

## GPR hyperparameters

Values are given in pixels (approximately 1.317 micrometers)

Dataset	Theta_signal	Sigma_noise_x	Sigma_noise_y	Theta_width_x	Theta_width_y
Pipe	5.0538	0.5904	0.0514	340.84	3645.6
Flow1	0.0391	0.0214	0.0225	56.9099	91.4234
Flow9	0.0782	0.0235	0.0247	43.3828	52.5646
Flow14	0.2260	0.0260	0.0292	41.8433	41.5762
Flow1half1	0.0378	0.0221	0.0240	56.5072	304.0608
Flow1half2	0.0375	0.0201	0.0219	70.6848	135.6431
Flow9half1	0.0665	0.0228	0.0208	52.0533	50.5249
Flow9half2	0.076	0.0259	0.0246	72.052	59.8033
Flow14half1	0.2244	0.0364	0.0356	58.9953	51.5078
Flow14half2	0.2262	0.0350	0.0323	56.7784	49.9569
Flow1evens	0.0626	0.0213	0.0222	35.3056	25.8593
Flow1odds	0.0542	0.0173	0.0234	33.4558	61.0201
Flow9evens	0.1345	0.0308	0.0293	48.7030	43.1162
Flow9odds	0.1332	0.0301	0.0280	59.2300	41.7069
Flow14evens	0.4334	0.0571	0.0640	59.5662	48.7781
Flow14odds	0.4383	0.0669	0.0703	61.8907	45.5231