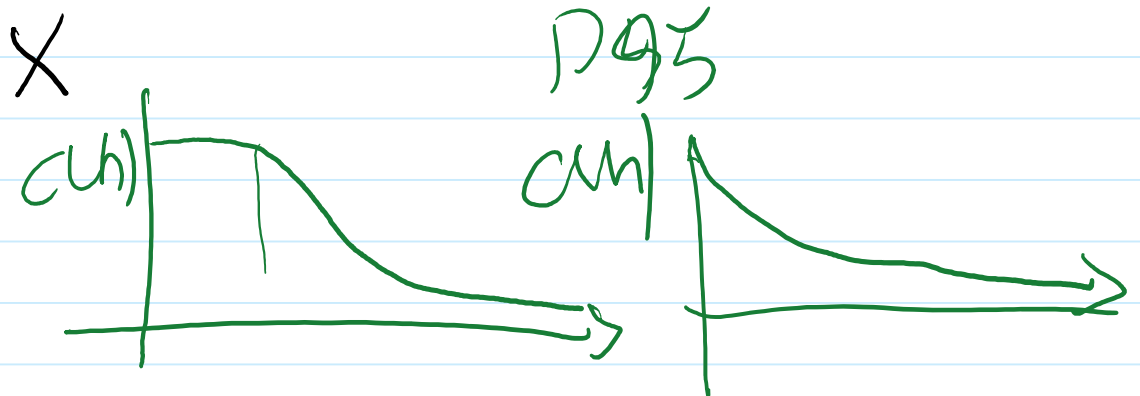
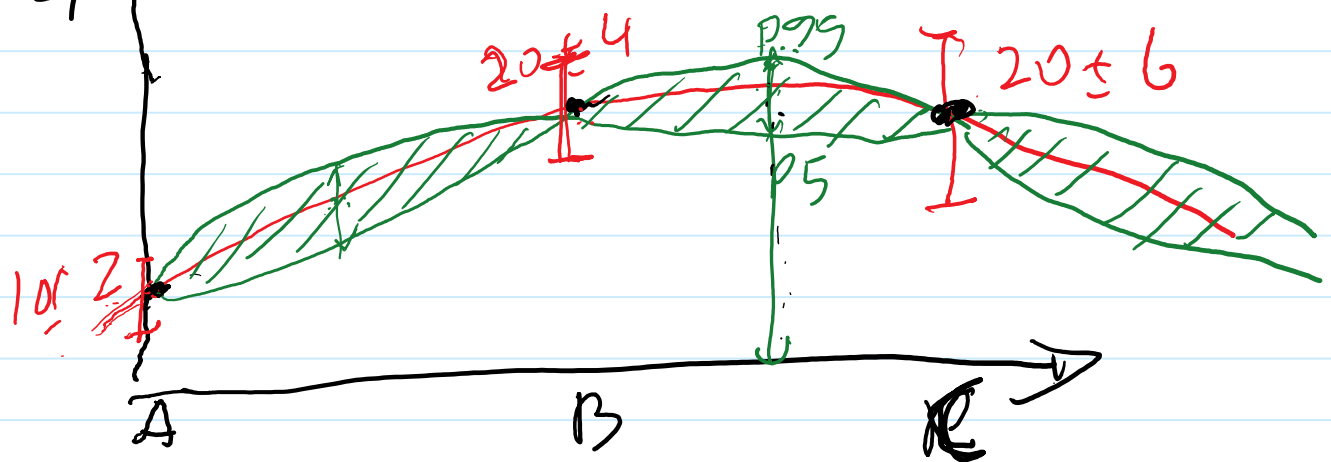
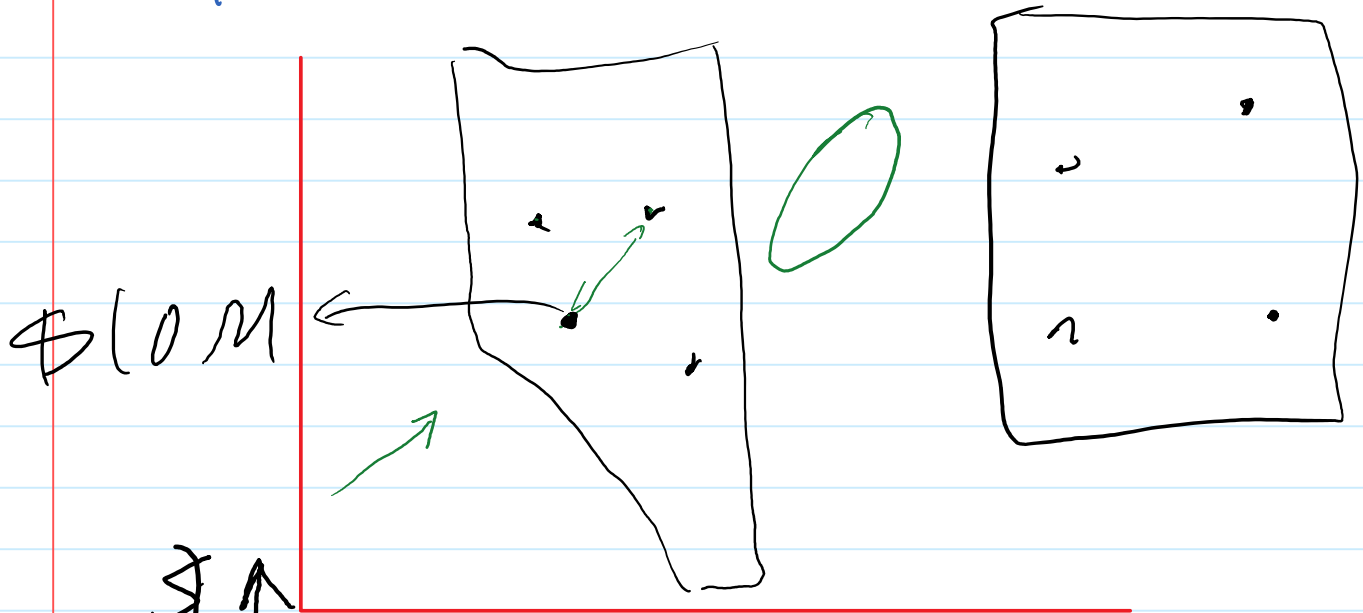
$$E(\bar{Z} - Z^*) = 0 \quad E\left(\sum \lambda_i Z_i - \bar{Z}\right) = 0$$

$$\sum \lambda_i E(Z_i) - E(\bar{Z}) = 0$$

$$\sum \lambda_i m - m = 0$$

$$\begin{aligned} &\rightarrow m=0 \\ &\rightarrow \sum \lambda_i = 1 \end{aligned}$$

$$\min_{x_i} E(z - \bar{z})^2 \Rightarrow$$



$C(h)$ 