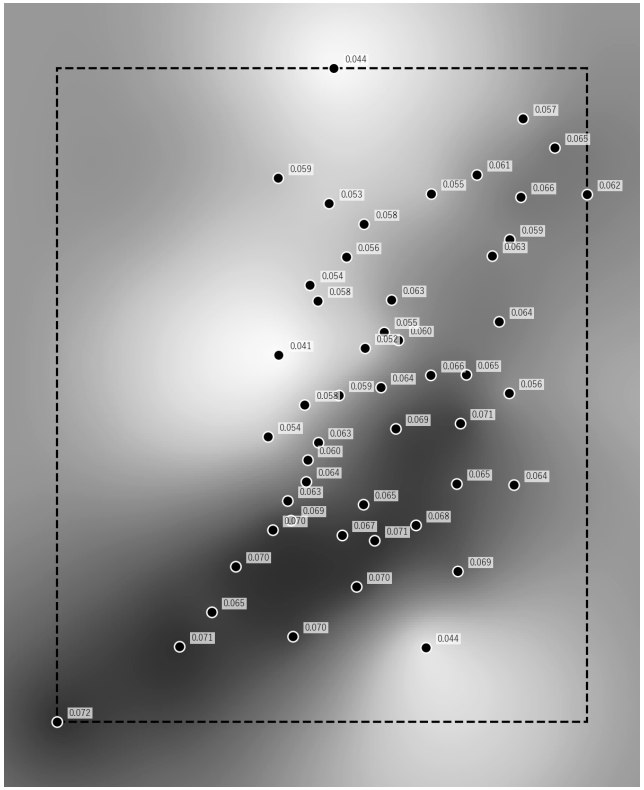
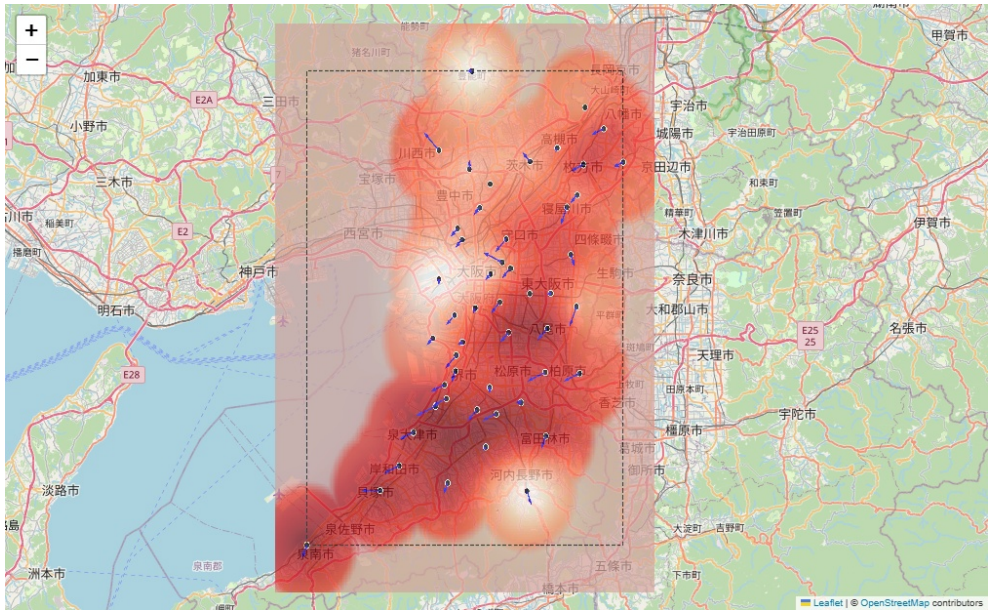
Simple Kriging Interpolation - 大阪府 - 2025/5/12 19H

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

$\hat{z}(x_0)$: 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...)





Variogram	Transform	RMSE	MAE	R^2
linear	none	0.00614	0.00422	0.269
linear	log	0.00620	0.00430	0.254
linear	sqrt	0.00617	0.00426	0.261
gaussian	none	0.00611	0.00445	0.275
gaussian	log	0.00650	0.00448	0.180
gaussian	sqrt	0.00650	0.00444	0.182
exponential	none	0.00611	0.00439	0.276
exponential	log	0.00622	0.00456	0.251
exponential	sqrt	0.00626	0.00454	0.239
spherical	none	0.00599	0.00434	0.304
spherical	log	0.00610	0.00437	0.278
spherical	sqrt	0.00615	0.00437	0.266