30 -1476.20 2002.12 1934.28 29 -1157.92 4353.56 1790.91 28 -1369.69

27 -

26 -

20 -

19

Time window length - 18 - 16 - 15 - 15 - 14 - 13 - 12 - 12 -

12 -

11 -

10 -

9 -

8 -

7 -

6 -5 -

4 -

3 -

2 -

1380.84

1097.87

1016.25

1478.03

964.77

778.13

1165.63

1188.01

1137.41

1108.56

774.65

1291.71

902.91

1344.43

1263.73

1306.19

1246.06

1213.26

718.74

1318.59

1247.45

1100.67

GRU

2351.78 3063.62

2519.63

2383.26

1833.62

1443.48

1703.84

1296.31

1380.09

1258.90

1143.15

1323.25

1472.94

1327.70

1118.10

1254.50

1315.89

1450.07

1117.13

835.02

1861.32

824.79

1093.23

LR

1946.09 1801.40 1696.62

1740.22

2011.67

1575.47

1317.38

1431.73

1463.42

1526.28

1390.94

1442.70

1500.13

1342.34

1706.17

1600.78

1615.09

1485.51

1355.91

884.31

1439.93

1357.13

1118.64

LSTM

Model

1210.68 1134.98

1106.59

1333.98

1159.75

1293.20

1423.39

1108.28

1047.61

1154.50

805.04

1182.21

833.07

1157.59

1157.87

1221.01

1153.40

1212.12

863.28

1314.41

835.44

1097.27

MLP

1572.69

1083.62

1177.21

1164.98 974.55 992.43

1071.36

1272.58

962.90

774.22

1119.69

1130.26

1006.04

1096.40

795.55

1134.35

885.57

1199.03

1126.09

1180.14

1049.49

1110.58

648.14

1167.32

1002.50

1035.10

RF

1299.43

1158.63

1297.08

1254.43

1172.24

1451.70

1326.47

976.00

1343.37

993.57

795.26

1141.26

1182.48

1046.11

1179.92

840.82

1142.54

1009.50

1168.05

1109.68

1153.40

1025.50

1110.65

731.16

1309.85

974.49

1229.87

XGBoost

4000

- 3500

- 3000

- 2500

- 2000

- 1500

- 1000

902.64 1830.25 1253.68 958.81 893.56 853.96 741.37 1552.15

25 -1257.83 2492.23 24 -1052.57 2223.92 23 -958.82 3976.15 1048.08 1041.59 1204.98 1518.20 22 -1118.60 897.78 3227.10 1439.56 1021.38 958.07 21 -884.20 894.62 1168.18 2794.08 1431.87 879.93

RMSE Heatmap