

Table 1: Comparison of our forecast-corrupt-denoise approach with GPs with standalone forecasting models with higher number of layers (parameters) denoted by \dagger sign. Initially, the number of layers for our proposed model and other baselines are chosen from $\{1, 2\}$, however to show that the performance of our model indeed stems from its mechanism, we included the results of stand-alone forecasting models with number of layers chosen from $\{3, 4\}$. Results are reported as average and standard error of **MSE**. A lower **MSE** indicates a better forecasting model.

Dataset	Horizon	AutoDG(Ours)	Autoformer	Autoformer †	InfoDG(Ours)	Informer	Informer †
Traffic	24	0.392 \pm 0.006	0.412 \pm 0.006	0.359 \pm 0.007	0.398 \pm 0.006	0.421 \pm 0.006	0.422 \pm 0.009
	48	0.387 \pm 0.001	0.422 \pm 0.007	0.383 \pm 0.001	0.399 \pm 0.001	0.434 \pm 0.001	0.486 \pm 0.010
	72	0.380 \pm 0.001	0.383 \pm 0.002	0.442 \pm 0.006	0.380 \pm 0.001	0.436 \pm 0.001	0.412 \pm 0.003
	96	0.385 \pm 0.003	0.400 \pm 0.004	0.416 \pm 0.001	0.397 \pm 0.003	0.402 \pm 0.003	0.408 \pm 0.005
Electricity	24	0.165 \pm 0.001	0.187 \pm 0.003	0.242 \pm 0.007	0.193 \pm 0.001	0.222 \pm 0.001	0.266 \pm 0.001
	48	0.188 \pm 0.003	0.203 \pm 0.008	0.232 \pm 0.005	0.222 \pm 0.002	0.262 \pm 0.002	0.293 \pm 0.002
	72	0.209 \pm 0.004	0.230 \pm 0.001	0.263 \pm 0.004	0.238 \pm 0.001	0.280 \pm 0.003	0.310 \pm 0.002
	96	0.211 \pm 0.001	0.230 \pm 0.014	0.224 \pm 0.004	0.242 \pm 0.001	0.289 \pm 0.002	0.327 \pm 0.003
Solar	24	0.446 \pm 0.002	0.472 \pm 0.003	0.524 \pm 0.001	0.455 \pm 0.009	0.524 \pm 0.003	0.498 \pm 0.001
	48	0.546 \pm 0.005	0.603 \pm 0.003	0.622 \pm 0.001	0.556 \pm 0.005	0.629 \pm 0.003	0.690 \pm 0.031
	72	0.666 \pm 0.003	0.667 \pm 0.004	0.701 \pm 0.004	0.643 \pm 0.003	0.729 \pm 0.023	0.716 \pm 0.024
	96	0.713 \pm 0.004	0.739 \pm 0.009	0.744 \pm 0.002	0.708 \pm 0.004	0.770 \pm 0.004	0.738 \pm 0.0015