

| Epochs | Ouput Pred | Feat Type | Hide Dim | Num Layers | Dropout | Loss | Prune | Alpha Smth | Gate Type | Dilations | Mult Sea | No Trend | Beta Smth | Sea | Train RMSE | Test RMSE | Train SMAPE | Test SMAPE | Train MASE | Test MASE | Z Score |
|--------|------------|-----------|----------|------------|---------|------|-------|------------|-----------|--------------------|----------|----------|-----------|-----|------------|-----------|-------------|------------|------------|-----------|---------|
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 21.78 | 16.44 | 27.20 | 15.46 | 0.30 | 0.12 | 3.81 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 21.78 | 16.44 | 27.20 | 15.46 | 0.30 | 0.12 | 3.81 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 10.91 | 15.02 | 13.30 | 17.17 | 0.14 | 0.17 | 3.72 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 14.60 | 14.94 | 15.92 | 16.61 | 0.17 | 0.18 | 3.71 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 10.43 | 15.20 | 11.32 | 17.94 | 0.13 | 0.19 | 3.67 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 10.43 | 15.20 | 11.32 | 17.94 | 0.13 | 0.19 | 3.67 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 15.77 | 16.77 | 17.63 | 19.07 | 0.19 | 0.20 | 3.57 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 11.30 | 16.79 | 13.54 | 20.15 | 0.15 | 0.20 | 3.57 |
| 200 | TRUE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 14.14 | 18.02 | 15.86 | 21.58 | 0.18 | 0.22 | 3.46 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 15.89 | 18.82 | 17.69 | 22.13 | 0.19 | 0.22 | 3.43 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 15.89 | 18.82 | 17.69 | 22.13 | 0.19 | 0.22 | 3.43 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.7 | 7 | 15.95 | 19.35 | 17.90 | 22.25 | 0.19 | 0.22 | 3.42 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.7 | 7 | 15.95 | 19.35 | 17.90 | 22.25 | 0.19 | 0.22 | 3.42 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 15.46 | 20.03 | 17.10 | 23.62 | 0.18 | 0.22 | 3.37 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 15.46 | 20.03 | 17.10 | 23.62 | 0.18 | 0.22 | 3.37 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.5 | 7 | 12.74 | 19.91 | 13.87 | 23.83 | 0.16 | 0.23 | 3.36 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 14.52 | 20.17 | 15.83 | 24.15 | 0.17 | 0.23 | 3.36 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.7 | 7 | 15.11 | 20.10 | 16.57 | 23.42 | 0.18 | 0.24 | 3.34 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 15.95 | 20.44 | 17.46 | 23.78 | 0.18 | 0.23 | 3.33 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 15.95 | 20.44 | 17.46 | 23.78 | 0.18 | 0.23 | 3.33 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 14.15 | 20.36 | 15.10 | 24.24 | 0.16 | 0.24 | 3.31 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 14.15 | 21.06 | 15.25 | 25.10 | 0.17 | 0.23 | 3.30 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.5 | 7 | 13.10 | 20.69 | 14.19 | 25.03 | 0.16 | 0.24 | 3.30 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.7 | 7 | 15.10 | 20.88 | 16.19 | 25.00 | 0.17 | 0.24 | 3.29 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 16.27 | 21.41 | 18.39 | 24.61 | 0.20 | 0.24 | 3.29 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.5 | 7 | 14.56 | 21.31 | 15.83 | 25.34 | 0.17 | 0.23 | 3.29 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 16.31 | 21.20 | 18.26 | 25.18 | 0.19 | 0.24 | 3.28 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 16.31 | 21.20 | 18.26 | 25.18 | 0.19 | 0.24 | 3.28 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.2 | 7 | 15.92 | 20.65 | 18.12 | 24.47 | 0.19 | 0.25 | 3.28 |
| 200 | TRUE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 14.91 | 21.40 | 16.92 | 25.41 | 0.19 | 0.24 | 3.27 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 15.30 | 21.79 | 16.82 | 25.79 | 0.18 | 0.23 | 3.27 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 12.99 | 21.14 | 14.16 | 25.31 | 0.17 | 0.25 | 3.27 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 12.99 | 21.14 | 14.16 | 25.31 | 0.17 | 0.25 | 3.27 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 16.51 | 21.22 | 18.95 | 24.69 | 0.20 | 0.25 | 3.26 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 16.51 | 21.22 | 18.95 | 24.69 | 0.20 | 0.25 | 3.26 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 16.23 | 21.43 | 18.07 | 25.58 | 0.19 | 0.25 | 3.25 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 16.51 | 21.13 | 16.87 | 25.48 | 0.20 | 0.26 | 3.24 |
| 200 | TRUE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 14.11 | 21.87 | 15.67 | 26.40 | 0.18 | 0.24 | 3.24 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 14.03 | 22.41 | 15.03 | 26.83 | 0.17 | 0.24 | 3.23 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 14.16 | 22.46 | 15.23 | 26.57 | 0.17 | 0.24 | 3.23 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 16.15 | 21.22 | 18.28 | 25.20 | 0.20 | 0.27 | 3.22 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 16.15 | 21.22 | 18.28 | 25.20 | 0.20 | 0.27 | 3.22 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 17.12 | 21.78 | 19.98 | 25.46 | 0.22 | 0.27 | 3.20 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 16.65 | 21.45 | 19.16 | 25.38 | 0.20 | 0.27 | 3.19 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 16.65 | 21.45 | 19.16 | 25.38 | 0.20 | 0.27 | 3.19 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 13.62 | 22.53 | 14.82 | 27.43 | 0.17 | 0.25 | 3.19 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 16.42 | 22.88 | 18.67 | 27.33 | 0.20 | 0.25 | 3.19 |
| 200 | FALSE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 16.32 | 22.28 | 18.41 | 26.52 | 0.19 | 0.26 | 3.18 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 13.47 | 23.36 | 14.77 | 27.98 | 0.17 | 0.24 | 3.17 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | TRUE | 0.5 | 7 | 13.47 | 23.36 | 14.77 | 27.98 | 0.17 | 0.24 | 3.17 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 15.09 | 23.25 | 16.43 | 27.92 | 0.18 | 0.25 | 3.16 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 15.09 | 23.25 | 16.43 | 27.92 | 0.18 | 0.25 | 3.16 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.5 | 7 | 16.71 | 22.88 | 17.60 | 27.77 | 0.20 | 0.27 | 3.14 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.5 | 7 | 15.83 | 23.09 | 17.46 | 28.09 | 0.18 | 0.27 | 3.13 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.7 | 7 | 16.29 | 23.45 | 18.33 | 28.12 | 0.19 | 0.26 | 3.13 |
| 200 | FALSE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.7 | 7 | 16.29 | 23.45 | 18.33 | 28.12 | 0.19 | 0.26 | 3.13 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.5 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 16.16 | 23.47 | 17.99 | 28.81 | 0.20 | 0.27 | 3.11 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 16.39 | 23.35 | 18.55 | 28.23 | 0.20 | 0.27 | 3.10 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.5 | 7 | 17.23 | 23.00 | 20.22 | 26.33 | 0.22 | 0.29 | 3.09 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | TRUE | FALSE | 0.5 | 7 | 17.23 | 23.00 | 20.22 | 26.33 | 0.22 | 0.29 | 3.09 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 14.07 | 24.07 | 14.95 | 29.58 | 0.17 | 0.26 | 3.09 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.7 | 7 | 15.94 | 24.35 | 17.77 | 29.48 | 0.19 | 0.26 | 3.08 |
| 200 | TRUE | SUBSET | 16 | 2 | 0.2 | MSE | 0.2 | 0.7 | GRU | ((1, 7), (14, 28)) | FALSE | TRUE | 0.5 | 7 | 17.00 | 24.27 | 18.78 | 29.62 | 0.19 | 0.26 | 3.08 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 16.26 | 23.89 | 18.07 | 28.99 | 0.19 | 0.27 | 3.08 |
| 200 | TRUE | FT | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14, 28)) | FALSE | FALSE | 0.2 | 7 | 16.26 | 23.89 | 18.07 | 28.99 | 0.19 | 0.27 | 3.08 |
| 200 | FALSE | RAW | 16 | 2 | 0.2 | MSE | 0.2 | 0.2 | GRU | ((1, 7), (14 | | | | | | | | | | | |