

| Methods | | Ours | | SegRNN | | TimesNet | | PatchTST | | LSTF-Linear | | FiLM | |
|---------|-----------|---------------|---------------|---------------|---------------|----------|--------|---------------|---------------|---------------|--------|---------------|---------------|
| Metrics | | MSE | MAE | MSE | MAE | MSE | MAE | MSE | MAE | MSE | MAE | MSE | MAE |
| ETTm1 | 168-168 | 0.3256 | 0.3622 | 0.3402 | 0.3781 | 0.3803 | 0.4004 | <u>0.3271</u> | 0.3645 | 0.3427 | 0.3692 | 0.3459 | 0.3662 |
| | 168-336 | 0.3632 | 0.3878 | <u>0.3668</u> | 0.3960 | 0.4264 | 0.4258 | 0.3727 | 0.3960 | 0.3825 | 0.3935 | 0.3860 | <u>0.3894</u> |
| | 336-336 | 0.3571 | 0.3834 | 0.3748 | 0.4050 | 0.4225 | 0.4270 | 0.3764 | 0.3963 | <u>0.3710</u> | 0.3878 | 0.3732 | <u>0.3842</u> |
| | 336-720 | 0.4109 | 0.4147 | <u>0.4182</u> | <u>0.4287</u> | 0.4551 | 0.4513 | 0.4285 | 0.4318 | 0.4251 | 0.4198 | 0.4276 | <u>0.4153</u> |
| | 720-720 | 0.4101 | <u>0.4151</u> | 0.4310 | 0.4409 | 0.4859 | 0.4815 | 0.4859 | 0.4815 | 0.4214 | 0.4222 | <u>0.4185</u> | 0.4132 |
| | 720-1440 | 0.4483 | <u>0.4388</u> | <u>0.4559</u> | 0.4638 | 0.7882 | 0.6176 | 0.5046 | 0.4742 | 0.4571 | 0.4441 | 0.4563 | 0.4350 |
| | 1440-1440 | <u>0.4366</u> | <u>0.4404</u> | 0.5133 | 0.4977 | 0.6657 | 0.5756 | 0.4742 | 0.4677 | 0.4401 | 0.4437 | 0.4338 | 0.4326 |
| | AVG | 0.3931 | <u>0.4061</u> | 0.4143 | 0.4300 | 0.5177 | 0.4827 | 0.4159 | 0.4238 | <u>0.4057</u> | 0.4115 | 0.4059 | 0.4051 |
| ETTm2 | 168-168 | 0.2180 | 0.2929 | 0.2246 | 0.2890 | 0.2386 | 0.3023 | 0.2233 | 0.2909 | 0.2439 | 0.3264 | <u>0.2232</u> | <u>0.2895</u> |
| | 168-336 | 0.2836 | 0.3392 | <u>0.2879</u> | <u>0.3362</u> | 0.3384 | 0.3581 | 0.3019 | 0.3416 | 0.3483 | 0.4021 | 0.2891 | 0.3331 |
| | 336-336 | 0.2708 | <u>0.3310</u> | 0.2958 | 0.3377 | 0.2963 | 0.3458 | 0.2796 | 0.3328 | 0.3066 | 0.3684 | <u>0.2771</u> | <u>0.3286</u> |
| | 336-720 | <u>0.3624</u> | <u>0.3872</u> | 0.3615 | 0.3870 | 0.4181 | 0.4132 | 0.3637 | 0.3895 | 0.4461 | 0.4557 | 0.3728 | 0.3883 |
| | 720-720 | 0.3553 | 0.3891 | 0.3644 | <u>0.3899</u> | 0.3875 | 0.4087 | 0.4181 | 0.4274 | 0.4058 | 0.4302 | <u>0.3626</u> | 0.3913 |
| | 720-1440 | 0.3816 | 0.4118 | 0.4048 | 0.4264 | 0.4551 | 0.4590 | 0.4152 | 0.4335 | 0.4996 | 0.4890 | 0.4062 | 0.4363 |
| | 1440-1440 | <u>0.3998</u> | <u>0.4292</u> | 0.4640 | 0.4587 | 0.4998 | 0.4724 | 0.4182 | 0.4409 | 0.4869 | 0.4847 | 0.3669 | 0.4134 |
| | AVG | 0.3245 | 0.3686 | 0.3433 | <u>0.3750</u> | 0.3763 | 0.3942 | 0.3457 | 0.3795 | 0.3910 | 0.4224 | <u>0.3283</u> | 0.3686 |
| ECL | 168-168 | <u>0.1607</u> | <u>0.2617</u> | 0.1557 | 0.2497 | 0.1817 | 0.2846 | 0.1682 | 0.2682 | 0.1754 | 0.2758 | 0.1660 | 0.2567 |
| | 168-336 | <u>0.1796</u> | <u>0.2850</u> | 0.1756 | 0.2716 | 0.2050 | 0.3081 | 0.1891 | 0.2884 | 0.1932 | 0.2952 | 0.1913 | 0.2856 |
| | 336-336 | 0.1670 | <u>0.2712</u> | <u>0.1725</u> | 0.2673 | 0.2109 | 0.3091 | 0.1769 | 0.2781 | 0.1757 | 0.2778 | 0.1796 | 0.2773 |
| | 336-720 | 0.1950 | 0.2961 | 0.2067 | <u>0.3011</u> | 0.2220 | 0.3192 | 0.2156 | 0.3089 | <u>0.2099</u> | 0.3099 | 0.2404 | 0.3353 |
| | 720-720 | 0.1894 | 0.2947 | 0.2012 | <u>0.2981</u> | 0.2333 | 0.3315 | 0.2123 | 0.3061 | 0.2009 | 0.3006 | 0.2358 | 0.3320 |
| | 720-1440 | 0.2283 | 0.3302 | <u>0.2547</u> | <u>0.3445</u> | 0.2600 | 0.3539 | 0.2881 | 0.3611 | 0.2621 | 0.3509 | 0.3770 | 0.4414 |
| | 1440-1440 | 0.2306 | 0.3303 | <u>0.2435</u> | <u>0.3361</u> | 0.2815 | 0.3748 | 0.2853 | 0.3620 | 0.2598 | 0.3485 | 0.3729 | 0.4397 |
| | AVG | 0.1929 | <u>0.2956</u> | <u>0.2014</u> | 0.2955 | 0.2278 | 0.3259 | 0.2194 | 0.3104 | 0.2110 | 0.3084 | 0.2519 | 0.3383 |
| Traffic | 168-168 | <u>0.4442</u> | 0.3091 | 0.6464 | 0.3050 | 0.6048 | 0.3284 | 0.4419 | 0.2996 | 0.4977 | 0.3418 | 0.4623 | <u>0.3015</u> |
| | 168-336 | <u>0.4656</u> | 0.3180 | 0.6725 | <u>0.3168</u> | 0.6323 | 0.3407 | 0.4613 | 0.3085 | 0.5166 | 0.3512 | 0.4852 | 0.3170 |
| | 336-336 | <u>0.4432</u> | 0.3129 | 0.6231 | <u>0.2937</u> | 0.6324 | 0.3457 | 0.4279 | 0.2933 | 0.4566 | 0.3192 | 0.4465 | 0.3041 |
| | 336-720 | <u>0.4722</u> | 0.3244 | 0.6684 | <u>0.3117</u> | 0.6530 | 0.3532 | 0.4549 | 0.3081 | 0.4850 | 0.3361 | 0.5339 | 0.3742 |
| | 720-720 | 0.4620 | 0.3269 | 0.6432 | 0.3007 | 0.6647 | 0.3597 | 0.4450 | <u>0.3027</u> | <u>0.4617</u> | 0.3184 | 0.5242 | 0.3711 |
| | 720-1440 | 0.5265 | 0.3665 | 0.7141 | <u>0.3384</u> | 0.7049 | 0.3812 | 0.5063 | 0.3356 | <u>0.5196</u> | 0.3479 | 0.7453 | 0.4856 |
| | 1440-1440 | 0.5488 | 0.3703 | 0.7083 | <u>0.3349</u> | 0.7583 | 0.4030 | 0.4972 | 0.3312 | <u>0.5075</u> | 0.3370 | 0.7392 | 0.4795 |
| | AVG | <u>0.4804</u> | 0.3326 | 0.6680 | <u>0.3144</u> | 0.6644 | 0.3588 | 0.4621 | 0.3113 | 0.4921 | 0.3360 | 0.5624 | 0.3761 |