

模型：

1. 决策树 (**default_tree_learner**)
2. 加惩罚的linear model (**default_linear_learner**)
3. **lasso_learner**
4. kernel ridge model (**kernel_ridge_learner**)
5. support vector regression (**linear_svr_learner**)
6. reservoir computing+penalized linear model (**esn_ridge_learner**)
7. reservoir computing+kernel ridge model (**esn_kernel_ridge_learner**)
8. reservoir computing+support vector regression (**esn_linear_svr_learner**)

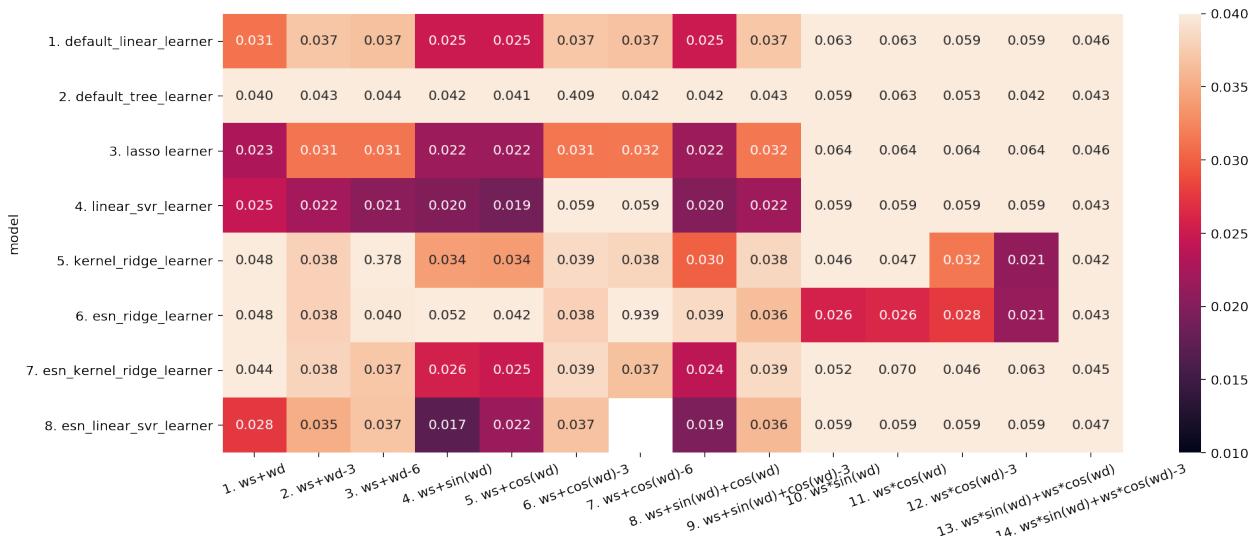
输入：

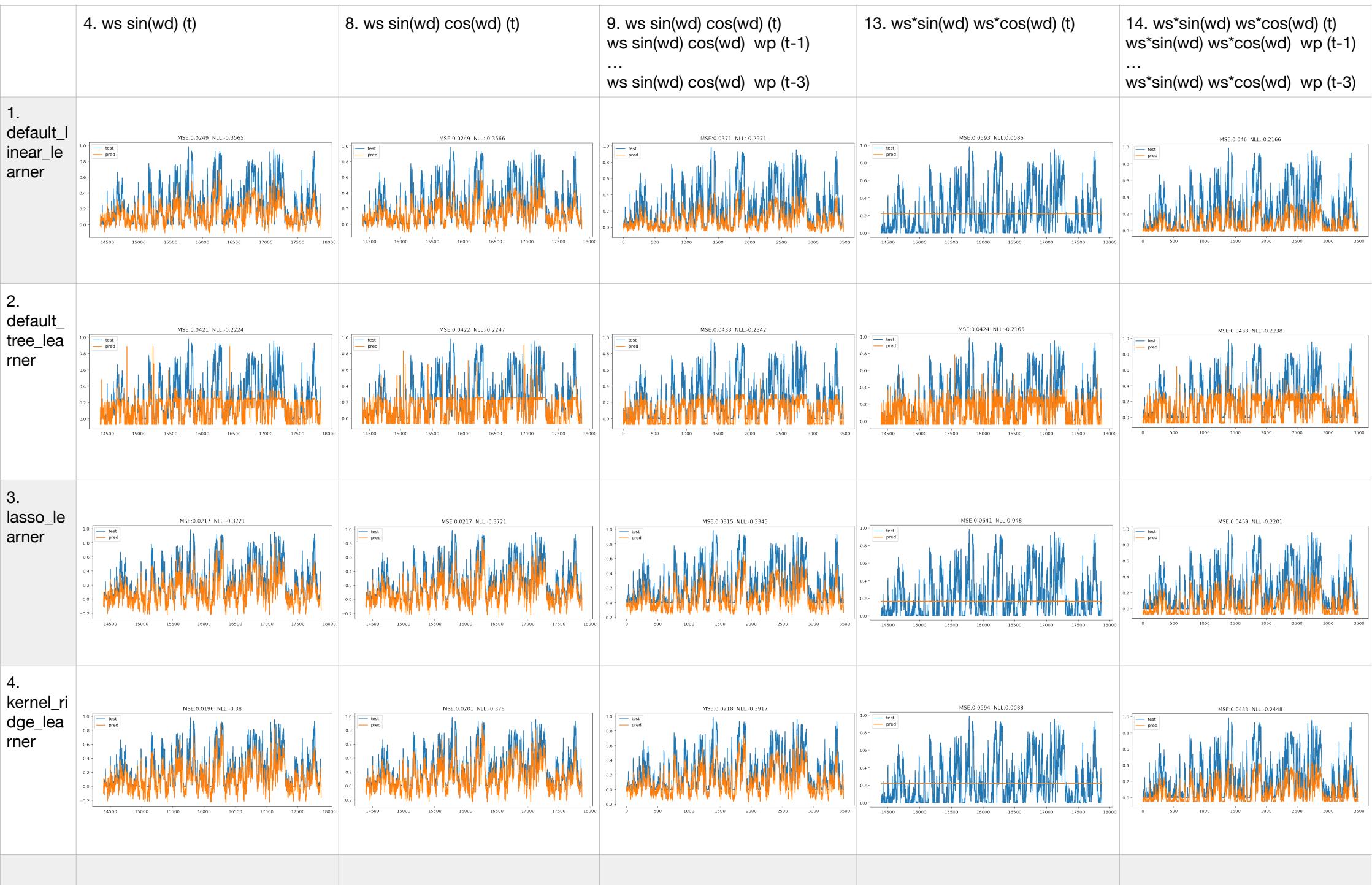
1. $WS_t \quad WD_t$
2. $WS_t \quad WD_t \mid\mid WS_{t-1} \quad WD_{t-1} \quad WP_{t-1} \mid\mid \dots \mid\mid WS_{t-3} \quad WD_{t-3} \quad WP_{t-3} \sim (\mathbf{t-3})$
3. $WS_t \quad WD_t \sim (\mathbf{t-6})$
4. $WS_t \quad \sin(WD_t)$
5. $WS_t \quad \cos(WD_t)$
6. $WS_t \quad \cos(WD_t) \sim (\mathbf{t-3})$
7. $WS_t \quad \cos(WD_t) \sim (\mathbf{t-6})$
8. $WS_t \quad \sin(WD_t) \quad \cos(WD_t)$
9. $WS_t \quad \sin(WD_t) \quad \cos(WD_t) \sim (\mathbf{t-3})$
10. $WS_t \times \sin(WD_t)$
11. $WS_t \times \cos(WD_t)$
12. $WS_t \times \cos(WD_t) \sim (\mathbf{t-3})$
13. $WS_t \times \sin(WD_t), \quad WS_t \times \cos(WD_t)$
14. $WS_t \times \sin(WD_t), \quad WS_t \times \cos(WD_t) \sim (\mathbf{t-3})$

输出： WP_t

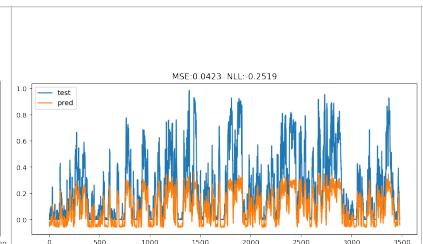
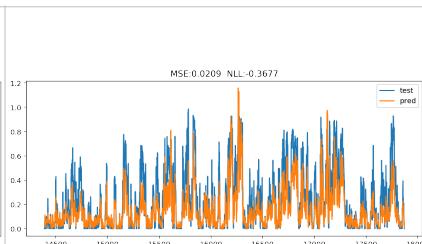
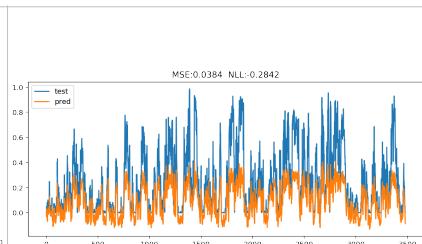
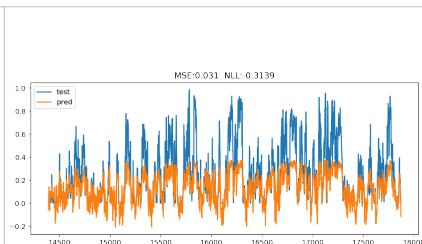
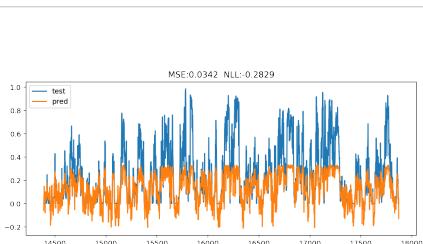
train: [6426 , 10427] len: 4001

test: [14389 , 17872] len: 3483

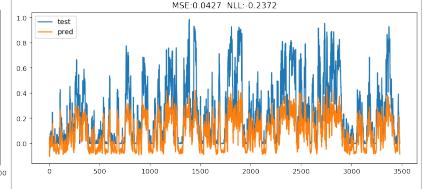
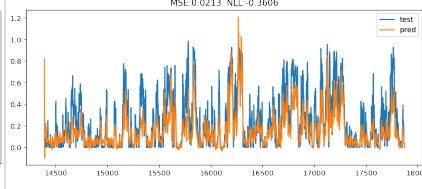
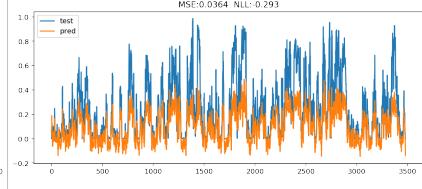
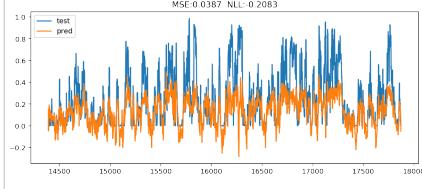
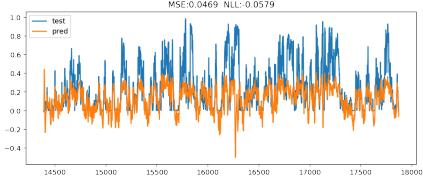




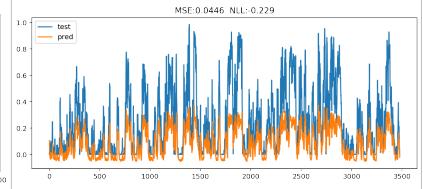
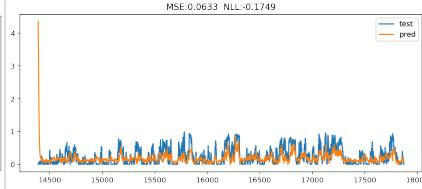
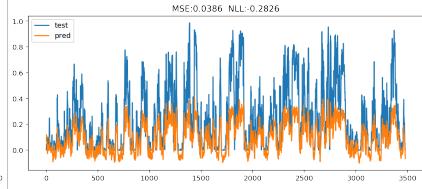
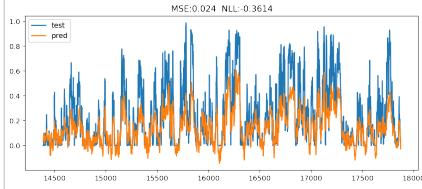
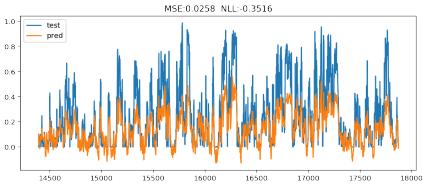
5.
linear_s
vr_learn
er



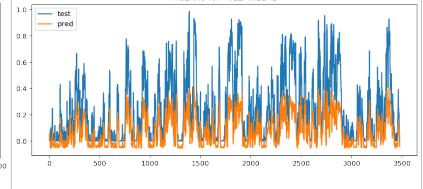
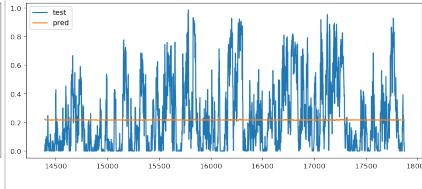
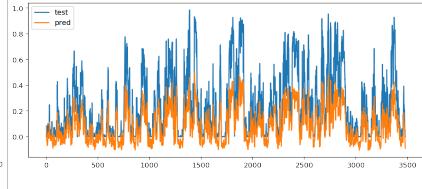
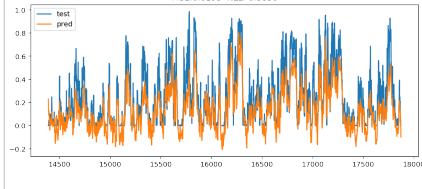
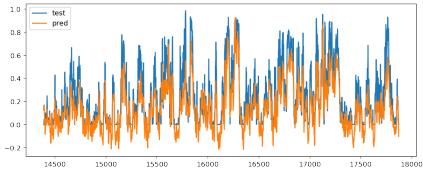
6.
esn_ridg
e_learne
r

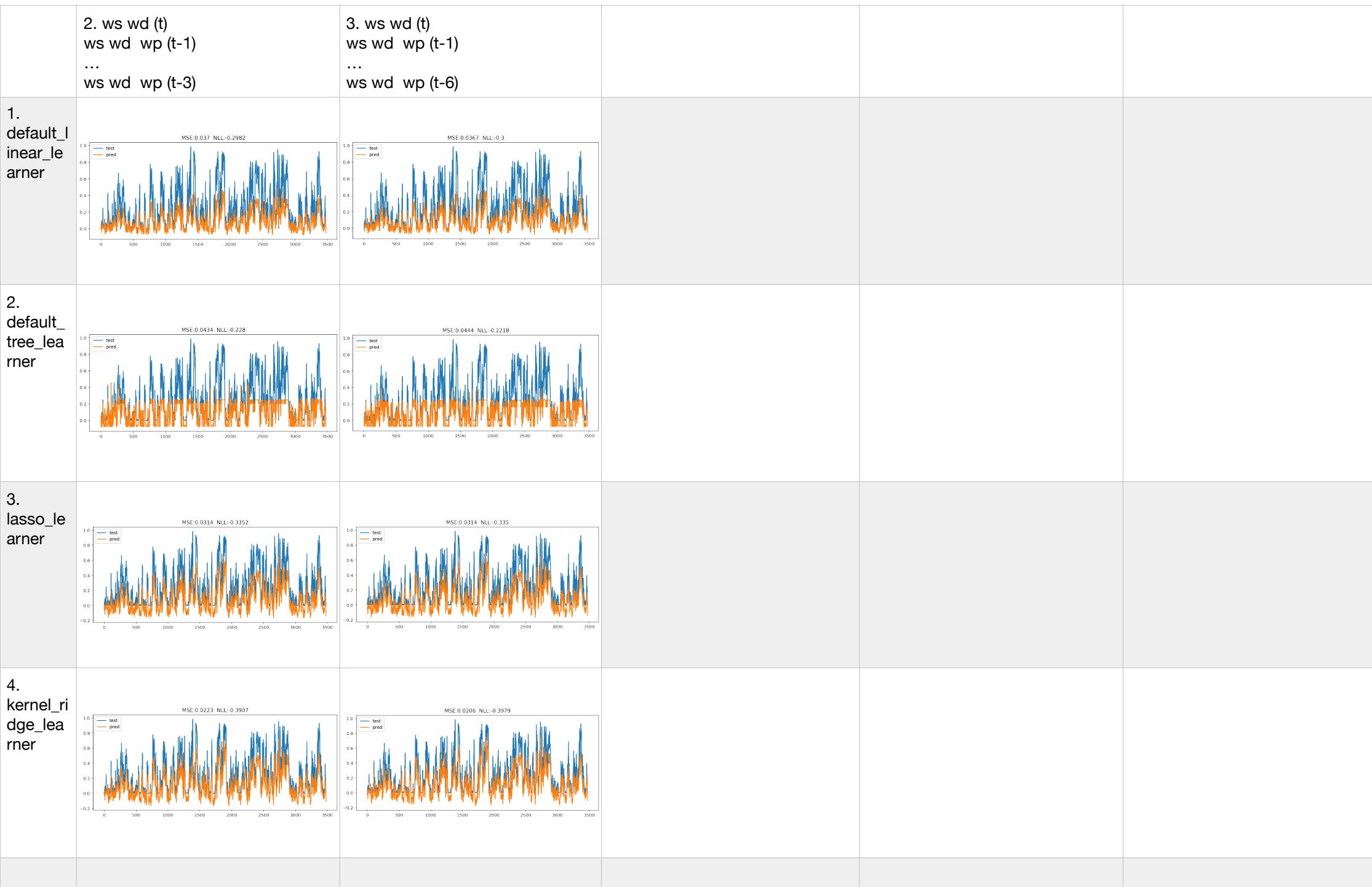


7.
esn_ker
nel_ridg
e_learne
r

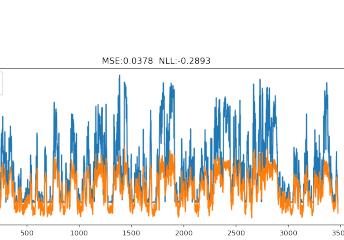
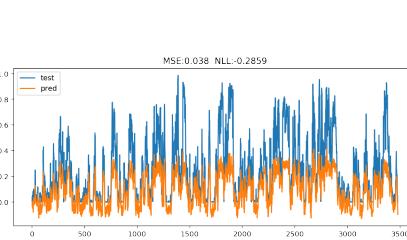


8.
esn_line
ar_svr_l
earner

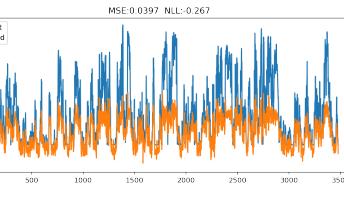
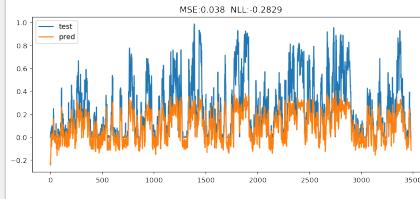




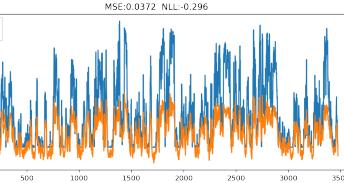
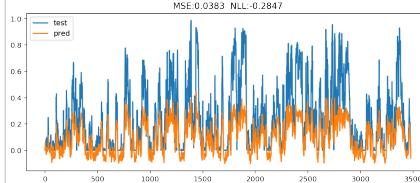
5.
linear_s
vr_learne
r



6.
esn_ridg
e_learne
r



7.
esn_ker
nel_ridg
e_learne
r



8.
esn_line
ar_sv_r_learner

