

Problem:

We have station

$x$  data, coarse grid.

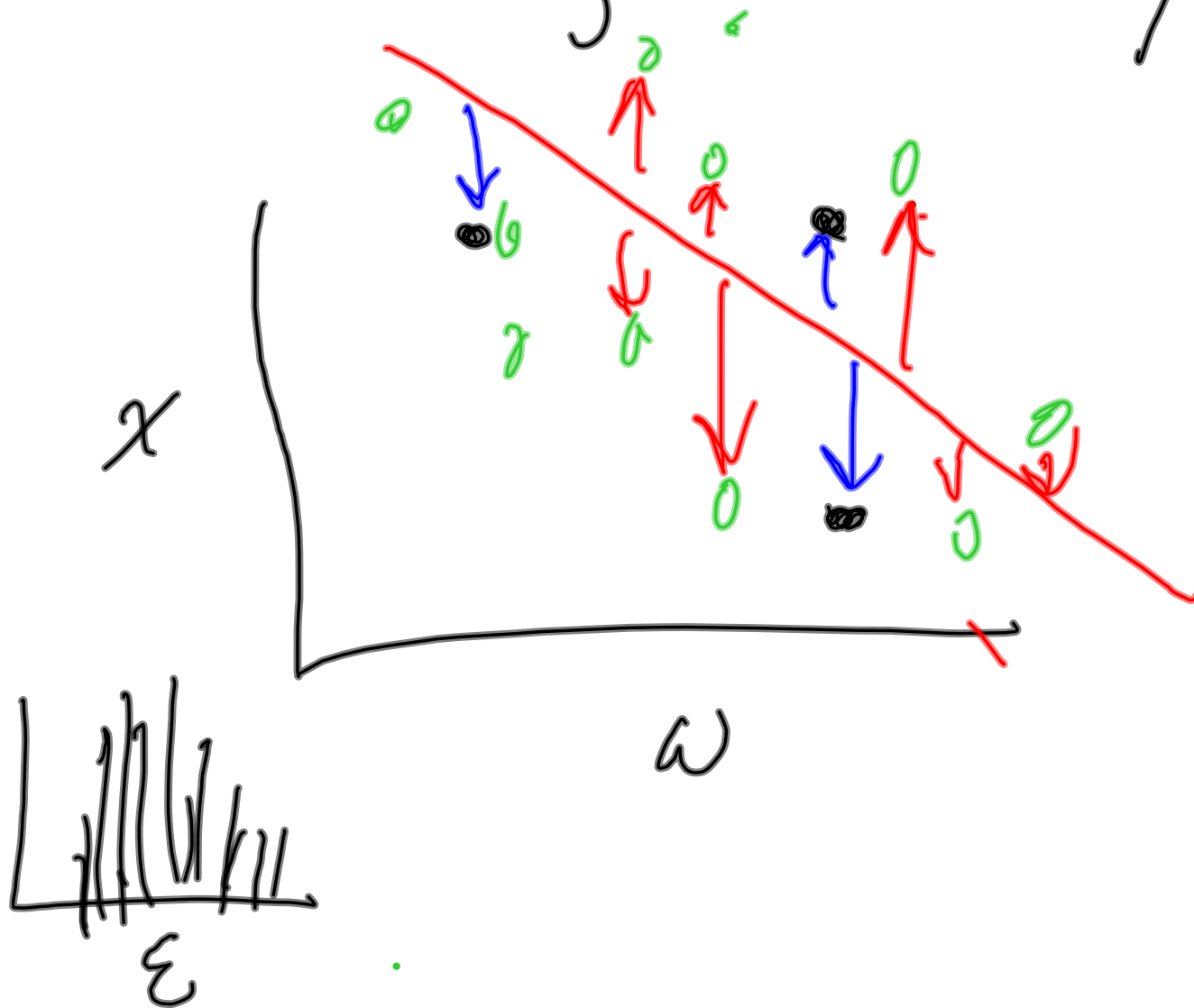
We have covariates

$w$  data, Fine grid

We want to interpolate  
(predict) station variable  
on fine grid

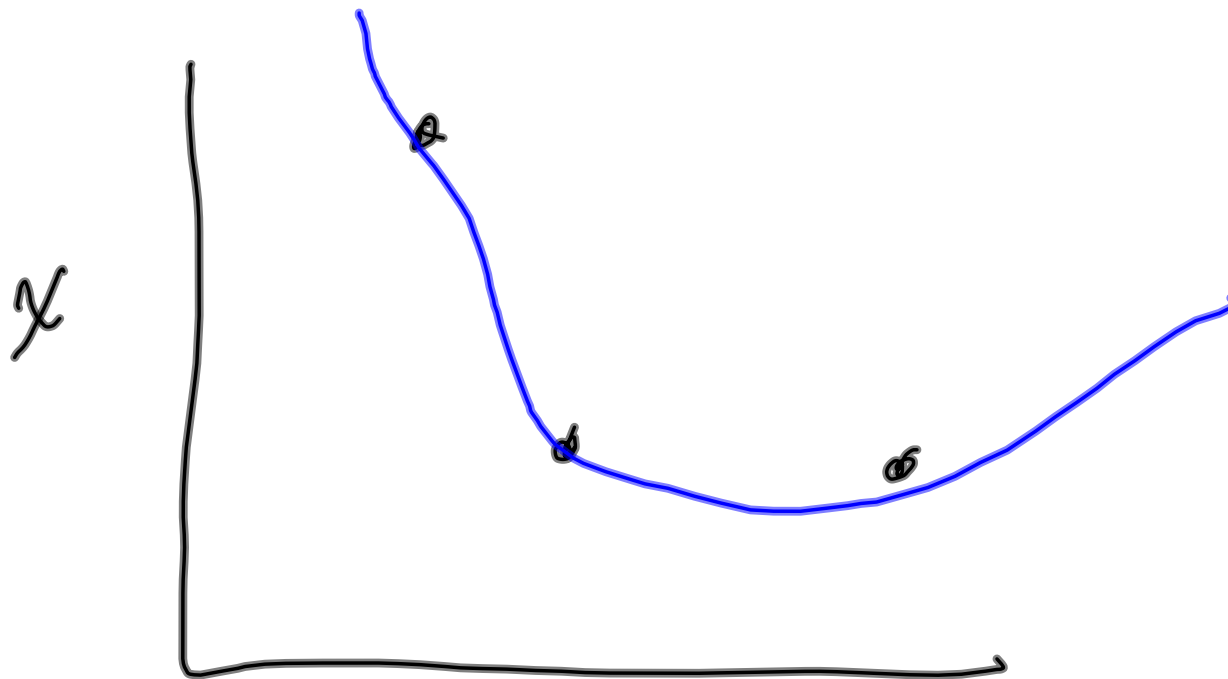
Solution Strategy A  
Multiple regression  
$$x_{\text{observed}} = \mu(\underline{w}) + \epsilon$$

# Linear regression metaploz.



Regression sample size  
if the station  
observations

Do we regression on  
that station sized  
data set  
trust  $\frac{\sigma}{\sigma}$   
or cross-validate



quadratic  $w$

Step II. After  
regress, map residuals,  
look spatial pattern

$x$  predicted

