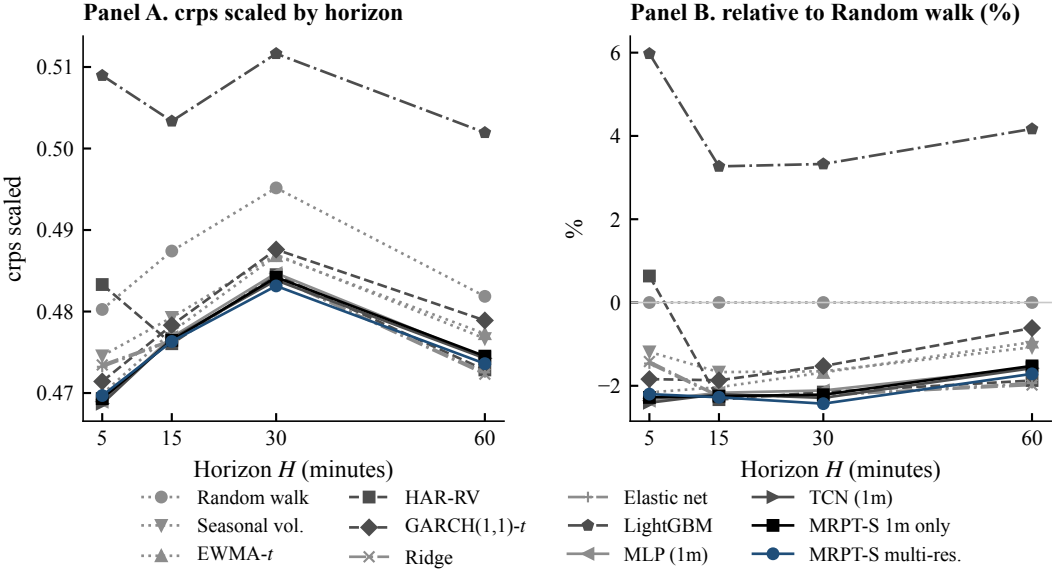

Panel A. crps scaled by horizon
crps scaled
0.51
0.50
0.49
0.48
0.47
5
15
30
60
Horizon H (minutes)
Panel B. relative to Random walk (%)
%
6
4
2
0
−2
5
15
30
60
Horizon H (minutes)
Random walk
Seasonal vol.
EWMA-t
HAR-RV
GARCH(1,1)-t
Ridge
Elastic net
LightGBM
MLP (1m)
TCN (1m)
MRPT-S 1m only
MRPT-S multi-res.