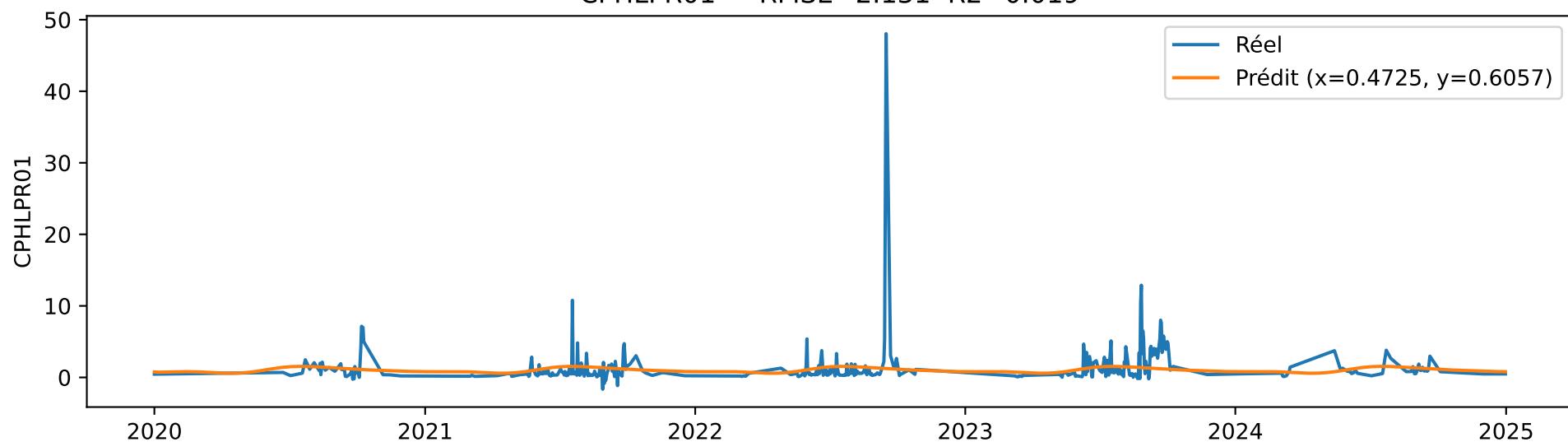
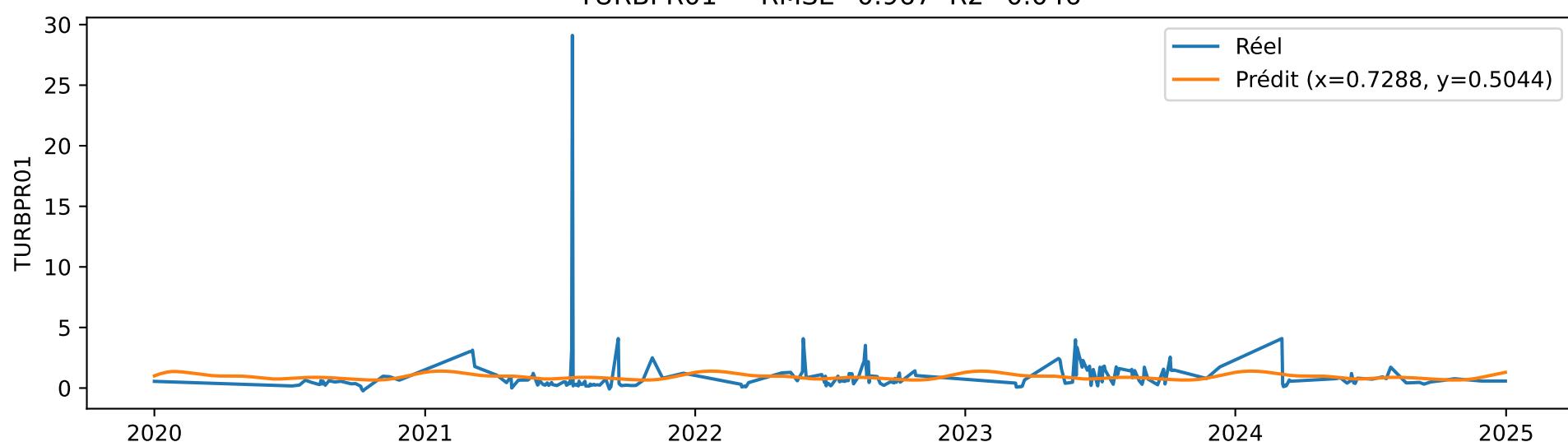


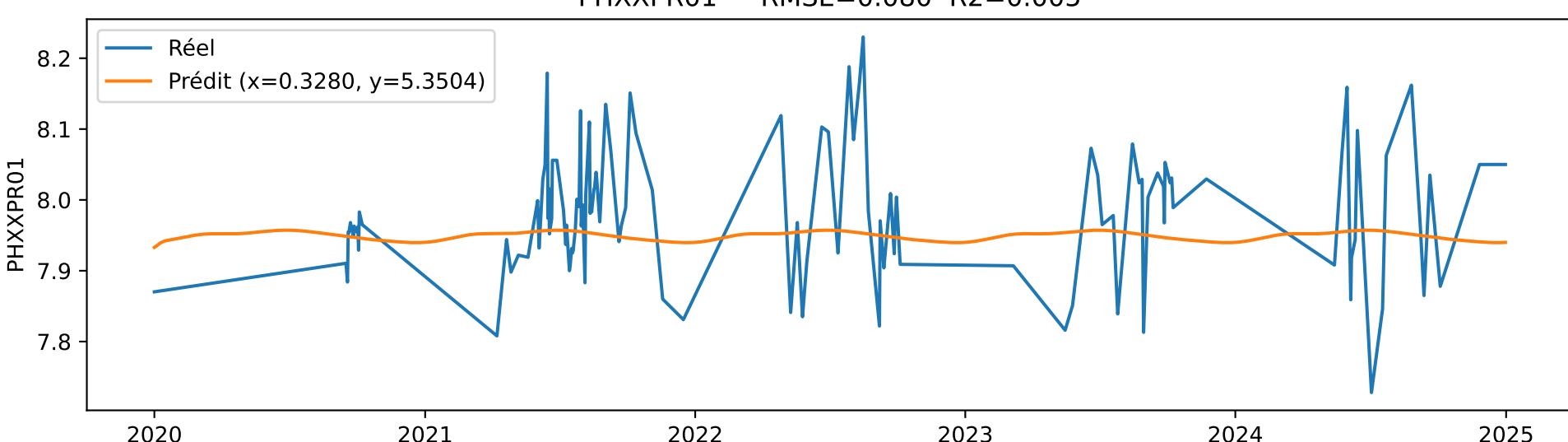
CPHLPR01 — RMSE=2.131 R2=0.019



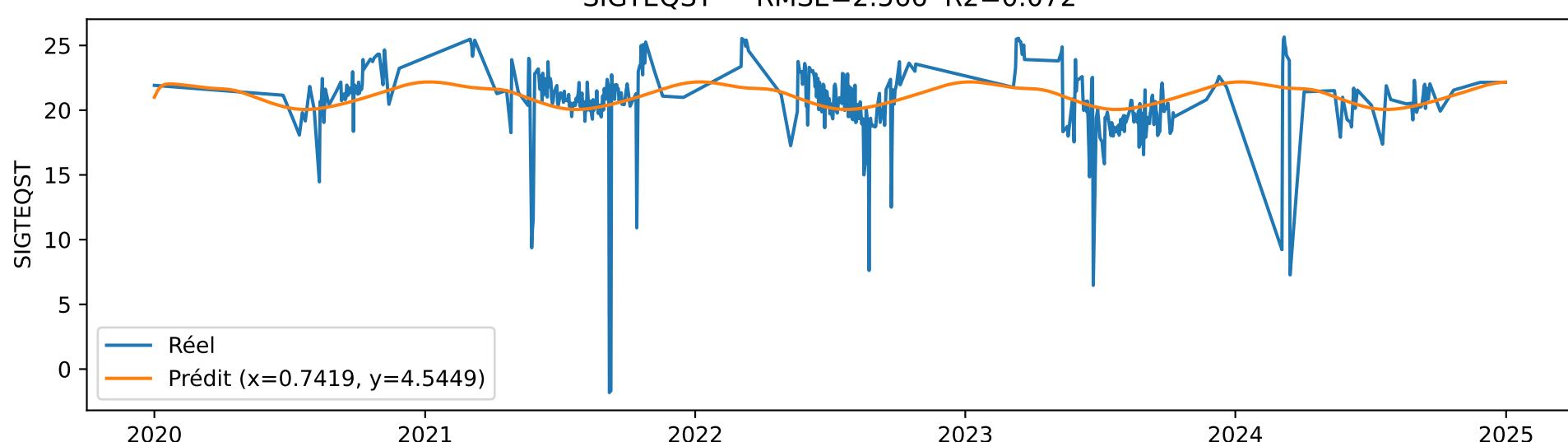
TURBPR01 — RMSE=0.967 R2=0.046



PHXXPR01 — RMSE=0.080 R2=0.005



SIGTEQST — RMSE=2.566 R2=0.072



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=2.1313, R2=0.0188 ($x=0.472522$, $y=0.605723$, $R2_{opt}=0.018752$)
- TURBPR01: RMSE=0.9672, R2=0.0465 ($x=0.728828$, $y=0.504405$, $R2_{opt}=0.046470$)
- PHXXPR01: RMSE=0.0797, R2=0.0052 ($x=0.328018$, $y=5.350411$, $R2_{opt}=0.005215$)
- SIGTEQST: RMSE=2.5662, R2=0.0720 ($x=0.741898$, $y=4.544898$, $R2_{opt}=0.072017$)