

TimeDC Additional Experiments

Effect of Expert Trajectory Numbers

We study the effect of the number of expert trajectories on *Weather* as shown in the following Table. From the Table, we can easily observe that as the increase of the Trajectories number, the performance of TimeDC gets better. This is because more expert trajectories may bring more knowledge, which gives more guidance on time series dataset condensation.

Trajectory Number (PL=96)	MAE	RMSE	Trajectory Number (PL=192)	MAE	RMSE
1	0.341	0.303	1	0.349	0.311
3	0.324	0.286	3	0.332	0.296
5	0.306	0.275	5	0.325	0.279
10	0.257	0.188	10	0.285	0.247

Time Comparison Among Coreset Methods and TimeDC

We present the time of coreset construction and training time of coreset methods and TimeDC as follows, which shows the training time of TimeDC is comparable with those of coreset methods.

Dataset	Weather				ETTh1			
Method (PL = 96)	Random	K-means	Herding	TimeDC	Random	K-means	Herding	TimeDC
Coreset Construction Time (s)	1.85	10.14	63.66	None	2.00	6.07	69.01	None
Training Time (s)	20.37	20.40	20.38	20.41	9.54	9.56	9.55	9.56

Precisions on Time Series Classification

We also record the overall precision results on the task of time series classification. The results are as follows. TimeDC achieves the best performance among all the baselines.

