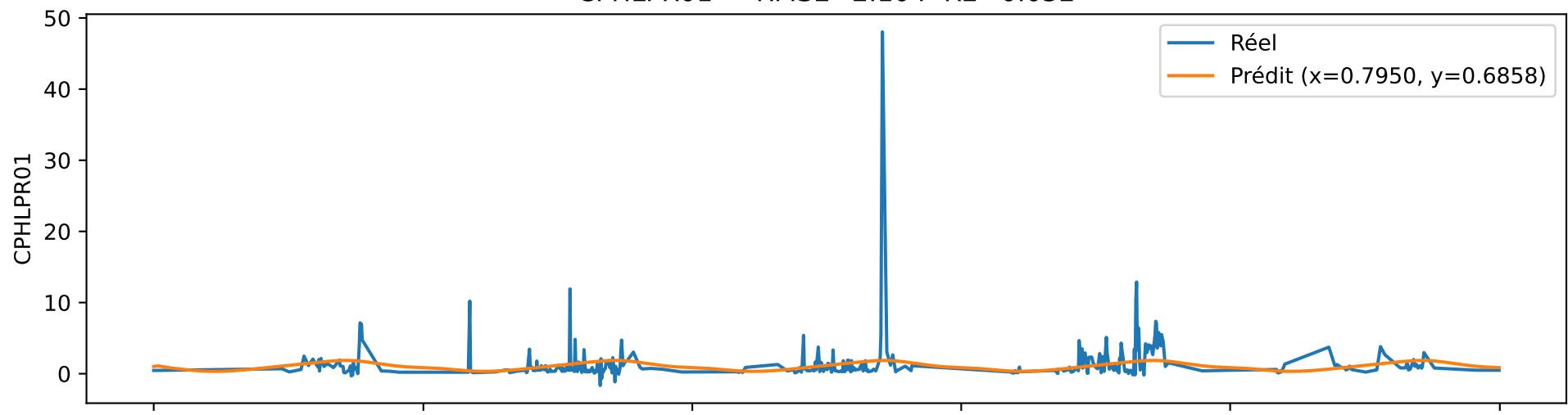
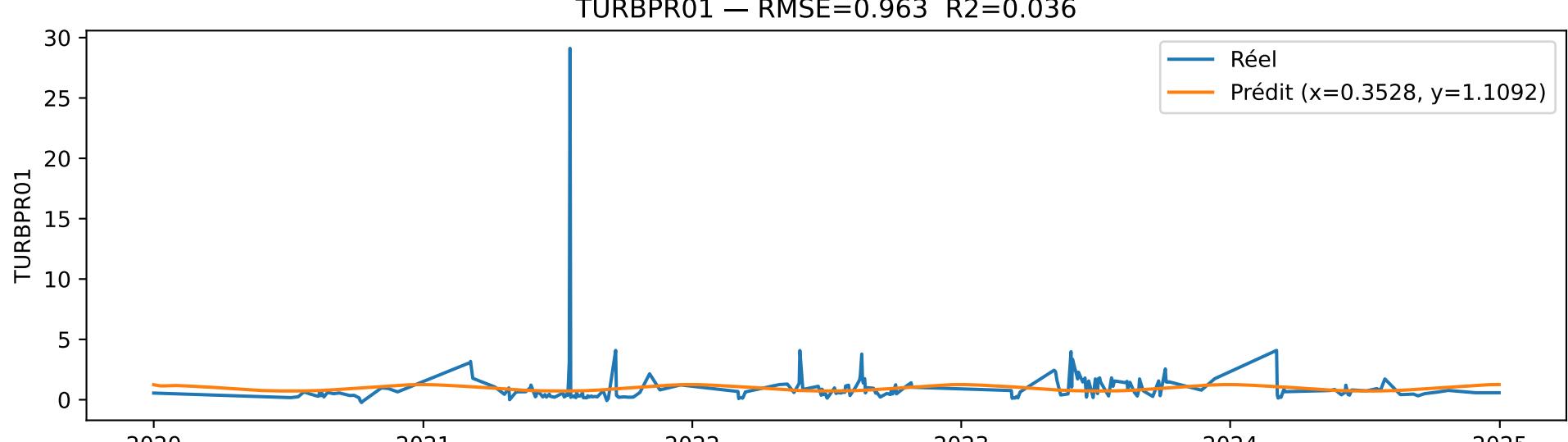


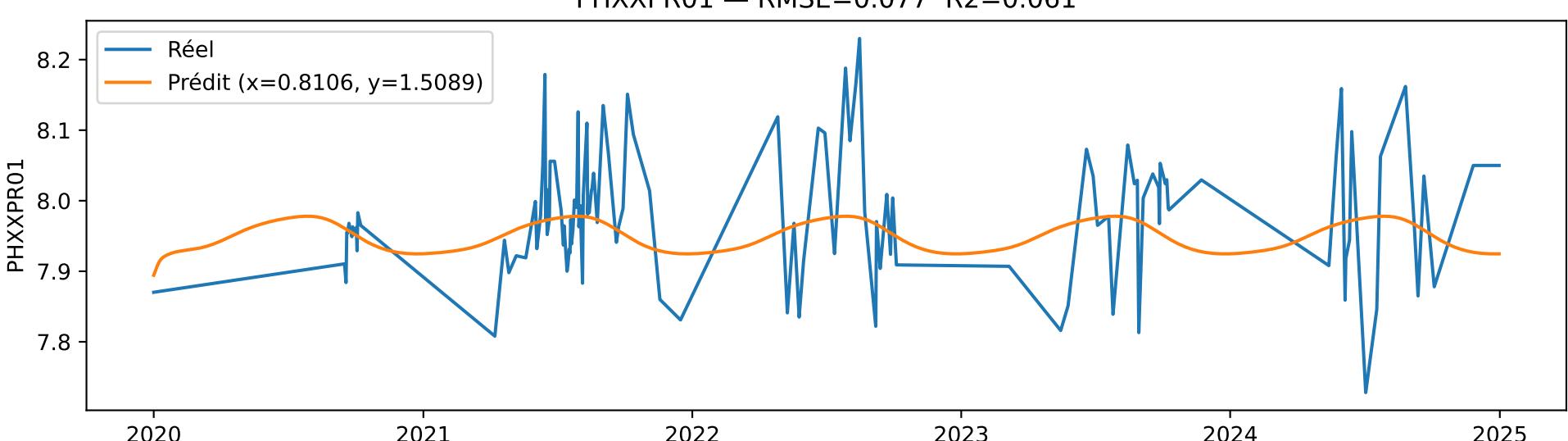
CPHLPR01 — RMSE=2.104 R2=0.052



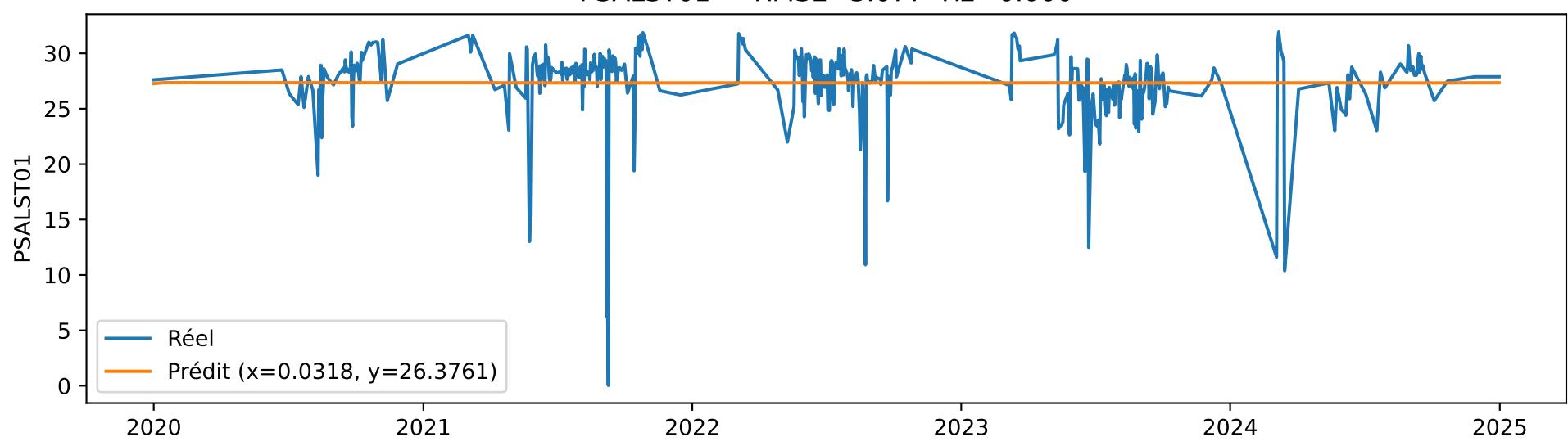
TURBPR01 — RMSE=0.963 R2=0.036



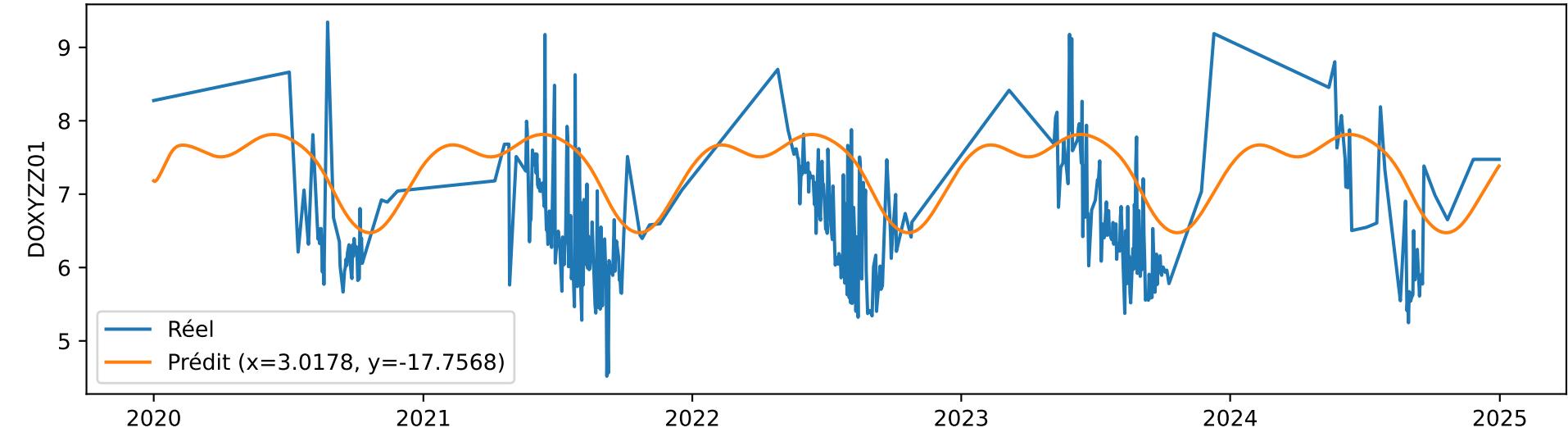
PHXXPR01 — RMSE=0.077 R2=0.061



PSALST01 — RMSE=3.077 R2=0.000



DOXYZZ01 — RMSE=0.832 R2=0.217



Résultats LSTM multivarié (après OLS)

Période entraînement : 2000-03-01 -> 2019-12-31

Période test : 2020-01-01 -> 2024-12-31

Metrics par variable (après transformation optimale) :

- CPHLPR01: RMSE=2.1041, R2=0.0522 ($x=0.795014$, $y=0.685785$, $R2_{opt}=0.052240$)
- TURBPR01: RMSE=0.9627, R2=0.0363 ($x=0.352779$, $y=1.109242$, $R2_{opt}=0.036254$)
- PHXXPR01: RMSE=0.0774, R2=0.0609 ($x=0.810614$, $y=1.508907$, $R2_{opt}=0.060874$)
- PSALST01: RMSE=3.0771, R2=0.0000 ($x=0.031820$, $y=26.376060$, $R2_{opt}=0.000007$)
- DOXYZZ01: RMSE=0.8318, R2=0.2168 ($x=3.017780$, $y=-17.756769$, $R2_{opt}=0.216840$)