

Figure 1: Example forecast of three treatments on the **Traffic** dataset for 96 future time steps using the Autoformer forecasting model. The values are plotted in Z-score normalized space. Standalone Autoformer model a) generally tracks the ground-truth, albeit fine-grained features are only roughly reproduced. Autoformer with isotropic corruption and denoising b) yields a higher MSE with forecasts containing many jitters leading to inaccurate local behavior. Our proposed Autoformer with Gaussian Process corruption and denoising produces the most accurate forecasts by accurately predicting coarse-grained behavior of peaks and valleys, as well as fine-grained behavior such as smooth slopes, details and better extreme values prediction.

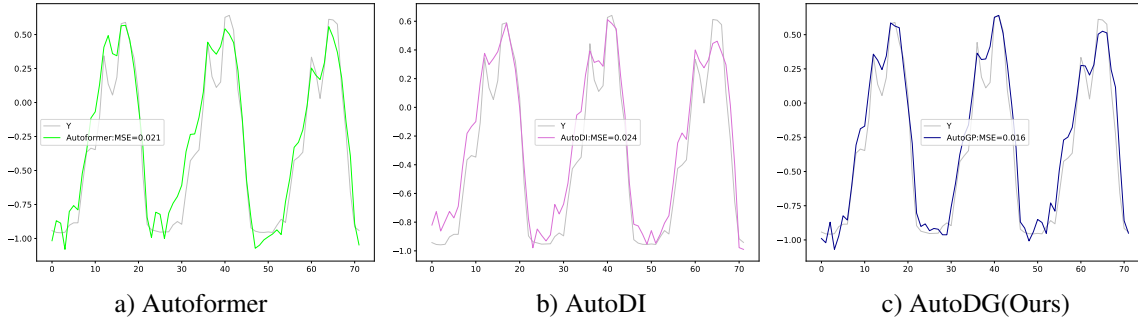


Figure 2: Example forecast of three treatments on the **Electricity** dataset for 96 future time steps using the Autoformer forecasting model. The values are plotted in Z-score normalized space. Standalone Autoformer model a) generally tracks the ground-truth, albeit fine-grained features are only roughly reproduced. Autoformer with isotropic corruption and denoising b) yields a higher MSE with forecasts containing jitters leading to inaccurate local behavior. Our proposed Autoformer with Gaussian Process corruption and denoising produces the most accurate forecasts by accurately predicting coarse-grained behavior of peaks and valleys, as well as fine-grained behavior such as smooth slopes, details and better extreme values prediction.

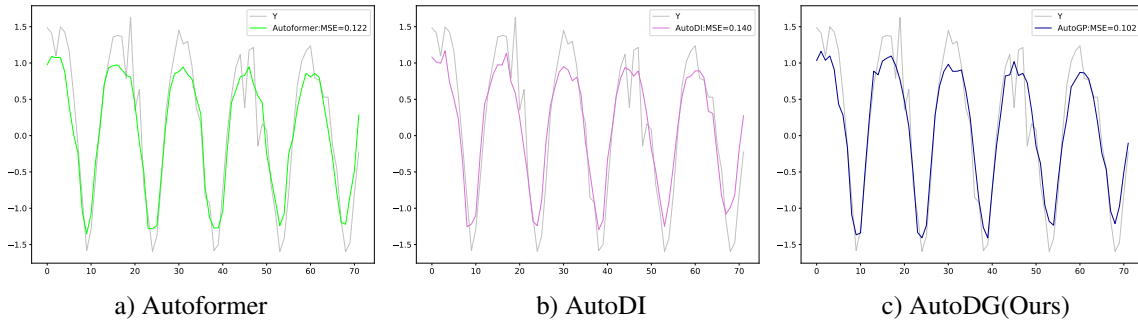


Figure 3: Example forecast of three treatments on the **Solar** dataset for 96 future time steps using the Autoformer forecasting model. The values are plotted in Z-score normalized space. Standalone Autoformer model a) generally tracks the ground-truth, albeit fine-grained features are only roughly reproduced. Autoformer with isotropic corruption and denoising b) yields a higher MSE with less accurate local behavior (e.g. prediction of extreme values). Our proposed Autoformer with Gaussian Process corruption and denoising produces the most accurate forecasts by accurately predicting coarse-grained behavior of peaks and valleys, as well as fine-grained behavior such as smooth slopes, details and better extreme values prediction.