

### Experiments results for x1.large Instance type

TABLE I: Experiment 1. Summary of errors for next hour prediction. Highlighted values correspond to algorithms that obtained the best performance.

[illegible]

TABLE II: Experiment 2. Summary of errors for 12 hours prediction. Highlighted values correspond to algorithms that obtained the best performance.

|        | MSE (12 hours) |                 |                 |                 |                 | MaxPE (12 hours) |                 |                  |                 | MeanPE (12 hours) |                 |                 |                 |
|--------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|-------------------|-----------------|-----------------|-----------------|
|        | Month          | A1              | A2              | A3              | A4              | A1               | A2              | A3               | A4              | A1                | A2              | A3              | A4              |
|        |                |                 |                 |                 |                 |                  |                 |                  |                 |                   |                 |                 |                 |
| High   | SET            | 1.815505        | 2.517261        | <b>1.513133</b> | 1.632727        | 18.860000        | 17.970000       | <b>16.790000</b> | 17.160000       | <b>9.958333</b>   | 14.534167       | 10.420000       | 11.286667       |
|        | NOV            | 5.035486        | <b>0.073407</b> | 0.518970        | 0.450108        | 4.210000         | 4.530000        | <b>0.000000</b>  | 0.060000        | 0.350833          | 2.248333        | <b>0.000000</b> | 0.005000        |
|        | OCT            | 0.001114        | <b>0.000035</b> | 0.013278        | 0.004440        | 0.370000         | 0.090000        | <b>0.000000</b>  | 0.940000        | 0.333333          | 0.054167        | <b>0.000000</b> | 0.619167        |
|        | Best           | 0               | 2               | 1               | 0               | 0                | 0               | 3                | 0               | 1                 | 0               | 2               | 0               |
|        | Performance    | out 3           |                 |                 |                 | out 3            |                 |                  |                 | out 3             |                 |                 |                 |
|        | Error Average  | 2.284035        | 0.863568        | <b>0.681794</b> | 0.695759        | 7.813333         | 7.530000        | <b>5.596667</b>  | 6.053333        | 3.547500          | 5.612222        | <b>3.473333</b> | 3.970278        |
| Medium | ABR            | 2.992488        | <b>0.008401</b> | 0.045538        | 2.027219        | <b>0.000000</b>  | 0.030000        | <b>0.000000</b>  | 0.040000        | <b>0.000000</b>   | 0.002500        | <b>0.000000</b> | 0.003333        |
|        | FEB            | 0.004187        | <b>0.000249</b> | 0.073535        | 0.006034        | <b>0.000000</b>  | 0.200000        | 4.060000         | 0.010000        | <b>0.000000</b>   | 0.086667        | 2.488333        | 0.000833        |
|        | AGO            | 5.319181        | 1.060064        | <b>0.795652</b> | 1.324233        | <b>0.000000</b>  | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | <b>0.000000</b>   | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> |
|        | MAR            | <b>0.000005</b> | 0.000006        | 0.000006        | 0.000007        | <b>0.010000</b>  | 0.040000        | 0.050000         | 0.050000        | <b>0.002500</b>   | 0.010833        | 0.015833        | 0.016667        |
|        | Best           | 1               | 2               | 1               | 0               | 4                | 1               | 2                | 1               | 4                 | 1               | 2               | 1               |
|        | Performance    | out 4           |                 |                 |                 | out 4            |                 |                  |                 | out 4             |                 |                 |                 |
|        | Error Average  | 2.078965        | 0.267180        | <b>0.228683</b> | 0.839373        | <b>0.002500</b>  | 0.067500        | 1.027500         | <b>0.025000</b> | <b>0.000625</b>   | 0.025000        | 0.626042        | 0.005208        |
| Low    | MAY            | 0.000001        | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> | 0.010000         | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 0.009167          | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> |
|        | JUN            | <b>0.000000</b> | <b>0.000000</b> | 0.000001        | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 0.010000         | <b>0.000000</b> | <b>0.000000</b>   | <b>0.000000</b> | 0.007500        | <b>0.000000</b> |
|        | JUL            | 0.000001        | <b>0.000000</b> | 0.000001        | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 0.010000         | <b>0.000000</b> | <b>0.000000</b>   | <b>0.000000</b> | 0.005833        | <b>0.000000</b> |
|        | Best           | 1               | 3               | 1               | 3               | 2                | 3               | 1                | 3               | 1                 | 3               | 1               | 3               |
|        | Performance    | out 3           |                 |                 |                 | out 3            |                 |                  |                 | out 3             |                 |                 |                 |
|        | Error Average  | 0.000001        | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> | 0.003333         | <b>0.000000</b> | 0.006667         | <b>0.000000</b> | 0.003056          | <b>0.000000</b> | 0.004444        | <b>0.000000</b> |

TABLE III: Experiment 3. Summary of errors for 24 hours prediction. Highlighted values correspond to algorithms that obtained the best performance.

|        | MSE (24 hours) |                 |                 |                 |                 | MaxPE (24 hours) |                 |                  |                 | MeanPE (24 hours) |                 |                 |                 |
|--------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|-------------------|-----------------|-----------------|-----------------|
|        | Month          | A1              | A2              | A3              | A4              | A1               | A2              | A3               | A4              | A1                | A2              | A3              | A4              |
|        |                |                 |                 |                 |                 |                  |                 |                  |                 |                   |                 |                 |                 |
| High   | SET            | 3.210432        | 1.980742        | 1.358441        | <b>1.210091</b> | 28.360000        | 17.970000       | <b>16.790000</b> | 17.160000       | 8.609167          | 11.530833       | <b>6.261667</b> | 7.597500        |
|        | NOV            | 4.259127        | 0.566459        | 0.524201        | <b>0.454446</b> | 19.480000        | 23.450000       | <b>11.210000</b> | 15.570000       | 2.121250          | 4.887083        | <b>0.910833</b> | 1.332917        |
|        | OCT            | 0.001253        | <b>0.000095</b> | 0.095251        | 0.007700        | 0.410000         | 0.170000        | <b>0.000000</b>  | 1.130000        | 0.352917          | 0.087917        | <b>0.000000</b> | 0.832500        |
|        | Best           | 0               | 1               | 0               | 2               | 0                | 0               | 3                | 0               | 0                 | 0               | 3               | 0               |
|        | Performance    | out 3           |                 |                 |                 | out 3            |                 |                  |                 | out 3             |                 |                 |                 |
|        | Error Average  | 2.490271        | 0.849099        | 0.659297        | 0.557412        | 16.083333        | 13.863333       | 9.333333         | 11.286667       | 3.694444          | 5.501944        | 2.390833        | 3.254306        |
| Medium | ABR            | 2.135461        | <b>0.012413</b> | 0.033046        | 1.032471        | 0.350000         | 0.030000        | <b>0.000000</b>  | 0.500000        | 0.014583          | 0.001250        | <b>0.000000</b> | 0.030833        |
|        | FEB            | 0.005281        | <b>0.000888</b> | 0.302865        | 0.007300        | 0.830000         | 0.200000        | 4.060000         | <b>0.010000</b> | 0.244167          | 0.043333        | 1.398333        | <b>0.000417</b> |
|        | AGO            | 3.908497        | 1.619529        | <b>0.977763</b> | 1.154441        | 20.820000        | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 3.362500          | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> |
|        | MAR            | <b>0.000003</b> | 0.000009        | <b>0.000003</b> | 0.000004        | <b>0.010000</b>  | 0.040000        | 0.050000         | 0.050000        | <b>0.002917</b>   | 0.005417        | 0.007917        | 0.011667        |
|        | Best           | 1               | 2               | 2               | 0               | 1                | 1               | 2                | 2               | 1                 | 1               | 2               | 2               |
|        | Performance    | out 4           |                 |                 |                 | out 4            |                 |                  |                 | out 4             |                 |                 |                 |
|        | Error Average  | 1.512310        | 0.408210        | <b>0.328419</b> | 0.548554        | 5.502500         | <b>0.067500</b> | 1.027500         | 0.140000        | 0.906042          | 0.012500        | 0.351563        | <b>0.010729</b> |
| Low    | MAY            | 0.000001        | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> | 0.010000         | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 0.005833          | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> |
|        | JUN            | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 0.010000         | 0.010000        | <b>0.000000</b>   | <b>0.000000</b> | 0.004583        | 0.000417        |
|        | JUL            | 0.000001        | <b>0.000000</b> | 0.000001        | <b>0.000000</b> | <b>0.000000</b>  | <b>0.000000</b> | 0.010000         | <b>0.000000</b> | <b>0.000000</b>   | <b>0.000000</b> | 0.002917        | <b>0.000000</b> |
|        | Best           | 1               | 3               | 2               | 3               | 2                | 3               | 1                | 2               | 2                 | 3               | 1               | 2               |
|        | Performance    | out 3           |                 |                 |                 | out 3            |                 |                  |                 | out 3             |                 |                 |                 |
|        | Error Average  | 0.000001        | <b>0.000000</b> | <b>0.000000</b> | <b>0.000000</b> | 0.003333         | <b>0.000000</b> | 0.006667         | 0.003333        | 0.001944          | <b>0.000000</b> | 0.002500        | 0.000139        |