## **IDW Cross-validation Report**

$$\hat{z}(x_0) = \sum_{i=1}^{k} \frac{w_i z_i}{w_i}$$
, where  $w_i = \frac{1}{d(x_0, x_i)^p}$ 

 $x_0$ : location to interpolate

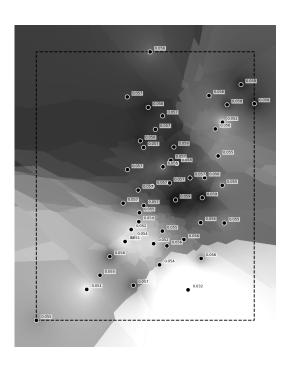
xi: known data point location

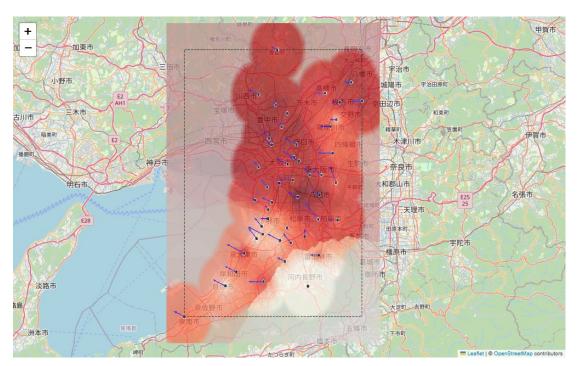
 $z_i$ : known value at  $x_i$ 

 $d(x_0, x_i)$ : distance between  $x_0$  and  $x_i$ 

 $w_i$ : weight of  $z_i$ 

p: power parameter (controls weight decay)
k: number of nearest neighbors





k	рF	RMSE	MAE	$R^2$
5	1.00	0.00389	0.00186	0.025
5	1.20	0.00389	0.00187	0.024
5	1.50	0.00389	0.00189	0.023
5	2.00	0.00389	0.00191	0.021
6	1.00	0.00384	0.00191	0.048
6	1.20	0.00384	0.00192	0.047
6	1.50	0.00385	0.00192	0.046
6	2.00	0.00385	0.00194	0.042
7	1.00	0.00383	0.00190	0.056
7	1.20	0.00383	0.00190	0.055
7	1.50	0.00383	0.00191	0.053
7	2.00	0.00384	0.00193	0.048
9	1.00	0.00386	0.00189	0.039
9	1.20	0.00386	0.00190	0.040
9	1.50	0.00386	0.00191	0.040
9	2 00	0.00386	0.00193	0.037