

TABLE III  
PREDICTION RESULTS WITH TRAFFIC SPEED AND FLOW DATASETS

Type	Dataset	T	Metric	STGCN	DCRNN	ASTGCN	ST-MetaNet	Graph-WaveNet	STG2Seq	STSGCN	GMAN
Speed	METR-LA	15min	MAE	2.954	2.751	4.103	2.723	<b>2.698</b>	2.902	2.938	2.786
			MAPE	7.939	7.056	10.19	7.136	<b>6.982</b>	7.794	7.954	7.417
			RMSE	5.940	5.317	7.742	5.229	<b>5.161</b>	5.438	5.838	5.496
		30min	MAE	3.603	3.156	4.962	3.111	<b>3.086</b>	3.245	3.329	3.095
			MAPE	10.055	8.491	12.40	8.764	<b>8.435</b>	9.104	9.560	8.669
			RMSE	7.436	6.419	9.181	6.335	<b>6.206</b>	6.329	6.892	6.389
		60min	MAE	4.877	3.628	6.253	3.579	3.539	3.828	3.808	<b>3.429</b>
			MAPE	13.516	10.153	15.488	10.83	<b>10.05</b>	11.24	11.554	<b>10.05</b>
			RMSE	9.679	7.612	10.834	7.541	7.311	7.647	8.010	<b>7.281</b>
	PeMS-BAY	15min	MAE	1.424	1.335	1.755	1.384	<b>1.304</b>	1.744	1.528	1.346
			MAPE	3.104	2.806	3.960	2.920	<b>2.715</b>	4.647	3.374	2.876
			RMSE	3.083	2.812	3.394	2.926	<b>2.738</b>	4.022	3.281	2.909
		30min	MAE	1.906	1.668	2.127	1.763	<b>1.624</b>	1.958	1.825	1.633
			MAPE	4.488	3.764	4.954	4.030	<b>3.652</b>	5.160	4.229	3.705
			RMSE	4.441	3.817	4.211	3.992	<b>3.674</b>	4.462	4.108	3.760
		60min	MAE	2.533	1.978	2.586	2.170	1.919	2.259	2.135	<b>1.885</b>
			MAPE	6.255	4.680	6.137	5.275	4.586	5.922	5.094	<b>4.429</b>
			RMSE	5.921	4.613	5.059	4.930	4.435	5.059	4.845	<b>4.371</b>
	PeMSD7(M)	15min	MAE	2.219	2.144	3.149	2.441	<b>2.102</b>	2.371	2.401	2.295
			MAPE	5.210	5.059	7.956	5.858	<b>4.942</b>	6.073	5.827	5.642
			RMSE	4.230	4.094	5.365	4.481	<b>3.960</b>	4.434	4.569	4.522
		30min	MAE	3.087	2.804	3.798	3.437	<b>2.692</b>	2.831	2.894	2.718
			MAPE	7.562	7.069	9.662	8.764	<b>6.744</b>	7.349	7.310	6.902
			RMSE	6.164	5.639	6.498	6.477	<b>5.305</b>	5.433	5.729	5.545
		60min	MAE	4.396	3.510	4.542	4.982	3.225	3.379	3.389	<b>3.151</b>
			MAPE	11.164	9.340	11.61	13.15	8.389	8.911	8.833	<b>8.193</b>
			RMSE	8.752	7.099	7.672	9.177	<b>6.407</b>	6.516	6.772	6.466
Flow	PeMSD3	15min	MAE	17.045	14.365	17.822	14.648	<b>13.423</b>	15.527	15.704	14.839
			MAPE	15.419	14.931	17.534	14.691	<b>14.656</b>	16.139	16.036	15.689
			RMSE	30.222	24.989	30.530	25.292	<b>22.819</b>	27.597	29.902	25.210
		30min	MAE	19.702	15.623	19.603	16.205	<b>14.486</b>	16.103	16.811	15.523
			MAPE	16.871	15.657	18.981	15.981	<b>15.050</b>	16.373	17.207	16.230
			RMSE	34.224	27.545	33.793	27.605	<b>24.864</b>	28.629	30.838	26.380
		60min	MAE	24.694	17.769	22.501	19.009	<b>16.195</b>	17.653	19.064	16.947
			MAPE	19.702	17.567	21.637	18.664	<b>16.508</b>	18.088	20.108	17.761
			RMSE	40.886	30.962	38.859	31.491	<b>27.625</b>	30.642	35.971	28.579
	PeMSD4	15min	MAE	19.664	19.340	21.009	20.495	18.154	19.054	20.511	<b>18.044</b>
			MAPE	12.441	12.817	15.369	14.218	<b>12.388</b>	13.239	14.531	12.500
			RMSE	30.843	30.767	32.217	32.033	<b>29.071</b>	30.728	32.778	29.241
		30min	MAE	22.472	21.109	22.231	23.078	19.329	19.665	21.706	<b>18.583</b>
			MAPE	13.932	14.007	16.439	16.253	13.139	13.637	15.519	<b>12.931</b>
			RMSE	34.375	33.556	34.007	35.808	30.893	31.786	34.491	<b>30.213</b>
		60min	MAE	28.683	24.521	25.283	29.278	21.360	21.228	23.998	<b>20.073</b>
			MAPE	17.364	16.390	19.000	21.375	14.767	14.840	17.986	<b>14.348</b>
			RMSE	42.208	38.835	38.292	44.462	33.915	33.884	37.480	<b>32.316</b>
	PeMSD7	15min	MAE	21.404	20.417	22.836	21.590	18.935	21.016	22.873	<b>18.617</b>
			MAPE	8.662	8.971	9.856	9.183	8.359	9.711	10.439	<b>7.910</b>
			RMSE	33.534	32.101	35.447	33.914	30.877	33.541	35.446	<b>30.653</b>
		30min	MAE	25.730	22.657	24.887	24.510	20.482	22.302	24.588	<b>19.712</b>
			MAPE	10.512	10.021	10.724	10.335	8.999	10.247	11.456	<b>8.345</b>
			RMSE	39.214	35.414	38.845	38.520	33.462	35.890	38.131	<b>32.767</b>
		60min	MAE	34.079	26.573	28.641	30.080	22.992	24.826	28.063	<b>21.625</b>
			MAPE	14.060	12.173	12.592	12.633	10.089	11.545	13.387	<b>9.261</b>
			RMSE	49.875	40.730	44.565	46.605	37.098	39.764	43.175	<b>35.864</b>
	PeMSD8	15min	MAE	15.160	14.782	18.047	15.835	13.573	15.185	15.483	<b>13.323</b>
			MAPE	8.953	9.900	12.164	10.819	<b>8.765</b>	10.180	10.341	8.916
			RMSE	23.609	23.061	27.500	24.514	<b>21.690</b>	23.479	23.948	22.562
		30min	MAE	17.473	16.064	18.549	17.830	14.505	15.937	16.640	<b>13.702</b>
			MAPE	10.150	10.636	12.394	12.128	9.404	10.584	11.169	<b>9.204</b>
			RMSE	27.013	25.419	28.439	27.919	<b>23.436</b>	24.941	25.830	23.451
		60min	MAE	22.079	18.563	20.742	23.161	15.997	17.558	18.782	<b>14.915</b>
			MAPE	12.373	12.238	13.893	16.244	10.605	11.905	12.870	<b>10.168</b>
			RMSE	33.476	29.224	31.512	35.559	25.826	27.514	28.864	<b>25.277</b>