

Figure 1: Visualization of Chimera decomposition of time series on **(Left)** ECL, **(Middle)** ETTm1, and **(Right)** Traffic.

Table 2: Ultra-long-range forecasting results.

Chimera			Chimera (w/o MCL)			TimesNet		PatchTST	
	MSE	MAE		MSE	MAE		MSE	MAE	
ECL	1440	0.5721	0.5538	0.6143	0.5976	0.6119	0.5962	0.8243	0.6704
	2880	0.7119	0.6218	0.7612	0.6851	0.7683	0.6846	1.12	0.8087

Table 1: Ablation Study on additional datasets.

Method	BVFC	Exchange		Traffic	
	Acc. %	MSE	MAE	MSE	MAE
Chimera	58.99	0.077	0.198	0.366	0.248
Uni.-directional	57.29	0.091	0.203	0.369	0.255
w/o Gating	56.18	0.094	0.210	0.373	0.259
Input-independent	55.31	0.113	0.228	0.402	0.271
w/o seasonal	58.12	0.083	0.202	0.372	0.258
All Diagonal	57.98	0.095	0.209	0.370	0.257
All Companion	54.01	0.108	0.226	0.375	0.261

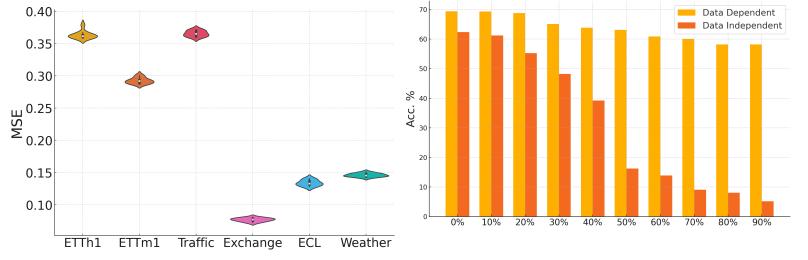


Figure 2: The effect of permutation of and independent on filtering noisy variates.

Figure 3: Comparison of data-dependent

Table 3: Forecasting results on new datasets.

Models	Chimera		iTransformer		RLinear		PatchTST		Crossformer		TiDE		TimesNet		DLlinear		SCINet		FEDformer		
	Metric	MSE	MAE	MSE	MAE	MSE	MAE	MSE	MAE	MSE	MAE	MSE	MAE	MSE	MAE	MSE	MAE	MSE	MAE		
PEMS07	24	0.081	0.189	0.088	0.190	0.242	0.341	0.150	0.262	0.139	0.247	0.271	0.383	0.101	0.204	0.210	0.329	0.119	0.225	0.125	0.244
	48	0.105	0.213	0.110	0.215	0.562	0.541	0.253	0.340	0.311	0.369	0.446	0.495	0.134	0.238	0.398	0.458	0.149	0.237	0.165	0.288
	96	0.139	0.247	0.139	0.245	1.096	0.795	0.346	0.404	0.396	0.442	0.628	0.577	0.181	0.279	0.594	0.553	0.141	0.234	0.262	0.376
PEMS08	24	0.109	0.212	0.115	0.219	0.249	0.343	0.224	0.281	0.215	0.260	0.318	0.409	0.141	0.238	0.248	0.353	0.122	0.221	0.210	0.301
	48	0.175	0.226	0.186	0.235	0.569	0.544	0.321	0.354	0.315	0.355	0.497	0.510	0.198	0.283	0.440	0.470	0.189	0.270	0.320	0.394
	96	0.218	0.265	0.221	0.267	1.166	0.814	0.408	0.417	0.377	0.397	0.721	0.592	0.320	0.351	0.674	0.565	0.236	0.300	0.442	0.465