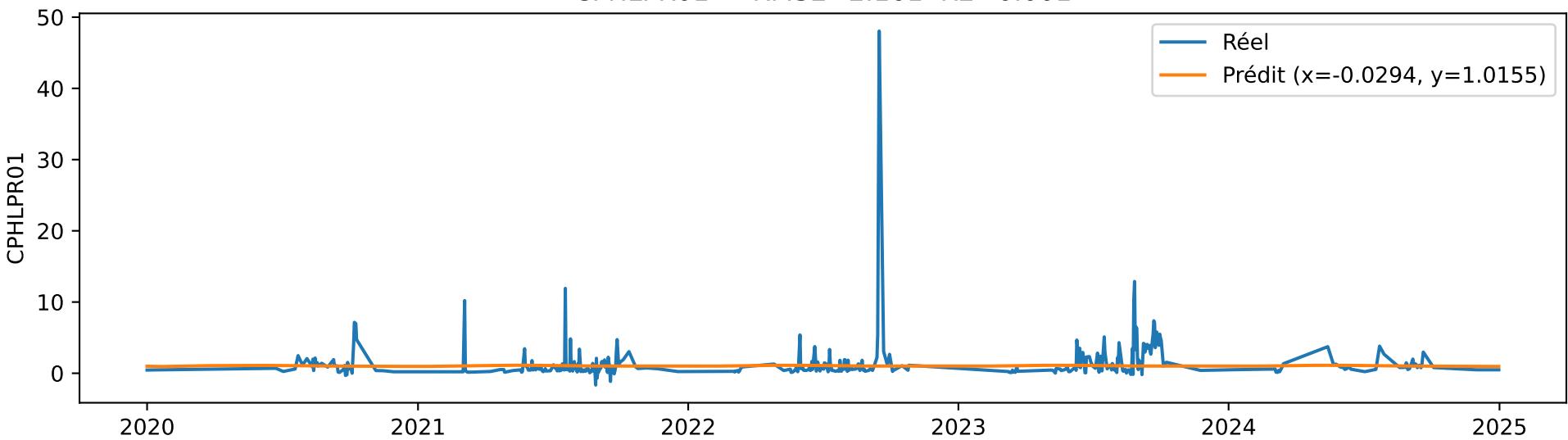
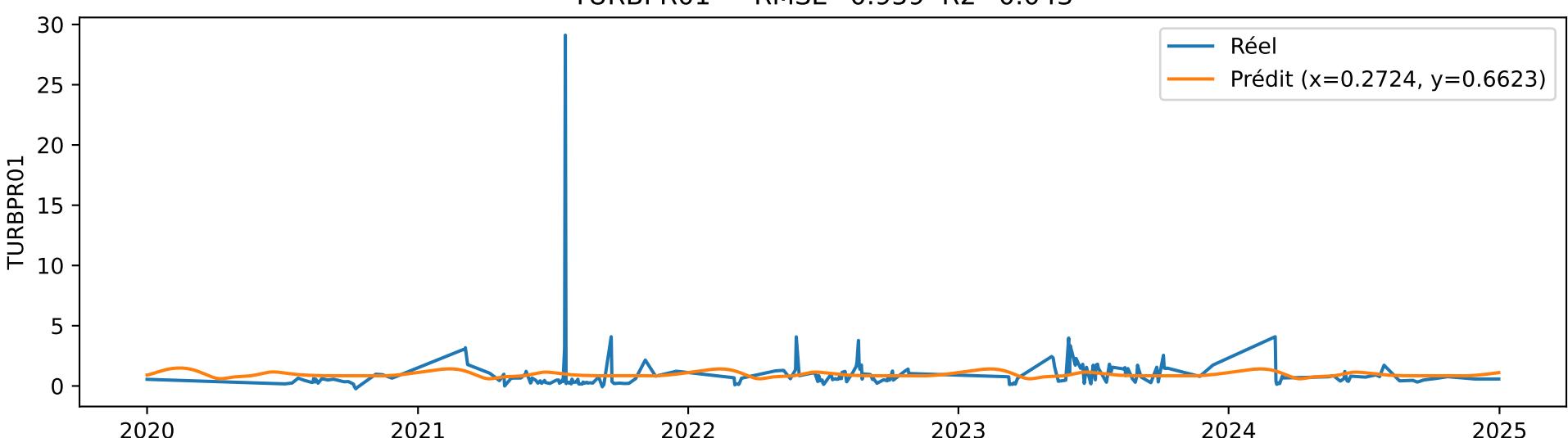


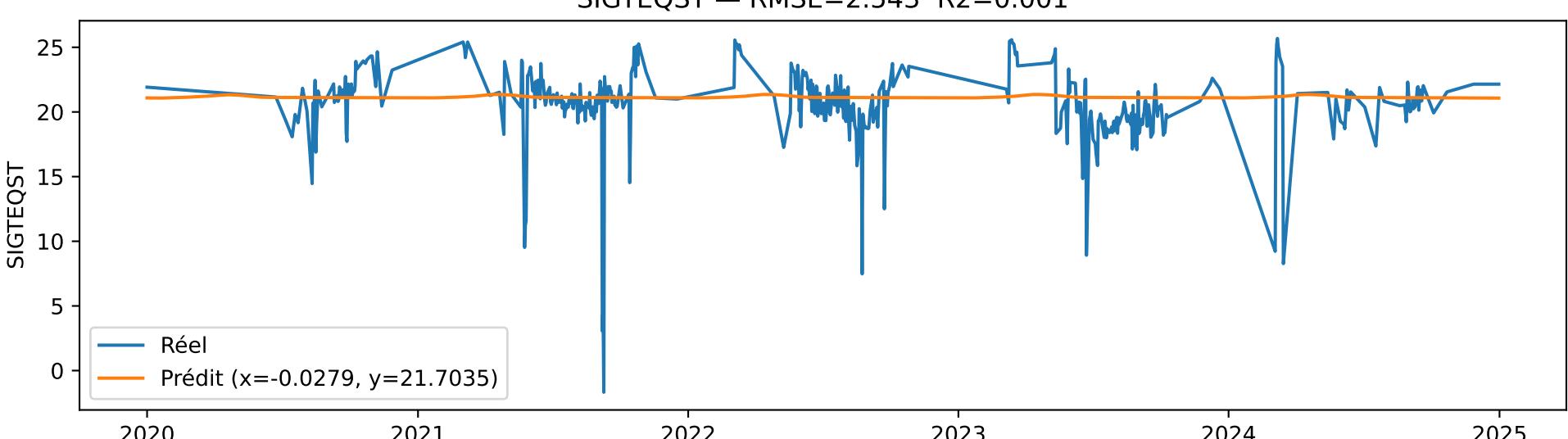
CPHLPR01 — RMSE=2.161 R2=0.001



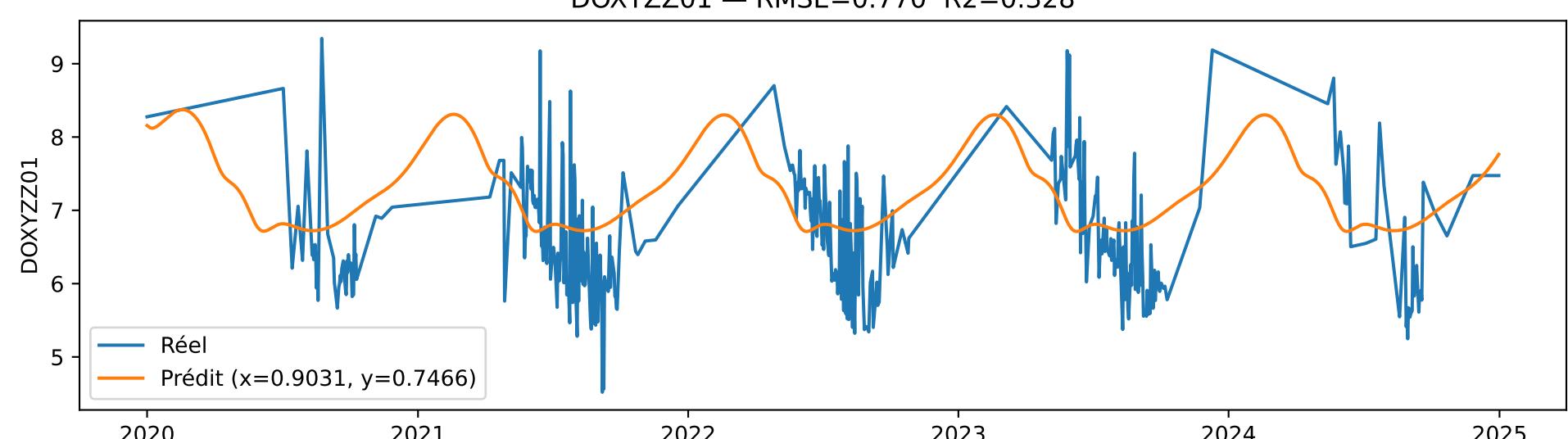
TURBPR01 — RMSE=0.959 R2=0.043



SIGTEQST — RMSE=2.543 R2=0.001



DOXYZZ01 — RMSE=0.770 R2=0.328



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=2.1607, R2=0.0006 ($x=-0.029366$, $y=1.015510$, $R^2_{opt}=0.000560$)
- TURBPR01: RMSE=0.9592, R2=0.0433 ($x=0.272358$, $y=0.662296$, $R^2_{opt}=0.043350$)
- SIGTEQST: RMSE=2.5427, R2=0.0010 ($x=-0.027924$, $y=21.703494$, $R^2_{opt}=0.000972$)
- DOXYZZ01: RMSE=0.7703, R2=0.3284 ($x=0.903094$, $y=0.746593$, $R^2_{opt}=0.328353$)