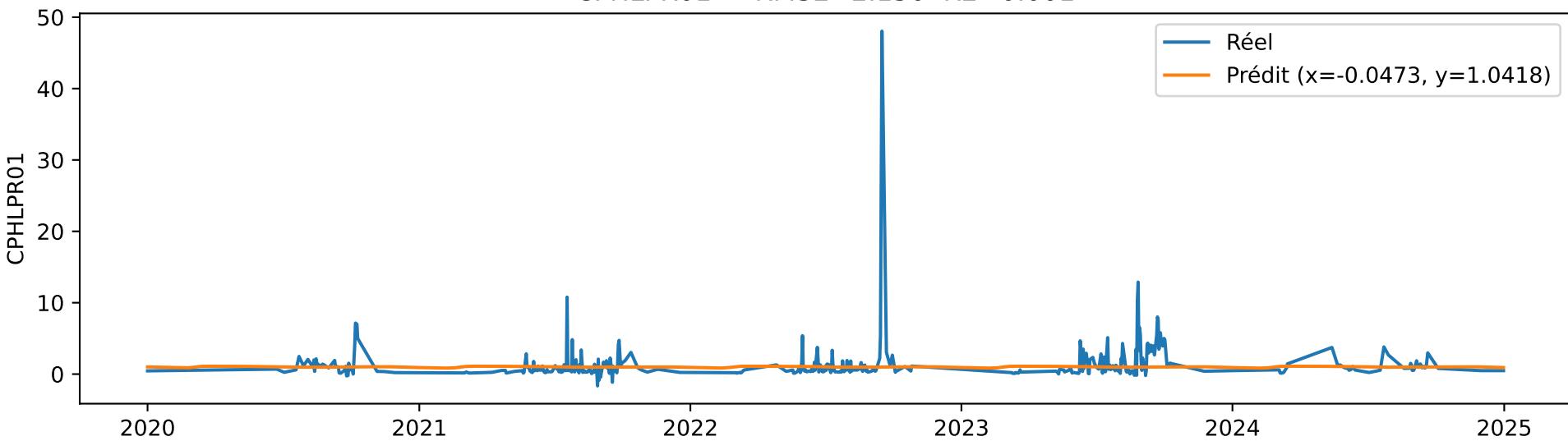
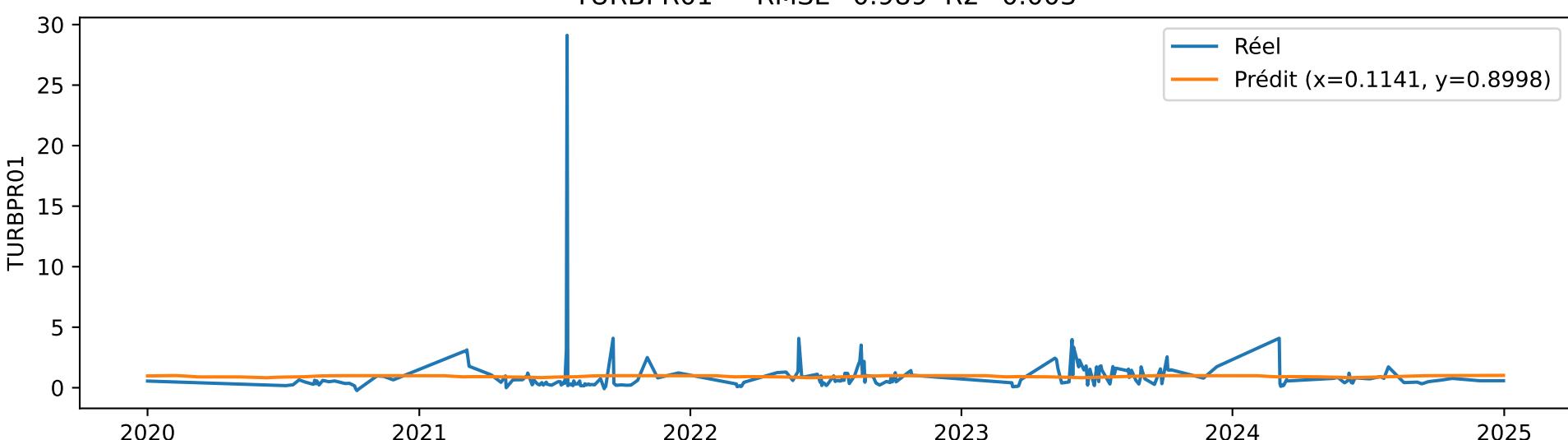


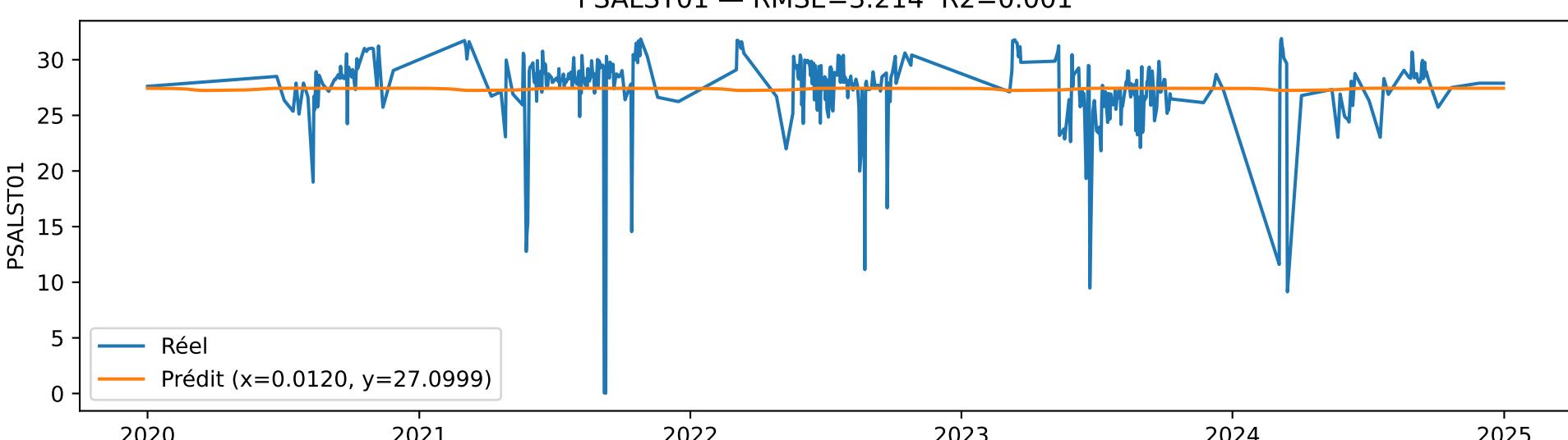
CPHLPR01 — RMSE=2.150 R2=0.001



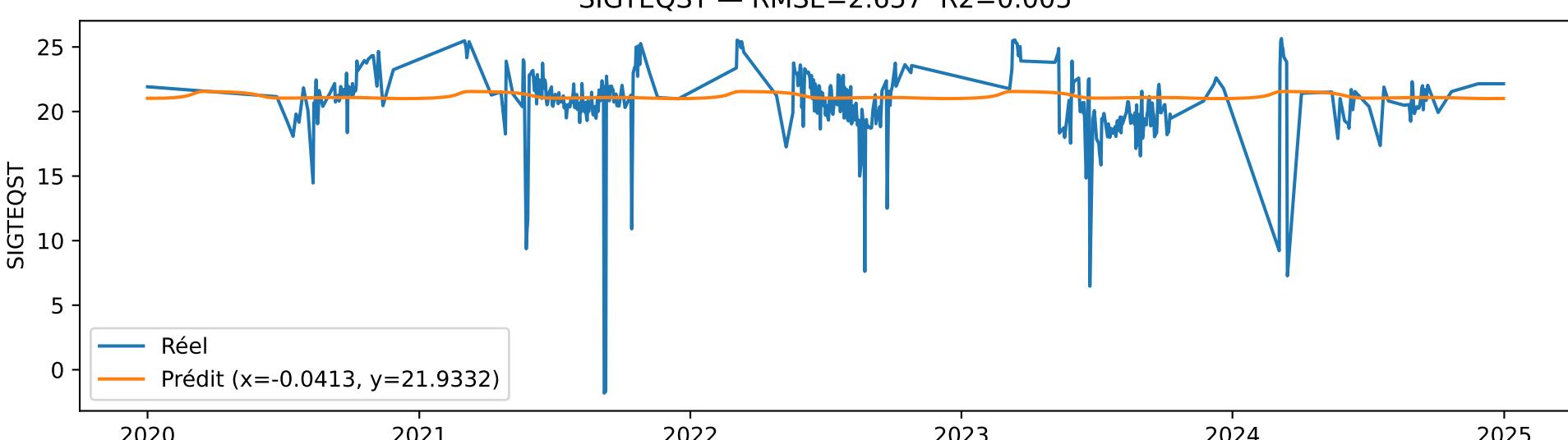
TURBPR01 — RMSE=0.989 R2=0.003



PSALST01 — RMSE=3.214 R2=0.001



SIGTEQST — RMSE=2.657 R2=0.005



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=2.1505, R2=0.0010 ($x=-0.047263$, $y=1.041794$, $R2_{opt}=0.001048$)
- TURBPR01: RMSE=0.9889, R2=0.0033 ($x=0.114109$, $y=0.899849$, $R2_{opt}=0.003313$)
- PSALST01: RMSE=3.2144, R2=0.0005 ($x=0.011981$, $y=27.099868$, $R2_{opt}=0.000524$)
- SIGTEQST: RMSE=2.6570, R2=0.0052 ($x=-0.041279$, $y=21.933204$, $R2_{opt}=0.005181$)