

Simple Kriging Cross-validation Report

$$\hat{z}(x_0) = \sum_{i=1}^n \lambda_i z(x_i)$$

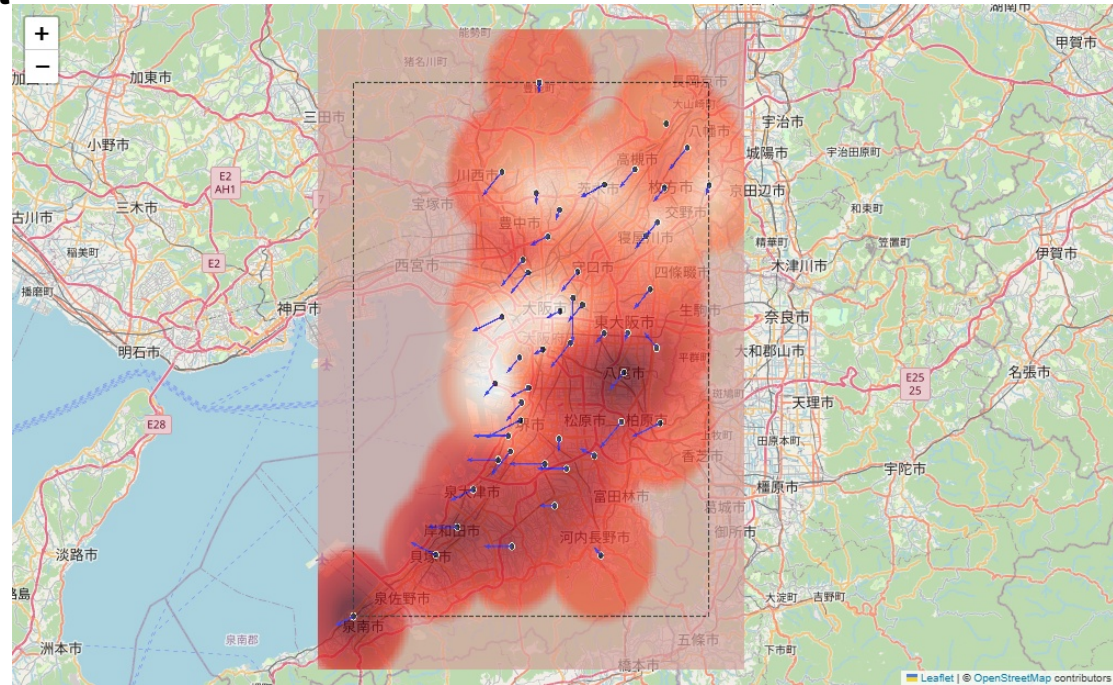
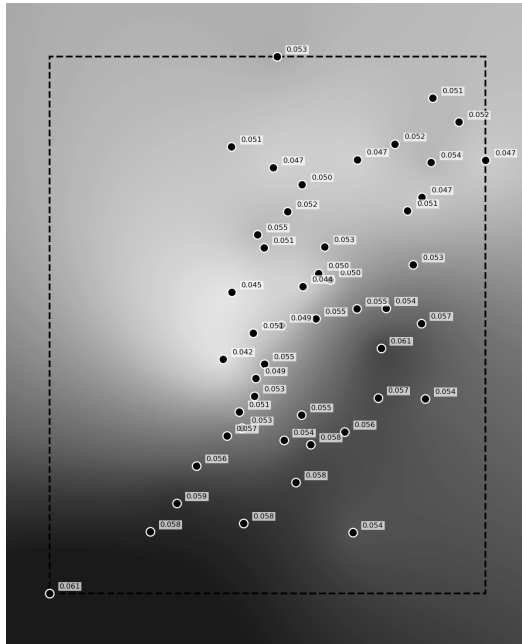
$\hat{z}(x_0)$: estimated value at location x_0

$z(x_i)$: known value at location x_i

λ_i : Kriging weight for $z(x_i)$, based on spatial correlation

$\sum \lambda_i = 1$: weights sum to 1 (unbiasedness condition)

Weights depend on variogram model (e.g., exponential, spherical...)



Model	Transform	RMSE	MAE	R ²
linear	none	0.00319	0.00257	0.426
linear	log	0.00319	0.00258	0.423
linear	sqrt	0.00319	0.00257	0.425
gaussian	none	0.00341	0.00273	0.343
gaussian	log	0.00343	0.00276	0.336
gaussian	sqrt	0.00342	0.00274	0.340
exponential	none	0.00354	0.00271	0.290
exponential	log	0.00355	0.00274	0.287
exponential	sqrt	0.00355	0.00272	0.289
spherical	none	0.00350	0.00273	0.307
spherical	log	0.00352	0.00275	0.302
spherical	sqrt	0.00351	0.00274	0.305

