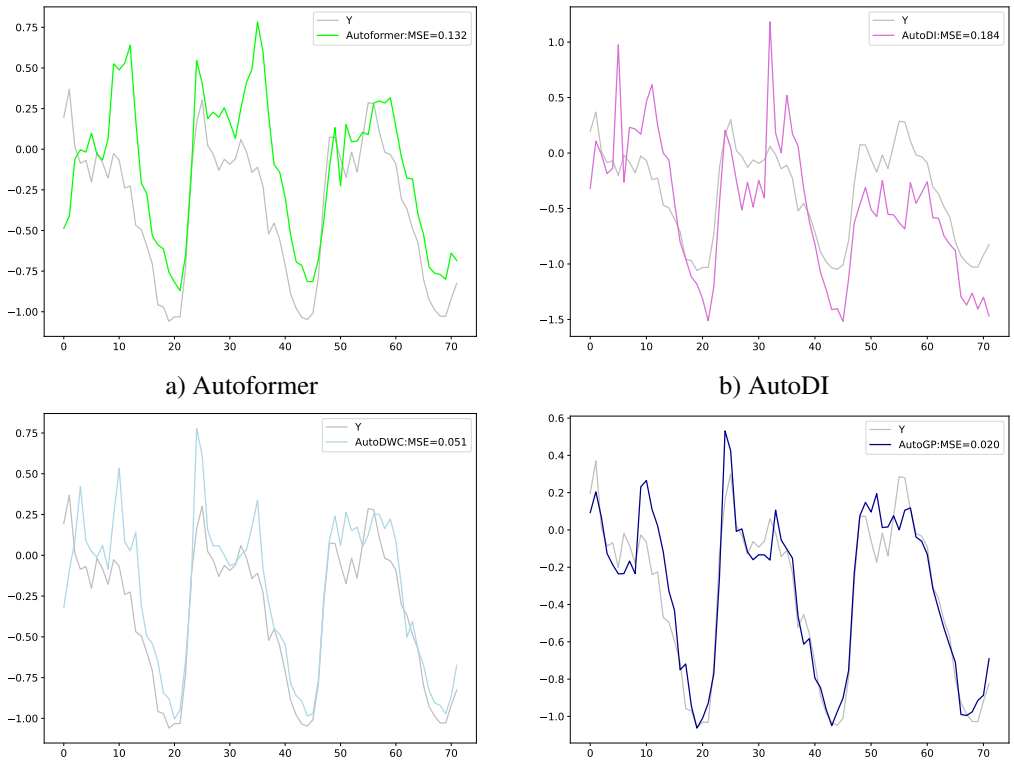


a) Autoformer b) AutoDI

c) AutoDWC d) AutoDG(Ours)

Figure 1: Example forecast of four treatments on the **Traffic** dataset for 72 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 not accuratelt reproduced. Autoformer with isotropic corruption and denoising (AutoDI) b) yields a higher MSE with forecasts containing many jitters leading to inaccurate local behavior. Denoising without corruption (AutoDWC) c) yield a better MSE but fine-grained features including details and extreme values are not accurately reproduced. Our proposed Autoformer with Gaussian Process corruption and denoising (AutoDG) d) 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.

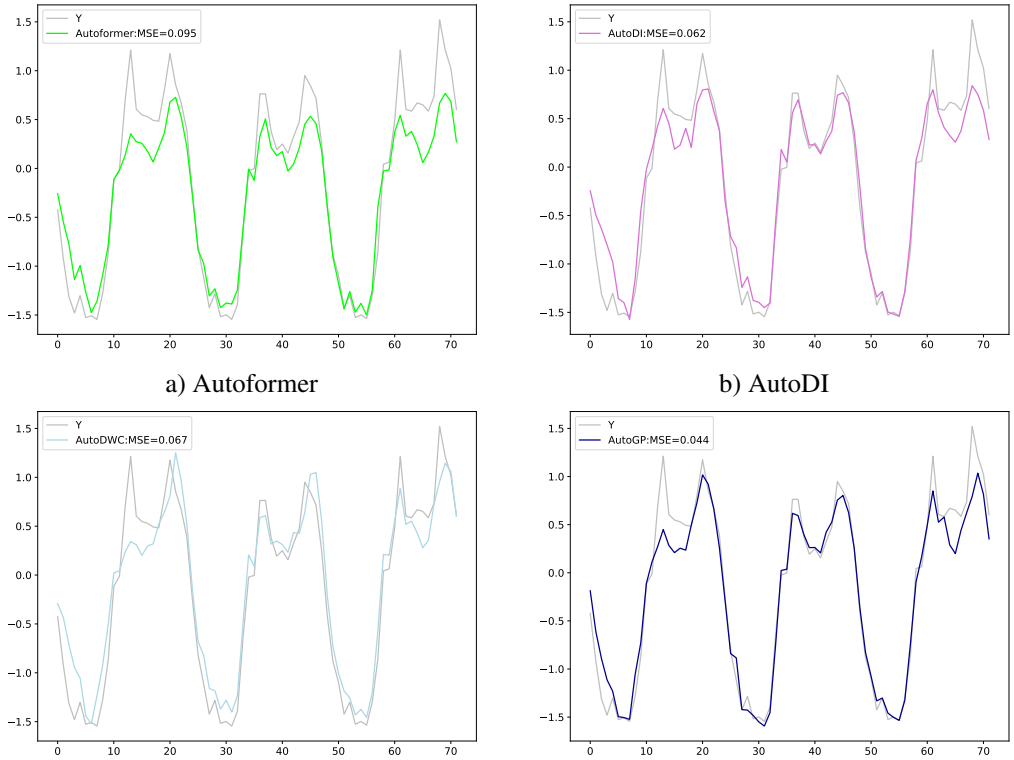
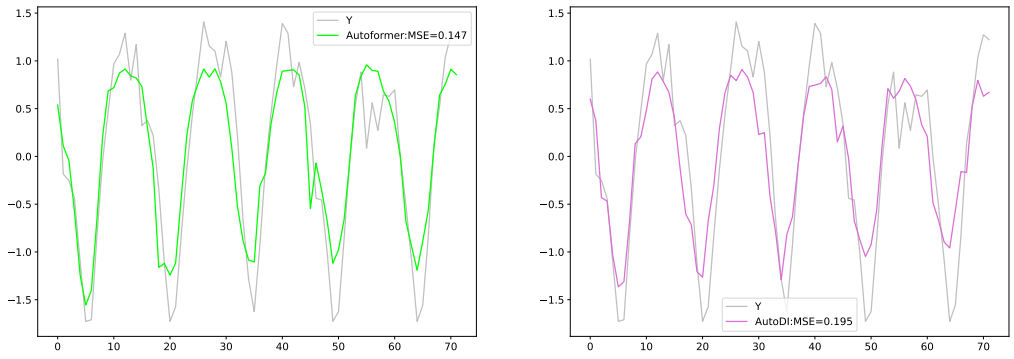


Figure 2: Example forecast of four treatments on the **Electricity** dataset for 72 future time steps using the Autoformer forecasting model. The values are plotted in Z-score normalized space. Standalone Autoformer model a) generally tracks the ground-truth, albeit fine-grained features are only roughly reproduced. Autoformer with isotropic corruption and denoising (AutoDI) b) yields a lower MSE with fine-grained features being more accurately predicted. Denoising without corruption (AutoDWC) c) yields a better MSE than Autoformer a), however fine-grained features are less accurately predicted than AutoDI. Our proposed Autoformer with Gaussian Process corruption and denoising (AutoDG) d) 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.



a) Autoformer b) AutoDI

c) AutoDWC d) AutoDG(Ours)

Figure 3: Example forecast of four treatments on the **Solar** dataset for 72 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). Denoising without corruption (AutoDWC) c) yields a higher MSE than Autoforme a) with fine-grained features being less accurately predicted. Our proposed Autoformer with Gaussian Process corruption and denoising (AutoDG) d) 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.