

Table S3. Specific results of testing RMSE, R² and SMAPE in all monitoring stations.

| Zhonghuamen (ZHM) | | | | | | | | | | | | | |
|------------------------|------------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| RMSE | Seq2Seq_LSTM | 15.44 | 23.46 | 28.94 | 32.79 | 35.49 | 37.36 | 38.71 | 39.75 | 40.65 | 41.54 | 42.46 | 43.39 |
| | Seq2Seq_GRU | 18.59 | 24.26 | 28.33 | 31.48 | 33.96 | 35.94 | 37.57 | 38.94 | 40.11 | 41.23 | 42.26 | 43.19 |
| | Seq2Seq+Attention_LSTM | 19.88 | 25.31 | 29.33 | 32.33 | 36.10 | 37.19 | 37.95 | 38.44 | 38.82 | 39.12 | 39.39 | 39.67 |
| | Seq2Seq+Attention_GRU | 18.71 | 22.98 | 26.49 | 29.31 | 31.56 | 33.33 | 34.73 | 35.84 | 36.71 | 37.46 | 38.12 | 38.69 |
| | STALSTM | 19.89 | 24.30 | 27.93 | 30.67 | 32.66 | 34.10 | 35.11 | 35.80 | 36.29 | 36.67 | 37.02 | 37.35 |
| | STAGRU | 18.81 | 23.09 | 26.61 | 29.40 | 31.56 | 33.18 | 34.40 | 35.31 | 35.97 | 36.50 | 36.95 | 37.31 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 44.28 | 45.09 | 45.79 | 46.35 | 46.75 | 46.99 | 47.06 | 46.98 | 46.74 | 46.38 | 45.94 | 45.51 |
| | Seq2Seq_GRU | 44.03 | 44.71 | 45.23 | 45.58 | 45.79 | 45.86 | 45.78 | 45.58 | 45.27 | 44.87 | 44.44 | 44.04 |
| | Seq2Seq+Attention_LSTM | 39.94 | 40.21 | 40.49 | 40.77 | 41.03 | 41.24 | 41.35 | 41.37 | 41.32 | 41.31 | 41.25 | 41.27 |
| | Seq2Seq+Attention_GRU | 39.18 | 39.61 | 39.97 | 40.29 | 40.59 | 40.78 | 40.92 | 40.95 | 40.85 | 40.63 | 40.30 | 39.96 |
| | STALSTM | 37.66 | 37.97 | 38.28 | 38.59 | 38.86 | 39.11 | 39.34 | 39.48 | 39.52 | 39.51 | 39.41 | 39.33 |
| | STAGRU | 37.62 | 37.87 | 38.05 | 38.17 | 38.25 | 38.29 | 38.36 | 38.46 | 38.55 | 38.51 | 38.46 | 38.45 |
| | R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Seq2Seq_LSTM | | 0.916 | 0.806 | 0.705 | 0.621 | 0.556 | 0.508 | 0.473 | 0.444 | 0.418 | 0.392 | 0.365 | 0.337 |
| Seq2Seq_GRU | | 0.878 | 0.793 | 0.718 | 0.652 | 0.595 | 0.546 | 0.504 | 0.467 | 0.434 | 0.403 | 0.372 | 0.343 |
| Seq2Seq+Attention_LSTM | | 0.860 | 0.774 | 0.697 | 0.632 | 0.580 | 0.541 | 0.513 | 0.493 | 0.480 | 0.470 | 0.461 | 0.454 |
| Seq2Seq+Attention_GRU | | 0.876 | 0.814 | 0.753 | 0.697 | 0.649 | 0.609 | 0.575 | 0.548 | 0.525 | 0.506 | 0.488 | 0.473 |
| STALSTM | | 0.860 | 0.792 | 0.725 | 0.669 | 0.624 | 0.591 | 0.566 | 0.549 | 0.536 | 0.527 | 0.517 | 0.509 |
| STAGRU | | 0.875 | 0.812 | 0.750 | 0.695 | 0.649 | 0.612 | 0.583 | 0.561 | 0.544 | 0.531 | 0.519 | 0.510 |
| methods | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Seq2Seq_LSTM | | 0.310 | 0.284 | 0.262 | 0.243 | 0.230 | 0.222 | 0.220 | 0.223 | 0.231 | 0.243 | 0.257 | 0.271 |
| Seq2Seq_GRU | | 0.319 | 0.298 | 0.281 | 0.269 | 0.262 | 0.260 | 0.262 | 0.268 | 0.279 | 0.292 | 0.306 | 0.319 |
| Seq2Seq+Attention_LSTM | | 0.446 | 0.438 | 0.431 | 0.423 | 0.415 | 0.407 | 0.401 | 0.398 | 0.397 | 0.399 | 0.401 | 0.401 |
| Seq2Seq+Attention_GRU | | 0.459 | 0.447 | 0.437 | 0.428 | 0.420 | 0.414 | 0.410 | 0.409 | 0.412 | 0.419 | 0.428 | 0.438 |
| STALSTM | | 0.501 | 0.492 | 0.484 | 0.475 | 0.468 | 0.461 | 0.455 | 0.451 | 0.450 | 0.450 | 0.453 | 0.453 |
| STAGRU | | 0.502 | 0.495 | 0.490 | 0.487 | 0.484 | 0.483 | 0.482 | 0.479 | 0.476 | 0.478 | 0.479 | 0.480 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 30.84 | 40.86 | 46.35 | 49.83 | 52.30 | 54.03 | 55.24 | 56.21 | 57.14 | 58.05 | 58.93 | 59.71 |
| | Seq2Seq_GRU | 36.47 | 42.75 | 46.52 | 49.10 | 51.11 | 52.75 | 54.14 | 55.43 | 56.63 | 57.79 | 58.79 | 59.64 |
| | Seq2Seq+Attention_LSTM | 33.74 | 39.19 | 43.25 | 46.28 | 48.35 | 49.92 | 51.05 | 51.79 | 52.23 | 52.42 | 52.71 | 53.02 |
| | Seq2Seq+Attention_GRU | 35.59 | 40.91 | 44.57 | 47.07 | 48.80 | 49.98 | 50.76 | 51.31 | 51.77 | 52.28 | 52.83 | 53.39 |

| | | | | | | | | | | | | | |
|--|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | STALSTM | 35.33 | 39.84 | 43.23 | 45.89 | 47.73 | 49.01 | 49.96 | 50.72 | 51.39 | 52.07 | 52.68 | 53.20 |
| | STAGRU | 33.95 | 38.35 | 42.00 | 44.95 | 47.13 | 48.77 | 50.06 | 51.11 | 51.90 | 52.59 | 53.12 | 53.58 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 60.35 | 60.85 | 61.29 | 61.66 | 61.97 | 62.23 | 62.38 | 62.44 | 62.43 | 62.31 | 62.11 | 61.89 |
| | Seq2Seq_GRU | 60.31 | 60.76 | 61.04 | 61.21 | 61.33 | 61.43 | 61.46 | 61.45 | 61.35 | 61.15 | 60.92 | 60.71 |
| | Seq2Seq+Attention_LSTM | 53.31 | 53.57 | 53.86 | 54.26 | 54.64 | 55.10 | 55.39 | 55.57 | 55.62 | 55.56 | 55.51 | 55.51 |
| | Seq2Seq+Attention_GRU | 53.88 | 54.40 | 54.94 | 55.46 | 55.90 | 56.27 | 56.60 | 56.89 | 57.07 | 57.15 | 57.12 | 57.04 |
| | STALSTM | 53.68 | 54.15 | 54.57 | 54.91 | 55.24 | 55.58 | 55.90 | 56.14 | 56.30 | 56.37 | 56.29 | 56.18 |
| | STAGRU | 53.99 | 54.35 | 54.61 | 54.78 | 54.96 | 55.14 | 55.46 | 55.75 | 55.94 | 55.95 | 55.87 | 55.81 |

Xianlindaxuecheng (XLDXC)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------------|------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 27.33 | 33.25 | 38.18 | 42.36 | 45.63 | 47.93 | 49.31 | 50.01 | 50.24 | 50.25 | 50.23 | 50.26 |
| | Seq2Seq_GRU | 21.17 | 28.80 | 34.66 | 39.41 | 43.22 | 46.13 | 48.20 | 49.55 | 50.34 | 50.75 | 50.95 | 51.06 |
| | Seq2Seq+Attention_LSTM | 18.44 | 24.12 | 28.41 | 31.59 | 33.89 | 35.45 | 36.42 | 36.97 | 37.22 | 37.29 | 37.27 | 37.22 |
| | Seq2Seq+Attention_GRU | 25.51 | 30.19 | 34.02 | 37.21 | 39.79 | 41.75 | 43.18 | 44.19 | 44.88 | 45.34 | 45.63 | 45.78 |
| | STALSTM | 18.35 | 24.01 | 27.88 | 30.65 | 32.69 | 34.19 | 35.25 | 36.00 | 36.50 | 36.83 | 37.08 | 37.29 |
| | STAGRU | 17.32 | 22.75 | 26.74 | 29.69 | 31.86 | 33.44 | 34.55 | 35.35 | 35.88 | 36.25 | 36.48 | 36.58 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 50.35 | 50.53 | 50.77 | 51.02 | 51.27 | 51.49 | 51.68 | 51.82 | 51.92 | 51.96 | 51.95 | 51.91 |
| | Seq2Seq_GRU | 51.14 | 51.25 | 51.41 | 51.62 | 51.81 | 51.90 | 51.84 | 51.55 | 51.06 | 50.44 | 49.84 | 49.38 |
| | Seq2Seq+Attention_LSTM | 37.22 | 37.31 | 37.52 | 37.81 | 38.16 | 38.49 | 38.74 | 38.89 | 38.91 | 38.84 | 38.76 | 38.79 |
| | Seq2Seq+Attention_GRU | 45.76 | 45.61 | 45.34 | 44.97 | 44.54 | 44.06 | 43.56 | 43.10 | 42.75 | 42.55 | 42.57 | 42.87 |
| | STALSTM | 37.51 | 37.79 | 38.15 | 38.58 | 39.07 | 39.52 | 39.88 | 40.12 | 40.17 | 40.05 | 39.79 | 39.54 |
| | STAGRU | 36.59 | 36.61 | 36.68 | 36.83 | 37.02 | 37.20 | 37.33 | 37.39 | 37.37 | 37.32 | 37.36 | 37.59 |
| | R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Seq2Seq_LSTM | | 0.758 | 0.641 | 0.527 | 0.418 | 0.325 | 0.256 | 0.212 | 0.190 | 0.182 | 0.182 | 0.182 | 0.181 |
| Seq2Seq_GRU | | 0.854 | 0.731 | 0.611 | 0.497 | 0.394 | 0.310 | 0.247 | 0.204 | 0.179 | 0.166 | 0.159 | 0.155 |
| Seq2Seq+Attention_LSTM | | 0.889 | 0.811 | 0.738 | 0.676 | 0.627 | 0.593 | 0.570 | 0.557 | 0.551 | 0.549 | 0.550 | 0.551 |
| Seq2Seq+Attention_GRU | | 0.789 | 0.704 | 0.625 | 0.551 | 0.487 | 0.435 | 0.396 | 0.367 | 0.347 | 0.334 | 0.325 | 0.321 |
| STALSTM | | 0.890 | 0.813 | 0.748 | 0.695 | 0.653 | 0.621 | 0.597 | 0.580 | 0.568 | 0.560 | 0.554 | 0.549 |
| STAGRU | | 0.902 | 0.832 | 0.768 | 0.714 | 0.671 | 0.637 | 0.613 | 0.595 | 0.583 | 0.574 | 0.568 | 0.566 |
| methods | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Seq2Seq_LSTM | | 0.178 | 0.172 | 0.164 | 0.156 | 0.148 | 0.140 | 0.133 | 0.129 | 0.126 | 0.124 | 0.125 | 0.126 |
| Seq2Seq_GRU | | 0.153 | 0.149 | 0.143 | 0.136 | 0.130 | 0.126 | 0.128 | 0.138 | 0.154 | 0.174 | 0.194 | 0.209 |

| | | | | | | | | | | | | | |
|--------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Seq2Seq+Attention_LSTM | 0.551 | 0.548 | 0.543 | 0.536 | 0.527 | 0.519 | 0.513 | 0.509 | 0.509 | 0.510 | 0.512 | 0.512 |
| | Seq2Seq+Attention_GRU | 0.321 | 0.325 | 0.333 | 0.344 | 0.356 | 0.370 | 0.384 | 0.397 | 0.407 | 0.412 | 0.412 | 0.404 |
| | STALSTM | 0.544 | 0.537 | 0.528 | 0.517 | 0.505 | 0.493 | 0.484 | 0.478 | 0.476 | 0.479 | 0.486 | 0.493 |
| | STAGRU | 0.566 | 0.565 | 0.563 | 0.560 | 0.555 | 0.551 | 0.547 | 0.546 | 0.546 | 0.548 | 0.547 | 0.541 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 41.06 | 48.17 | 53.37 | 57.32 | 60.17 | 62.04 | 62.97 | 63.30 | 63.40 | 63.48 | 63.43 | 63.43 |
| | Seq2Seq_GRU | 36.46 | 44.14 | 49.62 | 53.73 | 56.84 | 59.09 | 60.63 | 61.57 | 62.12 | 62.62 | 63.18 | 63.70 |
| | Seq2Seq+Attention_LSTM | 31.81 | 38.09 | 42.40 | 45.45 | 47.70 | 49.17 | 50.09 | 50.69 | 50.92 | 50.99 | 51.02 | 51.02 |
| | Seq2Seq+Attention_GRU | 36.43 | 41.91 | 45.95 | 49.09 | 51.51 | 53.45 | 54.86 | 55.78 | 56.43 | 56.95 | 57.35 | 57.63 |
| | STALSTM | 32.58 | 38.68 | 42.61 | 45.19 | 47.20 | 48.54 | 49.56 | 50.28 | 50.76 | 51.12 | 51.40 | 51.64 |
| | STAGRU | 30.12 | 36.63 | 41.18 | 44.26 | 46.44 | 48.08 | 49.32 | 50.24 | 50.86 | 51.31 | 51.62 | 51.80 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 63.45 | 63.51 | 63.72 | 64.04 | 64.40 | 64.76 | 65.03 | 65.19 | 65.25 | 65.23 | 65.12 | 65.04 |
| | Seq2Seq_GRU | 64.13 | 65.58 | 65.03 | 65.38 | 65.58 | 65.70 | 65.56 | 65.18 | 64.64 | 63.99 | 63.41 | 63.00 |
| | Seq2Seq+Attention_LSTM | 50.98 | 51.08 | 51.30 | 51.54 | 51.85 | 52.22 | 52.57 | 52.85 | 53.04 | 53.13 | 53.16 | 53.26 |
| | Seq2Seq+Attention_GRU | 57.73 | 57.68 | 57.51 | 57.23 | 56.84 | 56.41 | 55.99 | 55.59 | 55.29 | 55.11 | 55.02 | 55.12 |
| | STALSTM | 51.89 | 52.17 | 52.50 | 52.90 | 53.34 | 53.72 | 54.09 | 54.41 | 54.55 | 54.52 | 54.41 | 54.22 |
| | STAGRU | 51.79 | 51.79 | 51.85 | 51.92 | 51.96 | 51.99 | 52.05 | 52.12 | 52.13 | 52.08 | 52.08 | 52.23 |

Aotizhongxin (ATZX)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 19.36 | 25.20 | 30.26 | 34.46 | 37.87 | 40.56 | 42.68 | 44.31 | 45.57 | 46.58 | 47.42 | 48.12 |
| | Seq2Seq_GRU | 14.73 | 23.23 | 28.78 | 32.59 | 35.24 | 37.10 | 38.45 | 39.49 | 40.36 | 41.18 | 41.99 | 42.78 |
| | Seq2Seq+Attention_LSTM | 18.16 | 24.14 | 28.41 | 31.62 | 34.04 | 35.81 | 37.08 | 37.99 | 38.68 | 39.23 | 39.71 | 40.14 |
| | Seq2Seq+Attention_GRU | 18.55 | 23.51 | 27.11 | 30.00 | 32.33 | 34.11 | 35.39 | 36.27 | 36.82 | 37.21 | 37.51 | 37.75 |
| | STALSTM | 18.63 | 23.88 | 27.82 | 30.81 | 33.05 | 34.72 | 36.01 | 37.01 | 37.81 | 38.46 | 39.02 | 39.50 |
| | STAGRU | 18.78 | 23.93 | 27.78 | 30.71 | 32.91 | 34.50 | 35.62 | 36.37 | 36.77 | 36.98 | 37.11 | 37.18 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 48.68 | 49.09 | 49.33 | 49.42 | 49.37 | 49.25 | 49.05 | 48.80 | 48.56 | 48.40 | 48.42 | 48.72 |
| | Seq2Seq_GRU | 43.52 | 44.14 | 44.59 | 44.85 | 44.94 | 44.88 | 44.69 | 44.41 | 44.09 | 43.80 | 43.59 | 43.54 |
| | Seq2Seq+Attention_LSTM | 40.49 | 40.76 | 40.88 | 40.93 | 40.92 | 40.86 | 40.74 | 40.52 | 40.18 | 39.73 | 39.27 | 38.92 |
| | Seq2Seq+Attention_GRU | 37.99 | 38.22 | 38.45 | 38.69 | 38.96 | 39.25 | 39.48 | 39.58 | 39.51 | 39.28 | 38.97 | 38.76 |
| | STALSTM | 39.85 | 40.11 | 40.28 | 40.41 | 40.47 | 40.45 | 40.33 | 40.14 | 39.81 | 39.38 | 38.94 | 38.66 |
| | STAGRU | 37.26 | 37.36 | 37.42 | 37.52 | 37.69 | 37.93 | 38.19 | 38.42 | 38.55 | 38.56 | 38.50 | 38.47 |
| | R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

| | | | | | | | | | | | | | |
|--------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Seq2Seq_LSTM | 0.880 | 0.796 | 0.707 | 0.620 | 0.541 | 0.473 | 0.417 | 0.372 | 0.335 | 0.306 | 0.280 | 0.258 |
| | Seq2Seq_GRU | 0.930 | 0.827 | 0.734 | 0.660 | 0.602 | 0.559 | 0.527 | 0.501 | 0.478 | 0.457 | 0.435 | 0.414 |
| | Seq2Seq+Attention_LSTM | 0.894 | 0.813 | 0.741 | 0.680 | 0.629 | 0.589 | 0.560 | 0.538 | 0.521 | 0.507 | 0.495 | 0.484 |
| | Seq2Seq+Attention_GRU | 0.890 | 0.823 | 0.765 | 0.712 | 0.666 | 0.628 | 0.599 | 0.579 | 0.566 | 0.557 | 0.550 | 0.544 |
| | STALSTM | 0.888 | 0.817 | 0.752 | 0.696 | 0.650 | 0.614 | 0.585 | 0.561 | 0.542 | 0.526 | 0.512 | 0.500 |
| | STAGRU | 0.887 | 0.816 | 0.753 | 0.698 | 0.653 | 0.619 | 0.594 | 0.576 | 0.567 | 0.562 | 0.559 | 0.557 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 0.241 | 0.228 | 0.220 | 0.217 | 0.219 | 0.222 | 0.229 | 0.236 | 0.244 | 0.249 | 0.248 | 0.239 |
| | Seq2Seq_GRU | 0.393 | 0.375 | 0.363 | 0.355 | 0.352 | 0.354 | 0.359 | 0.367 | 0.376 | 0.385 | 0.391 | 0.392 |
| | Seq2Seq+Attention_LSTM | 0.475 | 0.468 | 0.464 | 0.463 | 0.463 | 0.465 | 0.468 | 0.473 | 0.482 | 0.494 | 0.506 | 0.514 |
| | Seq2Seq+Attention_GRU | 0.538 | 0.532 | 0.526 | 0.520 | 0.514 | 0.506 | 0.501 | 0.498 | 0.500 | 0.506 | 0.513 | 0.519 |
| | STALSTM | 0.491 | 0.484 | 0.480 | 0.476 | 0.475 | 0.475 | 0.478 | 0.483 | 0.492 | 0.503 | 0.514 | 0.521 |
| | STAGRU | 0.555 | 0.553 | 0.551 | 0.548 | 0.544 | 0.539 | 0.532 | 0.526 | 0.523 | 0.523 | 0.525 | 0.525 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 31.54 | 37.17 | 41.68 | 45.18 | 47.93 | 50.59 | 52.64 | 54.23 | 55.53 | 56.70 | 57.63 | 58.31 |
| | Seq2Seq_GRU | 24.82 | 35.64 | 41.71 | 45.47 | 48.12 | 49.98 | 51.29 | 52.25 | 52.95 | 53.61 | 54.26 | 54.87 |
| | Seq2Seq+Attention_LSTM | 29.12 | 35.23 | 39.14 | 41.90 | 44.23 | 45.99 | 47.27 | 48.25 | 49.05 | 49.95 | 50.81 | 51.46 |
| | Seq2Seq+Attention_GRU | 31.83 | 36.99 | 40.37 | 42.89 | 44.77 | 46.28 | 47.35 | 48.10 | 48.64 | 49.12 | 49.55 | 49.85 |
| | STALSTM | 29.01 | 34.54 | 38.49 | 41.41 | 43.70 | 45.28 | 46.50 | 47.51 | 48.55 | 49.50 | 50.30 | 50.91 |
| | STAGRU | 31.69 | 36.58 | 40.30 | 42.56 | 44.52 | 46.05 | 47.19 | 47.93 | 48.50 | 48.77 | 49.02 | 49.15 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 58.75 | 59.02 | 59.11 | 59.08 | 59.00 | 58.89 | 58.79 | 58.64 | 58.49 | 58.43 | 58.48 | 58.71 |
| | Seq2Seq_GRU | 55.42 | 55.86 | 56.15 | 56.31 | 56.41 | 56.43 | 56.42 | 56.37 | 56.28 | 56.18 | 56.05 | 55.98 |
| | Seq2Seq+Attention_LSTM | 51.91 | 52.20 | 52.33 | 52.39 | 52.45 | 52.59 | 52.71 | 52.71 | 52.53 | 52.18 | 51.69 | 51.26 |
| | Seq2Seq+Attention_GRU | 50.10 | 50.31 | 50.52 | 50.73 | 51.09 | 51.54 | 51.90 | 52.17 | 52.25 | 52.08 | 51.77 | 51.55 |
| | STALSTM | 51.30 | 51.51 | 51.70 | 51.84 | 51.98 | 52.15 | 52.26 | 52.27 | 52.07 | 51.70 | 51.31 | 50.95 |
| STAGRU | 49.27 | 49.41 | 49.46 | 49.56 | 49.75 | 50.08 | 50.57 | 50.95 | 51.20 | 51.22 | 51.05 | 50.91 | |

Shanxilu (SXL)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 20.69 | 29.01 | 36.45 | 42.26 | 46.38 | 49.07 | 50.61 | 51.32 | 51.45 | 51.24 | 50.84 | 50.34 |
| | Seq2Seq_GRU | 22.54 | 29.88 | 35.71 | 40.56 | 44.53 | 47.67 | 50.05 | 51.73 | 52.81 | 53.40 | 53.59 | 53.43 |
| | Seq2Seq+Attention_LSTM | 19.13 | 24.12 | 28.53 | 31.60 | 33.94 | 35.49 | 36.46 | 37.04 | 37.37 | 37.61 | 37.80 | 37.99 |
| | Seq2Seq+Attention_GRU | 20.83 | 26.16 | 30.33 | 33.55 | 36.02 | 37.92 | 39.39 | 40.53 | 41.43 | 42.16 | 42.70 | 43.00 |
| | STALSTM | 17.36 | 22.94 | 27.07 | 29.98 | 32.03 | 33.50 | 34.55 | 35.32 | 35.87 | 36.30 | 36.64 | 36.93 |

| | | | | | | | | | | | | | |
|----------------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | STAGRU | 17.66 | 23.00 | 27.05 | 30.09 | 32.20 | 33.87 | 34.92 | 35.56 | 35.93 | 36.12 | 36.23 | 36.27 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 49.82 | 49.31 | 48.83 | 48.40 | 48.03 | 47.71 | 47.45 | 47.22 | 47.01 | 46.85 | 46.78 | 46.92 |
| | Seq2Seq_GRU | 52.97 | 52.24 | 51.35 | 50.38 | 49.45 | 48.67 | 48.10 | 47.73 | 47.49 | 47.34 | 47.29 | 47.40 |
| | Seq2Seq+Attention_LSTM | 38.20 | 38.44 | 38.74 | 39.12 | 39.57 | 40.08 | 40.58 | 40.99 | 41.31 | 41.47 | 41.50 | 41.44 |
| | Seq2Seq+Attention_GRU | 43.05 | 42.86 | 42.50 | 42.01 | 41.47 | 40.92 | 40.39 | 39.91 | 39.51 | 39.24 | 39.15 | 39.28 |
| | STALSTM | 37.19 | 37.45 | 37.78 | 38.17 | 38.64 | 39.12 | 39.47 | 39.66 | 39.74 | 39.74 | 39.68 | 39.61 |
| | STAGRU | 36.28 | 36.29 | 36.32 | 36.41 | 36.61 | 36.92 | 37.26 | 37.59 | 37.90 | 38.16 | 38.36 | 38.58 |
| R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 0.841 | 0.689 | 0.509 | 0.340 | 0.205 | 0.110 | 0.053 | 0.027 | 0.022 | 0.030 | 0.045 | 0.063 |
| | Seq2Seq_GRU | 0.812 | 0.670 | 0.528 | 0.392 | 0.267 | 0.160 | 0.074 | 0.011 | 0.030 | 0.053 | 0.061 | 0.055 |
| | Seq2Seq+Attention_LSTM | 0.864 | 0.784 | 0.702 | 0.630 | 0.574 | 0.534 | 0.508 | 0.493 | 0.483 | 0.477 | 0.472 | 0.466 |
| | Seq2Seq+Attention_GRU | 0.839 | 0.746 | 0.659 | 0.583 | 0.520 | 0.468 | 0.426 | 0.393 | 0.365 | 0.343 | 0.326 | 0.316 |
| | STALSTM | 0.888 | 0.805 | 0.729 | 0.667 | 0.620 | 0.585 | 0.558 | 0.539 | 0.524 | 0.513 | 0.503 | 0.496 |
| | STAGRU | 0.884 | 0.804 | 0.729 | 0.665 | 0.614 | 0.576 | 0.549 | 0.532 | 0.523 | 0.517 | 0.514 | 0.513 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 0.083 | 0.101 | 0.118 | 0.133 | 0.147 | 0.158 | 0.167 | 0.175 | 0.182 | 0.188 | 0.190 | 0.186 |
| | Seq2Seq_GRU | 0.036 | 0.009 | 0.024 | 0.061 | 0.095 | 0.123 | 0.144 | 0.157 | 0.166 | 0.171 | 0.173 | 0.169 |
| | Seq2Seq+Attention_LSTM | 0.460 | 0.453 | 0.445 | 0.434 | 0.420 | 0.405 | 0.391 | 0.378 | 0.369 | 0.364 | 0.363 | 0.365 |
| | Seq2Seq+Attention_GRU | 0.314 | 0.320 | 0.332 | 0.347 | 0.364 | 0.380 | 0.396 | 0.411 | 0.422 | 0.430 | 0.433 | 0.429 |
| | STALSTM | 0.488 | 0.481 | 0.472 | 0.461 | 0.447 | 0.434 | 0.423 | 0.418 | 0.416 | 0.415 | 0.417 | 0.420 |
| | STAGRU | 0.513 | 0.513 | 0.512 | 0.509 | 0.504 | 0.495 | 0.486 | 0.477 | 0.468 | 0.461 | 0.455 | 0.449 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 30.99 | 39.36 | 46.94 | 52.85 | 56.72 | 58.95 | 60.09 | 60.54 | 60.57 | 60.35 | 59.95 | 59.37 |
| | Seq2Seq_GRU | 35.26 | 43.01 | 49.48 | 54.68 | 59.04 | 62.14 | 64.41 | 65.99 | 67.00 | 67.42 | 67.44 | 66.99 |
| | Seq2Seq+Attention_LSTM | 28.47 | 34.26 | 38.39 | 41.39 | 43.50 | 44.83 | 45.66 | 46.15 | 46.45 | 46.61 | 46.76 | 46.89 |
| | Seq2Seq+Attention_GRU | 31.30 | 36.73 | 40.32 | 42.92 | 44.95 | 46.59 | 47.85 | 48.79 | 49.60 | 50.34 | 50.98 | 51.40 |
| | STALSTM | 25.90 | 32.28 | 36.74 | 39.78 | 41.75 | 43.02 | 43.89 | 44.57 | 45.03 | 45.41 | 45.69 | 45.91 |
| | STAGRU | 27.39 | 33.59 | 37.17 | 39.93 | 41.99 | 43.47 | 44.47 | 45.04 | 45.32 | 45.48 | 45.61 | 45.72 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 58.69 | 58.00 | 57.36 | 56.79 | 56.32 | 55.98 | 55.79 | 55.70 | 55.64 | 55.59 | 55.60 | 55.77 |
| | Seq2Seq_GRU | 66.15 | 64.95 | 63.48 | 61.86 | 60.25 | 58.93 | 57.93 | 57.26 | 56.77 | 56.39 | 56.18 | 56.21 |
| | Seq2Seq+Attention_LSTM | 47.03 | 47.16 | 47.33 | 47.33 | 47.81 | 48.17 | 48.60 | 49.05 | 49.48 | 49.80 | 49.98 | 50.12 |
| | Seq2Seq+Attention_GRU | 51.55 | 51.46 | 51.10 | 50.56 | 50.00 | 49.49 | 49.05 | 48.68 | 48.39 | 48.18 | 48.11 | 48.24 |
| | STALSTM | 46.04 | 46.18 | 46.41 | 46.67 | 47.03 | 47.40 | 47.73 | 48.00 | 48.20 | 48.34 | 48.48 | 48.68 |

| | | | | | | | | | | | | | |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | STAGRU | 45.82 | 45.86 | 45.90 | 45.93 | 46.05 | 46.32 | 46.69 | 47.03 | 47.33 | 47.54 | 47.71 | 47.96 |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

Pukou (PK)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------------|------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 15.56 | 23.70 | 28.87 | 32.37 | 34.77 | 36.38 | 37.45 | 38.19 | 38.80 | 39.46 | 40.28 | 41.25 |
| | Seq2Seq_GRU | 18.32 | 26.64 | 32.66 | 37.15 | 40.37 | 42.53 | 43.81 | 44.40 | 44.50 | 44.30 | 43.94 | 43.50 |
| | Seq2Seq+Attention_LSTM | 19.54 | 24.14 | 27.93 | 30.94 | 33.24 | 34.90 | 36.02 | 36.71 | 37.14 | 37.47 | 37.79 | 38.14 |
| | Seq2Seq+Attention_GRU | 18.84 | 23.58 | 28.06 | 32.03 | 35.22 | 37.57 | 39.13 | 40.00 | 40.29 | 40.19 | 39.86 | 39.39 |
| | STALSTM | 20.54 | 24.86 | 28.31 | 30.96 | 32.81 | 33.97 | 34.66 | 35.03 | 35.25 | 35.45 | 35.73 | 36.07 |
| | STAGRU | 20.67 | 25.36 | 28.70 | 31.12 | 32.87 | 34.11 | 34.96 | 35.55 | 35.87 | 36.13 | 36.44 | 36.84 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 42.35 | 43.51 | 44.69 | 45.82 | 46.86 | 47.76 | 48.43 | 48.86 | 49.03 | 48.93 | 48.61 | 48.11 |
| | Seq2Seq_GRU | 43.01 | 42.50 | 41.99 | 41.56 | 41.24 | 41.04 | 40.92 | 40.89 | 40.97 | 41.19 | 41.62 | 42.32 |
| | Seq2Seq+Attention_LSTM | 38.47 | 38.79 | 39.10 | 39.38 | 39.64 | 39.84 | 39.94 | 39.94 | 39.84 | 39.68 | 39.53 | 39.46 |
| | Seq2Seq+Attention_GRU | 38.88 | 38.40 | 38.00 | 37.73 | 37.60 | 37.57 | 37.54 | 37.52 | 37.51 | 37.55 | 37.75 | 38.21 |
| | STALSTM | 36.46 | 36.87 | 37.29 | 37.68 | 38.01 | 38.24 | 38.33 | 38.30 | 38.19 | 38.10 | 38.07 | 38.14 |
| | STAGRU | 37.25 | 37.65 | 37.98 | 38.24 | 38.43 | 38.51 | 38.48 | 38.37 | 38.24 | 38.14 | 38.16 | 38.31 |
| | R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Seq2Seq_LSTM | | 0.913 | 0.799 | 0.702 | 0.626 | 0.568 | 0.527 | 0.499 | 0.479 | 0.463 | 0.444 | 0.421 | 0.392 |
| Seq2Seq_GRU | | 0.880 | 0.746 | 0.619 | 0.507 | 0.418 | 0.354 | 0.315 | 0.296 | 0.293 | 0.300 | 0.311 | 0.325 |
| Seq2Seq+Attention_LSTM | | 0.863 | 0.792 | 0.721 | 0.658 | 0.606 | 0.565 | 0.537 | 0.519 | 0.508 | 0.499 | 0.490 | 0.481 |
| Seq2Seq+Attention_GRU | | 0.873 | 0.801 | 0.719 | 0.633 | 0.557 | 0.496 | 0.453 | 0.429 | 0.420 | 0.423 | 0.433 | 0.446 |
| STALSTM | | 0.849 | 0.779 | 0.714 | 0.658 | 0.615 | 0.588 | 0.571 | 0.562 | 0.556 | 0.551 | 0.544 | 0.535 |
| STAGRU | | 0.847 | 0.770 | 0.706 | 0.654 | 0.614 | 0.584 | 0.563 | 0.549 | 0.541 | 0.534 | 0.526 | 0.515 |
| methods | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Seq2Seq_LSTM | | 0.360 | 0.324 | 0.287 | 0.250 | 0.216 | 0.185 | 0.162 | 0.147 | 0.142 | 0.145 | 0.157 | 0.174 |
| Seq2Seq_GRU | | 0.339 | 0.355 | 0.370 | 0.383 | 0.393 | 0.398 | 0.402 | 0.403 | 0.401 | 0.394 | 0.382 | 0.361 |
| Seq2Seq+Attention_LSTM | | 0.472 | 0.463 | 0.454 | 0.446 | 0.439 | 0.433 | 0.430 | 0.430 | 0.433 | 0.438 | 0.442 | 0.445 |
| Seq2Seq+Attention_GRU | | 0.460 | 0.473 | 0.484 | 0.491 | 0.495 | 0.496 | 0.496 | 0.497 | 0.497 | 0.496 | 0.491 | 0.479 |
| STALSTM | | 0.525 | 0.514 | 0.503 | 0.493 | 0.484 | 0.477 | 0.475 | 0.476 | 0.479 | 0.482 | 0.483 | 0.481 |
| STAGRU | | 0.505 | 0.494 | 0.485 | 0.478 | 0.472 | 0.470 | 0.471 | 0.474 | 0.478 | 0.480 | 0.480 | 0.476 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 23.34 | 32.83 | 37.85 | 40.79 | 42.36 | 43.96 | 44.89 | 45.55 | 46.15 | 46.82 | 47.58 | 48.39 |
| | Seq2Seq_GRU | 25.13 | 33.88 | 39.71 | 43.70 | 46.24 | 47.78 | 48.45 | 48.45 | 48.22 | 48.03 | 47.78 | 47.52 |
| | Seq2Seq+Attention_LSTM | 26.07 | 31.01 | 34.71 | 37.46 | 39.52 | 40.97 | 41.98 | 42.78 | 43.28 | 43.68 | 44.07 | 44.49 |

| | | | | | | | | | | | | | |
|--|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Seq2Seq+Attention_GRU | 29.75 | 33.16 | 36.11 | 38.8 | 41.02 | 42.75 | 44.00 | 44.80 | 45.24 | 45.47 | 45.46 | 45.39 |
| | STALSTM | 28.92 | 32.63 | 35.54 | 37.74 | 39.33 | 40.43 | 41.2 | 41.76 | 42.12 | 42.44 | 42.82 | 43.25 |
| | STAGRU | 29.54 | 33.61 | 36.44 | 38.5 | 40.12 | 41.36 | 42.28 | 43.07 | 43.43 | 43.75 | 44.13 | 44.62 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 49.20 | 50.00 | 50.72 | 51.37 | 51.94 | 52.49 | 52.94 | 53.31 | 53.55 | 53.67 | 53.71 | 53.70 |
| | Seq2Seq_GRU | 47.26 | 47.06 | 46.87 | 46.66 | 46.53 | 46.46 | 46.39 | 46.32 | 46.3 | 46.4 | 46.64 | 47.15 |
| | Seq2Seq+Attention_LSTM | 44.93 | 45.33 | 45.75 | 46.14 | 46.42 | 46.62 | 46.72 | 46.75 | 46.71 | 46.61 | 46.51 | 46.46 |
| | Seq2Seq+Attention_GRU | 45.33 | 45.35 | 45.38 | 45.49 | 45.66 | 45.81 | 45.88 | 45.89 | 45.85 | 45.83 | 45.93 | 46.19 |
| | STALSTM | 43.76 | 44.32 | 44.87 | 45.33 | 45.69 | 45.94 | 46.07 | 46.15 | 46.17 | 46.22 | 46.3 | 46.39 |
| | STAGRU | 45.09 | 45.57 | 45.92 | 46.17 | 46.31 | 46.38 | 46.35 | 46.31 | 46.31 | 46.37 | 46.53 | 46.79 |

Xuanwuhu (XWH)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------------|------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 21.25 | 26.44 | 30.78 | 34.23 | 36.9 | 38.91 | 40.46 | 41.73 | 42.81 | 43.8 | 44.73 | 45.55 |
| | Seq2Seq_GRU | 23.31 | 28.45 | 33.37 | 37.47 | 40.67 | 42.99 | 44.59 | 45.63 | 46.25 | 46.65 | 46.93 | 47.12 |
| | Seq2Seq+Attention_LSTM | 18.25 | 23.97 | 28.29 | 31.59 | 34.03 | 35.63 | 36.55 | 36.98 | 37.09 | 37.07 | 37.02 | 37.00 |
| | Seq2Seq+Attention_GRU | 19.69 | 24.81 | 28.31 | 30.84 | 32.72 | 34.08 | 35.03 | 35.68 | 36.15 | 36.58 | 37.07 | 37.61 |
| | STALSTM | 18.42 | 24.22 | 28.15 | 30.90 | 32.85 | 34.13 | 34.91 | 35.34 | 35.55 | 35.67 | 35.83 | 36.02 |
| | STAGRU | 18.14 | 23.31 | 26.93 | 29.53 | 31.36 | 32.62 | 33.46 | 33.99 | 34.36 | 34.61 | 34.85 | 35.10 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 46.24 | 46.76 | 47.08 | 47.22 | 47.22 | 47.15 | 47.06 | 46.99 | 46.95 | 46.95 | 46.97 | 47.02 |
| | Seq2Seq_GRU | 47.21 | 47.25 | 47.23 | 47.14 | 47.04 | 46.97 | 46.92 | 46.88 | 46.82 | 46.78 | 46.75 | 46.76 |
| | Seq2Seq+Attention_LSTM | 37.02 | 37.13 | 37.32 | 37.59 | 37.96 | 38.41 | 38.88 | 39.29 | 39.56 | 39.74 | 39.85 | 39.99 |
| | Seq2Seq+Attention_GRU | 38.18 | 38.78 | 39.39 | 39.98 | 40.53 | 41.04 | 41.47 | 41.75 | 41.85 | 41.79 | 41.61 | 41.37 |
| | STALSTM | 36.27 | 36.60 | 37.01 | 37.50 | 38.06 | 38.68 | 39.29 | 39.76 | 40.07 | 40.27 | 40.39 | 40.48 |
| | STAGRU | 35.36 | 35.64 | 35.92 | 36.19 | 36.45 | 36.73 | 37.02 | 37.28 | 37.51 | 37.74 | 37.96 | 38.21 |
| | R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Seq2Seq_LSTM | | 0.833 | 0.742 | 0.650 | 0.568 | 0.498 | 0.441 | 0.396 | 0.358 | 0.324 | 0.292 | 0.262 | 0.235 |
| Seq2Seq_GRU | | 0.799 | 0.701 | 0.589 | 0.482 | 0.390 | 0.318 | 0.267 | 0.232 | 0.211 | 0.197 | 0.188 | 0.181 |
| Seq2Seq+Attention_LSTM | | 0.877 | 0.788 | 0.705 | 0.632 | 0.573 | 0.532 | 0.507 | 0.496 | 0.493 | 0.493 | 0.494 | 0.495 |
| Seq2Seq+Attention_GRU | | 0.856 | 0.772 | 0.704 | 0.649 | 0.605 | 0.571 | 0.547 | 0.530 | 0.518 | 0.506 | 0.493 | 0.478 |
| STALSTM | | 0.874 | 0.783 | 0.707 | 0.647 | 0.602 | 0.570 | 0.550 | 0.539 | 0.534 | 0.530 | 0.526 | 0.521 |
| STAGRU | | 0.878 | 0.799 | 0.732 | 0.678 | 0.637 | 0.607 | 0.587 | 0.574 | 0.564 | 0.558 | 0.552 | 0.545 |
| methods | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Seq2Seq_LSTM | 0.211 | 0.193 | 0.182 | 0.177 | 0.177 | 0.18 | 0.183 | 0.185 | 0.187 | 0.187 | 0.186 | 0.185 | |

| | | | | | | | | | | | | | |
|--------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Seq2Seq_GRU | 0.178 | 0.176 | 0.177 | 0.18 | 0.183 | 0.186 | 0.187 | 0.189 | 0.191 | 0.193 | 0.193 | 0.194 |
| | Seq2Seq+Attention_LSTM | 0.494 | 0.491 | 0.486 | 0.478 | 0.468 | 0.455 | 0.442 | 0.430 | 0.423 | 0.418 | 0.414 | 0.410 |
| | Seq2Seq+Attention_GRU | 0.462 | 0.445 | 0.427 | 0.410 | 0.394 | 0.378 | 0.365 | 0.357 | 0.354 | 0.355 | 0.361 | 0.369 |
| | STALSTM | 0.514 | 0.505 | 0.494 | 0.481 | 0.465 | 0.447 | 0.430 | 0.416 | 0.407 | 0.402 | 0.398 | 0.395 |
| | STAGRU | 0.538 | 0.531 | 0.524 | 0.516 | 0.509 | 0.502 | 0.494 | 0.487 | 0.481 | 0.474 | 0.468 | 0.461 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 33.71 | 39.74 | 44.68 | 48.30 | 50.91 | 52.84 | 54.24 | 55.45 | 56.39 | 57.19 | 57.92 | 58.59 |
| | Seq2Seq_GRU | 38.79 | 45.16 | 51.22 | 56.12 | 59.46 | 61.59 | 62.67 | 63.07 | 63.01 | 62.77 | 62.51 | 62.20 |
| | Seq2Seq+Attention_LSTM | 31.68 | 38.25 | 42.88 | 46.13 | 48.52 | 50.05 | 50.88 | 51.26 | 51.36 | 51.38 | 51.42 | 51.43 |
| | Seq2Seq+Attention_GRU | 35.59 | 40.91 | 44.57 | 47.07 | 48.80 | 49.98 | 50.76 | 51.31 | 51.77 | 52.28 | 52.83 | 53.39 |
| | STALSTM | 32.29 | 39.04 | 43.29 | 46.08 | 47.98 | 49.09 | 49.76 | 50.10 | 50.24 | 50.39 | 50.52 | 50.75 |
| | STAGRU | 32.07 | 37.78 | 41.64 | 44.48 | 46.37 | 47.59 | 48.39 | 49.02 | 49.47 | 49.84 | 50.25 | 50.57 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 59.12 | 59.55 | 59.86 | 60.02 | 60.13 | 60.18 | 60.21 | 60.25 | 60.32 | 60.39 | 60.45 | 60.51 |
| | Seq2Seq_GRU | 61.87 | 61.55 | 61.30 | 61.05 | 60.87 | 60.72 | 60.63 | 60.51 | 60.37 | 60.25 | 60.19 | 60.27 |
| | Seq2Seq+Attention_LSTM | 51.48 | 51.55 | 51.72 | 51.95 | 52.26 | 52.67 | 53.18 | 53.69 | 54.10 | 54.40 | 54.59 | 54.79 |
| | Seq2Seq+Attention_GRU | 53.88 | 54.40 | 54.94 | 55.46 | 55.90 | 56.27 | 56.60 | 56.89 | 57.07 | 57.15 | 57.12 | 57.04 |
| | STALSTM | 50.96 | 51.27 | 51.66 | 52.15 | 52.67 | 53.27 | 53.86 | 54.40 | 54.88 | 55.26 | 55.50 | 55.70 |
| | STAGRU | 50.83 | 51.02 | 51.27 | 51.52 | 51.7 | 51.92 | 52.20 | 52.53 | 52.82 | 53.09 | 53.36 | 53.58 |

Ruijinlu (RJL)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| RMSE | Seq2Seq_LSTM | 25.53 | 33.91 | 41.54 | 47.11 | 50.76 | 52.86 | 53.82 | 54.01 | 53.68 | 53.08 | 52.38 | 51.72 |
| | Seq2Seq_GRU | 17.52 | 23.45 | 28.98 | 33.80 | 37.90 | 41.26 | 43.87 | 45.75 | 46.87 | 47.34 | 47.31 | 46.95 |
| | Seq2Seq+Attention_LSTM | 18.13 | 23.94 | 27.75 | 30.50 | 32.53 | 33.99 | 35.06 | 35.83 | 36.41 | 36.93 | 37.45 | 37.98 |
| | Seq2Seq+Attention_GRU | 16.46 | 22.16 | 27.08 | 30.83 | 33.60 | 35.65 | 37.14 | 38.22 | 38.94 | 39.41 | 39.72 | 39.95 |
| | STALSTM | 18.51 | 23.38 | 26.86 | 29.50 | 31.53 | 33.13 | 34.24 | 35.10 | 35.71 | 36.26 | 36.80 | 37.36 |
| | STAGRU | 17.98 | 22.32 | 25.63 | 28.15 | 30.07 | 31.51 | 32.59 | 33.39 | 33.99 | 34.51 | 34.98 | 35.44 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 51.19 | 50.82 | 50.62 | 50.56 | 50.59 | 50.68 | 50.76 | 50.81 | 50.85 | 50.93 | 51.12 | 51.52 |
| | Seq2Seq_GRU | 46.45 | 45.99 | 45.69 | 45.59 | 45.64 | 45.77 | 45.89 | 45.87 | 45.67 | 45.33 | 45.00 | 44.87 |
| | Seq2Seq+Attention_LSTM | 38.53 | 39.07 | 39.56 | 39.97 | 40.29 | 40.49 | 40.57 | 40.52 | 40.34 | 40.06 | 39.72 | 39.42 |
| | Seq2Seq+Attention_GRU | 40.16 | 40.38 | 40.60 | 40.87 | 41.14 | 41.39 | 41.60 | 41.71 | 41.76 | 41.83 | 42.00 | 42.35 |
| | STALSTM | 37.93 | 38.50 | 39.03 | 39.49 | 39.79 | 39.98 | 40.02 | 39.90 | 39.61 | 39.26 | 38.87 | 38.58 |
| | STAGRU | 35.91 | 36.43 | 36.74 | 37.05 | 37.31 | 37.49 | 37.59 | 37.63 | 37.59 | 37.49 | 37.38 | 37.31 |

| R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----------------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Seq2Seq_LSTM | 0.780 | 0.612 | 0.419 | 0.253 | 0.133 | 0.059 | 0.025 | 0.018 | 0.03 | 0.051 | 0.076 | 0.099 |
| | Seq2Seq_GRU | 0.896 | 0.814 | 0.717 | 0.615 | 0.516 | 0.426 | 0.352 | 0.295 | 0.260 | 0.245 | 0.246 | 0.257 |
| | Seq2Seq+Attention_LSTM | 0.889 | 0.807 | 0.740 | 0.687 | 0.644 | 0.611 | 0.586 | 0.568 | 0.553 | 0.541 | 0.528 | 0.514 |
| | Seq2Seq+Attention_GRU | 0.908 | 0.834 | 0.753 | 0.680 | 0.619 | 0.572 | 0.535 | 0.508 | 0.489 | 0.477 | 0.468 | 0.462 |
| | STALSTM | 0.884 | 0.815 | 0.757 | 0.707 | 0.665 | 0.63 | 0.605 | 0.585 | 0.570 | 0.557 | 0.543 | 0.530 |
| | STAGRU | 0.891 | 0.832 | 0.778 | 0.733 | 0.695 | 0.665 | 0.642 | 0.624 | 0.611 | 0.599 | 0.587 | 0.576 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 0.117 | 0.130 | 0.136 | 0.138 | 0.137 | 0.134 | 0.131 | 0.129 | 0.128 | 0.125 | 0.119 | 0.105 |
| | Seq2Seq_GRU | 0.273 | 0.287 | 0.296 | 0.299 | 0.297 | 0.293 | 0.289 | 0.290 | 0.296 | 0.307 | 0.317 | 0.321 |
| | Seq2Seq+Attention_LSTM | 0.500 | 0.486 | 0.472 | 0.461 | 0.453 | 0.447 | 0.445 | 0.446 | 0.451 | 0.459 | 0.468 | 0.476 |
| | Seq2Seq+Attention_GRU | 0.456 | 0.450 | 0.444 | 0.437 | 0.429 | 0.422 | 0.416 | 0.413 | 0.411 | 0.410 | 0.405 | 0.395 |
| | STALSTM | 0.515 | 0.500 | 0.486 | 0.474 | 0.466 | 0.460 | 0.459 | 0.463 | 0.471 | 0.480 | 0.490 | 0.498 |
| | STAGRU | 0.565 | 0.555 | 0.545 | 0.537 | 0.530 | 0.526 | 0.523 | 0.522 | 0.523 | 0.526 | 0.529 | 0.530 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 35.57 | 46.85 | 58.25 | 66.10 | 70.06 | 71.09 | 70.66 | 69.89 | 68.75 | 67.52 | 66.41 | 65.52 |
| | Seq2Seq_GRU | 29.54 | 35.35 | 41.19 | 46.28 | 50.84 | 54.65 | 57.64 | 59.7 | 60.64 | 60.82 | 60.55 | 60.10 |
| | Seq2Seq+Attention_LSTM | 30.78 | 37.60 | 40.89 | 42.93 | 44.76 | 46.03 | 47.02 | 47.84 | 48.73 | 49.39 | 50.17 | 51.10 |
| | Seq2Seq+Attention_GRU | 29.37 | 34.96 | 40.34 | 44.29 | 46.85 | 48.70 | 49.98 | 50.82 | 51.51 | 52.25 | 53.00 | 53.51 |
| | STALSTM | 31.52 | 36.81 | 39.92 | 42.14 | 44.12 | 45.79 | 46.82 | 47.55 | 48.19 | 48.82 | 49.65 | 50.54 |
| | STAGRU | 32.83 | 36.95 | 39.86 | 41.97 | 43.62 | 44.83 | 45.86 | 46.65 | 47.50 | 48.03 | 48.59 | 49.22 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 64.83 | 64.34 | 64.03 | 63.83 | 63.79 | 63.86 | 63.94 | 64.01 | 64.07 | 64.18 | 64.39 | 64.8 |
| | Seq2Seq_GRU | 59.73 | 59.36 | 59.09 | 58.91 | 58.87 | 58.92 | 59.05 | 59.09 | 58.94 | 58.65 | 58.34 | 58.21 |
| | Seq2Seq+Attention_LSTM | 51.89 | 52.52 | 53.02 | 53.42 | 53.87 | 54.35 | 54.77 | 55.01 | 55.12 | 55.05 | 54.79 | 54.49 |
| | Seq2Seq+Attention_GRU | 53.91 | 54.20 | 54.36 | 54.45 | 54.57 | 54.78 | 55.05 | 55.32 | 55.57 | 55.85 | 56.18 | 56.58 |
| | STALSTM | 51.37 | 52.09 | 52.55 | 53.07 | 53.44 | 53.82 | 54.14 | 54.25 | 54.14 | 53.85 | 53.41 | 52.99 |
| | STAGRU | 49.84 | 50.47 | 50.88 | 51.28 | 51.67 | 51.95 | 52.17 | 52.29 | 52.34 | 52.19 | 51.94 | 51.86 |

Caochangmen (CCM)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 24.55 | 32.99 | 39.51 | 44.06 | 47.07 | 48.97 | 50.1 | 50.71 | 50.99 | 51.04 | 50.94 | 50.72 |
| | Seq2Seq_GRU | 24.99 | 28.86 | 32.79 | 36.29 | 39.22 | 41.59 | 43.54 | 45.17 | 46.6 | 47.89 | 49.06 | 50.09 |
| | Seq2Seq+Attention_LSTM | 17.66 | 22.87 | 26.76 | 29.68 | 31.85 | 33.42 | 34.57 | 35.46 | 36.22 | 36.95 | 37.70 | 38.43 |
| | Seq2Seq+Attention_GRU | 23.17 | 27.81 | 31.78 | 34.93 | 37.29 | 38.97 | 40.13 | 40.93 | 41.53 | 42.01 | 42.45 | 42.80 |

| | | | | | | | | | | | | | |
|----------------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | STALSTM | 17.74 | 22.71 | 26.62 | 29.64 | 31.92 | 33.55 | 34.71 | 35.53 | 36.15 | 36.70 | 37.25 | 37.77 |
| | STAGRU | 17.74 | 22.63 | 26.19 | 28.80 | 30.71 | 32.10 | 33.14 | 33.95 | 34.58 | 35.14 | 35.72 | 36.34 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 50.39 | 50.00 | 49.56 | 49.17 | 48.90 | 48.83 | 49.01 | 49.45 | 50.15 | 51.06 | 52.13 | 53.31 |
| | Seq2Seq_GRU | 50.91 | 51.49 | 51.84 | 51.96 | 51.89 | 51.66 | 51.29 | 50.80 | 50.24 | 49.68 | 49.24 | 49.06 |
| | Seq2Seq+Attention_LSTM | 39.09 | 39.65 | 40.08 | 40.40 | 40.59 | 40.66 | 40.60 | 40.40 | 40.05 | 39.62 | 39.18 | 38.84 |
| | Seq2Seq+Attention_GRU | 43.04 | 43.17 | 43.22 | 43.23 | 43.21 | 43.18 | 43.10 | 43.00 | 42.90 | 42.84 | 42.86 | 43.05 |
| | STALSTM | 38.23 | 38.64 | 39.01 | 39.35 | 39.64 | 39.89 | 40.05 | 40.09 | 39.99 | 39.80 | 39.59 | 39.44 |
| | STAGRU | 37.00 | 37.62 | 38.21 | 38.72 | 39.17 | 39.51 | 39.76 | 39.90 | 39.92 | 39.83 | 39.68 | 39.52 |
| R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 0.802 | 0.642 | 0.487 | 0.362 | 0.272 | 0.212 | 0.175 | 0.155 | 0.146 | 0.145 | 0.148 | 0.155 |
| | Seq2Seq_GRU | 0.794 | 0.726 | 0.646 | 0.567 | 0.494 | 0.431 | 0.377 | 0.33 | 0.287 | 0.247 | 0.209 | 0.176 |
| | Seq2Seq+Attention_LSTM | 0.897 | 0.828 | 0.764 | 0.710 | 0.666 | 0.633 | 0.607 | 0.587 | 0.569 | 0.551 | 0.533 | 0.515 |
| | Seq2Seq+Attention_GRU | 0.823 | 0.746 | 0.668 | 0.599 | 0.543 | 0.501 | 0.471 | 0.449 | 0.433 | 0.420 | 0.408 | 0.398 |
| | STALSTM | 0.896 | 0.830 | 0.767 | 0.711 | 0.665 | 0.630 | 0.604 | 0.585 | 0.571 | 0.557 | 0.544 | 0.531 |
| | STAGRU | 0.896 | 0.831 | 0.774 | 0.727 | 0.690 | 0.661 | 0.639 | 0.621 | 0.607 | 0.594 | 0.581 | 0.566 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 0.166 | 0.179 | 0.193 | 0.205 | 0.214 | 0.216 | 0.210 | 0.196 | 0.173 | 0.143 | 0.107 | 0.066 |
| | Seq2Seq_GRU | 0.149 | 0.129 | 0.117 | 0.112 | 0.115 | 0.122 | 0.135 | 0.151 | 0.170 | 0.189 | 0.203 | 0.209 |
| | Seq2Seq+Attention_LSTM | 0.498 | 0.483 | 0.472 | 0.463 | 0.458 | 0.456 | 0.458 | 0.463 | 0.473 | 0.484 | 0.495 | 0.504 |
| | Seq2Seq+Attention_GRU | 0.391 | 0.387 | 0.386 | 0.386 | 0.386 | 0.387 | 0.389 | 0.392 | 0.395 | 0.397 | 0.396 | 0.391 |
| | STALSTM | 0.520 | 0.509 | 0.499 | 0.491 | 0.483 | 0.477 | 0.472 | 0.471 | 0.474 | 0.479 | 0.485 | 0.489 |
| | STAGRU | 0.550 | 0.535 | 0.520 | 0.507 | 0.495 | 0.486 | 0.480 | 0.476 | 0.476 | 0.478 | 0.482 | 0.487 |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 36.99 | 45.75 | 52.12 | 56.34 | 58.90 | 60.32 | 61.21 | 61.68 | 61.89 | 61.83 | 61.58 | 61.20 |
| | Seq2Seq_GRU | 42.53 | 43.85 | 46.38 | 49.38 | 51.99 | 53.95 | 55.57 | 57.07 | 58.68 | 60.24 | 61.54 | 62.64 |
| | Seq2Seq+Attention_LSTM | 29.59 | 35.25 | 39.35 | 42.24 | 44.32 | 45.83 | 46.93 | 47.87 | 48.80 | 49.70 | 50.54 | 51.24 |
| | Seq2Seq+Attention_GRU | 39.76 | 43.41 | 45.88 | 47.73 | 49.38 | 50.49 | 51.19 | 51.74 | 52.16 | 52.61 | 53.08 | 53.44 |
| | STALSTM | 29.68 | 35.56 | 39.58 | 42.55 | 44.66 | 46.12 | 47.16 | 48.01 | 48.83 | 49.60 | 50.33 | 50.96 |
| | STAGRU | 30.08 | 35.50 | 39.32 | 42.11 | 44.31 | 45.83 | 46.84 | 47.68 | 48.45 | 49.07 | 49.73 | 50.46 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 60.70 | 60.19 | 59.70 | 59.31 | 59.13 | 59.20 | 59.51 | 60.01 | 60.70 | 61.59 | 62.64 | 63.83 |
| | Seq2Seq_GRU | 63.43 | 64.09 | 64.52 | 64.58 | 64.38 | 63.96 | 63.38 | 62.60 | 61.77 | 61.01 | 60.35 | 60.05 |
| | Seq2Seq+Attention_LSTM | 51.81 | 52.30 | 52.70 | 53.00 | 53.21 | 53.36 | 53.45 | 53.42 | 53.25 | 52.98 | 52.68 | 52.43 |
| | Seq2Seq+Attention_GRU | 53.47 | 53.57 | 53.68 | 53.69 | 53.67 | 53.59 | 53.52 | 53.42 | 53.32 | 53.31 | 53.32 | 53.47 |

| | | | | | | | | | | | | | |
|--|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | STALSTM | 51.43 | 51.85 | 52.22 | 52.51 | 52.72 | 52.95 | 53.14 | 53.25 | 53.25 | 53.20 | 53.13 | 53.05 |
| | STAGRU | 51.10 | 51.69 | 52.17 | 52.54 | 52.83 | 53.13 | 53.46 | 53.69 | 53.88 | 53.90 | 53.82 | 53.71 |

Maigaoqiao (MGQ)

| indicator | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----------------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| RMSE | Seq2Seq_LSTM | 14.46 | 22.08 | 27.94 | 32.54 | 36.03 | 38.57 | 40.35 | 41.61 | 42.56 | 43.37 | 44.08 | 44.66 |
| | Seq2Seq_GRU | 18.84 | 24.40 | 28.85 | 32.27 | 34.82 | 36.64 | 37.92 | 38.89 | 39.71 | 40.49 | 41.29 | 42.10 |
| | Seq2Seq+Attention_LSTM | 20.42 | 26.98 | 30.97 | 33.44 | 34.99 | 35.92 | 36.45 | 36.81 | 37.15 | 37.59 | 38.16 | 38.80 |
| | Seq2Seq+Attention_GRU | 19.77 | 25.67 | 30.11 | 33.13 | 35.12 | 36.34 | 37.08 | 37.57 | 38.06 | 38.66 | 39.39 | 40.18 |
| | STALSTM | 19.32 | 24.35 | 28.32 | 31.27 | 33.45 | 35.09 | 36.35 | 37.35 | 38.26 | 39.13 | 39.98 | 40.79 |
| | STAGRU | 19.40 | 24.40 | 28.07 | 30.77 | 32.81 | 34.25 | 35.23 | 35.9 | 36.4 | 36.84 | 37.28 | 37.71 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 45.08 | 45.31 | 45.30 | 45.06 | 44.63 | 44.07 | 43.44 | 42.81 | 42.25 | 41.78 | 41.43 | 41.34 |
| | Seq2Seq_GRU | 42.87 | 43.59 | 44.20 | 44.66 | 44.95 | 45.06 | 45.03 | 44.83 | 44.51 | 44.13 | 43.74 | 43.51 |
| | Seq2Seq+Attention_LSTM | 39.45 | 40.07 | 40.62 | 41.11 | 41.48 | 41.71 | 41.74 | 41.62 | 41.35 | 40.99 | 40.66 | 40.45 |
| | Seq2Seq+Attention_GRU | 40.94 | 41.56 | 42.24 | 42.71 | 43.01 | 43.11 | 43.03 | 42.78 | 42.41 | 41.99 | 41.56 | 41.21 |
| | STALSTM | 41.50 | 42.09 | 42.51 | 42.74 | 42.77 | 42.64 | 42.38 | 41.98 | 41.51 | 40.99 | 40.46 | 40.09 |
| STAGRU | 38.11 | 38.46 | 38.71 | 38.89 | 38.97 | 38.98 | 38.97 | 38.90 | 38.8 | 38.7 | 38.63 | 38.71 | |
| R² | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 0.927 | 0.831 | 0.730 | 0.634 | 0.552 | 0.487 | 0.438 | 0.403 | 0.375 | 0.351 | 0.330 | 0.312 |
| | Seq2Seq_GRU | 0.877 | 0.794 | 0.712 | 0.640 | 0.581 | 0.537 | 0.504 | 0.478 | 0.456 | 0.434 | 0.412 | 0.388 |
| | Seq2Seq+Attention_LSTM | 0.856 | 0.748 | 0.669 | 0.614 | 0.577 | 0.555 | 0.542 | 0.533 | 0.524 | 0.512 | 0.498 | 0.480 |
| | Seq2Seq+Attention_GRU | 0.865 | 0.772 | 0.687 | 0.621 | 0.574 | 0.544 | 0.526 | 0.513 | 0.500 | 0.484 | 0.464 | 0.443 |
| | STALSTM | 0.871 | 0.795 | 0.723 | 0.662 | 0.614 | 0.575 | 0.544 | 0.518 | 0.495 | 0.471 | 0.448 | 0.426 |
| | STAGRU | 0.870 | 0.794 | 0.728 | 0.673 | 0.628 | 0.595 | 0.571 | 0.555 | 0.543 | 0.532 | 0.520 | 0.509 |
| | methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | Seq2Seq_LSTM | 0.299 | 0.291 | 0.291 | 0.299 | 0.312 | 0.329 | 0.348 | 0.367 | 0.384 | 0.397 | 0.407 | 0.410 |
| | Seq2Seq_GRU | 0.365 | 0.344 | 0.325 | 0.311 | 0.302 | 0.299 | 0.300 | 0.306 | 0.316 | 0.327 | 0.339 | 0.347 |
| | Seq2Seq+Attention_LSTM | 0.463 | 0.446 | 0.430 | 0.416 | 0.406 | 0.400 | 0.398 | 0.402 | 0.410 | 0.420 | 0.429 | 0.435 |
| | Seq2Seq+Attention_GRU | 0.421 | 0.401 | 0.384 | 0.370 | 0.361 | 0.358 | 0.360 | 0.368 | 0.379 | 0.391 | 0.404 | 0.414 |
| STALSTM | 0.405 | 0.388 | 0.376 | 0.369 | 0.368 | 0.372 | 0.380 | 0.391 | 0.405 | 0.420 | 0.435 | 0.445 | |
| STAGRU | 0.498 | 0.489 | 0.482 | 0.478 | 0.475 | 0.475 | 0.475 | 0.477 | 0.480 | 0.483 | 0.485 | 0.483 | |
| SMAPE | methods | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | Seq2Seq_LSTM | 31.57 | 40.83 | 48.5 | 53.04 | 56.51 | 58.80 | 60.33 | 61.48 | 62.47 | 63.32 | 64.06 | 64.68 |
| | Seq2Seq_GRU | 36.98 | 43.54 | 47.92 | 51.22 | 53.39 | 55.36 | 56.56 | 57.76 | 58.78 | 59.71 | 60.74 | 61.74 |

| | | | | | | | | | | | | |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Seq2Seq+Attention_LSTM | 42.79 | 51.07 | 54.18 | 55.40 | 56.10 | 56.64 | 57.00 | 57.24 | 57.47 | 57.85 | 58.37 | 58.92 |
| Seq2Seq+Attention_GRU | 39.93 | 46.24 | 50.85 | 53.94 | 55.75 | 56.76 | 57.41 | 57.92 | 58.44 | 58.95 | 59.52 | 60.19 |
| STALSTM | 36.71 | 43.45 | 47.91 | 50.60 | 52.70 | 54.24 | 55.67 | 56.99 | 58.21 | 59.26 | 60.16 | 60.99 |
| STAGRU | 38.07 | 44.92 | 48.75 | 51.34 | 53.19 | 54.55 | 55.46 | 55.98 | 56.45 | 56.88 | 57.41 | 57.98 |
| methods | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Seq2Seq_LSTM | 65.07 | 65.28 | 65.24 | 64.98 | 64.62 | 64.24 | 63.80 | 63.4 | 63.09 | 62.81 | 62.54 | 62.46 |
| Seq2Seq_GRU | 62.68 | 63.49 | 64.01 | 64.35 | 64.50 | 64.55 | 64.50 | 64.35 | 64.13 | 63.85 | 63.61 | 63.56 |
| Seq2Seq+Attention_LSTM | 59.48 | 60.05 | 60.53 | 60.95 | 61.27 | 61.53 | 61.70 | 61.73 | 61.54 | 61.25 | 61.02 | 60.90 |
| Seq2Seq+Attention_GRU | 60.81 | 61.35 | 61.69 | 61.92 | 62.10 | 62.25 | 62.37 | 62.38 | 62.24 | 62.00 | 61.69 | 61.47 |
| STALSTM | 61.56 | 62.20 | 62.54 | 62.60 | 62.49 | 62.30 | 62.14 | 61.96 | 61.60 | 61.11 | 60.72 | 60.49 |
| STAGRU | 58.51 | 58.97 | 59.25 | 59.32 | 59.19 | 59.08 | 59.07 | 59.07 | 59.00 | 58.89 | 58.81 | 58.91 |