

Table 5: Variable importance scores for the Electricity, Traffic and Volatility datasets. The most significant variable of each input category is highlighted in purple. As before, past values of the target play a significant role – being the top 1 or 2 most significant past input across datasets. The role of seasonality can also be seen in Electricity and Traffic, where the past and future values of the hour-of-day is important for forecasts.

	10%	50%	90%
Static Inputs			
ID	1.000	1.000	1.000
Past Inputs			
Hour of Day	0.437	0.462	0.473
Day of Week	0.078	0.099	0.151
Time Index	0.066	0.077	0.092
Power Usage	0.342	0.359	0.366
Future Inputs			
Hour of Day	0.718	0.738	0.739
Day of Week	0.109	0.124	0.166
Time Index	0.114	0.137	0.155
(a) Electricity			

	10%	50%	90%
Static Inputs			
ID	1.000	1.000	1.000
Past Inputs			
Hour of Day	0.285	0.296	0.300
Day of Week	0.117	0.122	0.124
Time Index	0.107	0.109	0.111
Occupancy	0.471	0.473	0.483
Future Inputs			
Hour of Day	0.781	0.781	0.781
Day of Week	0.099	0.100	0.102
Time Index	0.117	0.119	0.121
(b) Traffic			

	10%	50%	90%
Static Inputs			
Region	1.000	1.000	1.000
Past Inputs			
Time Index	0.093	0.098	0.142
Day of Week	0.003	0.004	0.004
Day of Month	0.017	0.027	0.028
Week of Year	0.022	0.057	0.068
Month	0.008	0.009	0.011
Open-to-close Returns	0.078	0.158	0.178
Realised Vol	0.620	0.647	0.714
Future Inputs			
Time Index	0.011	0.014	0.024
Day of Week	0.019	0.072	0.299
Day of Month	0.069	0.635	0.913
Week of Year	0.026	0.060	0.227
Month	0.008	0.055	0.713
(c) Volatility			