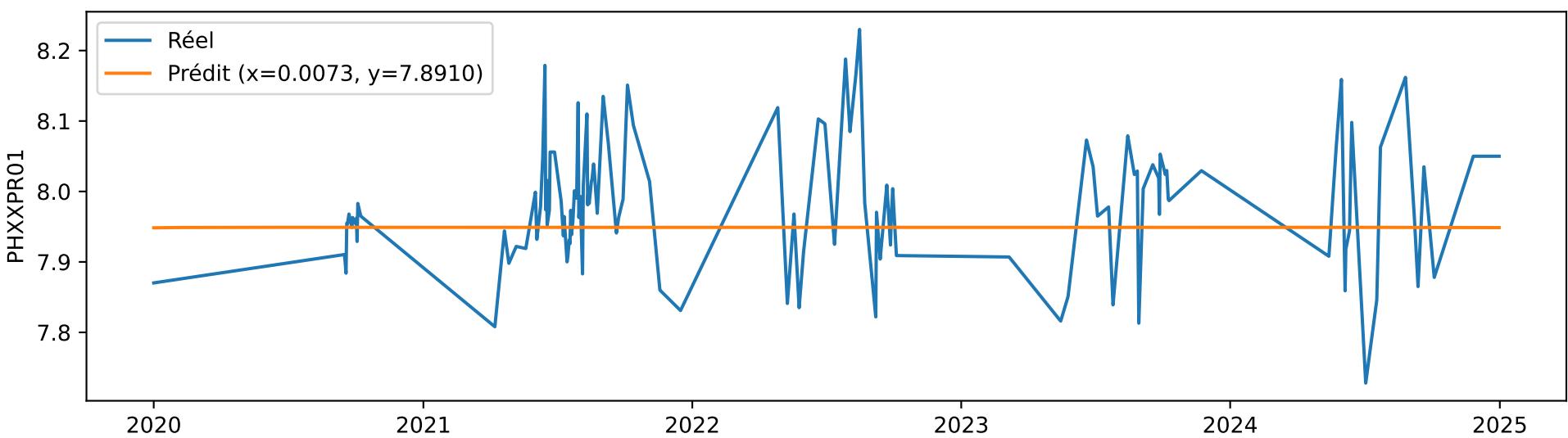
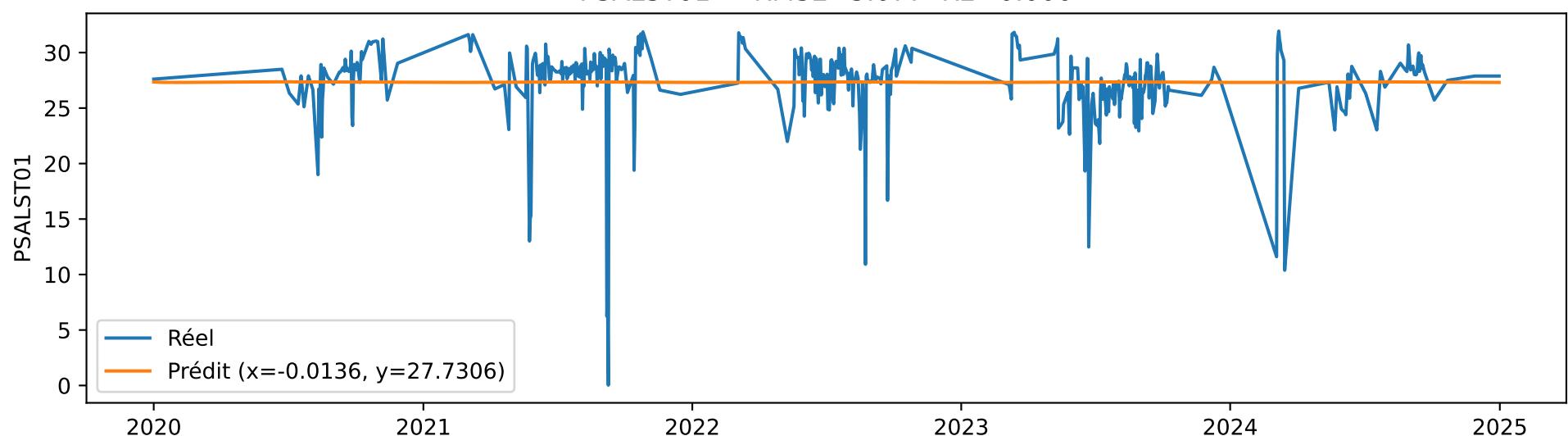


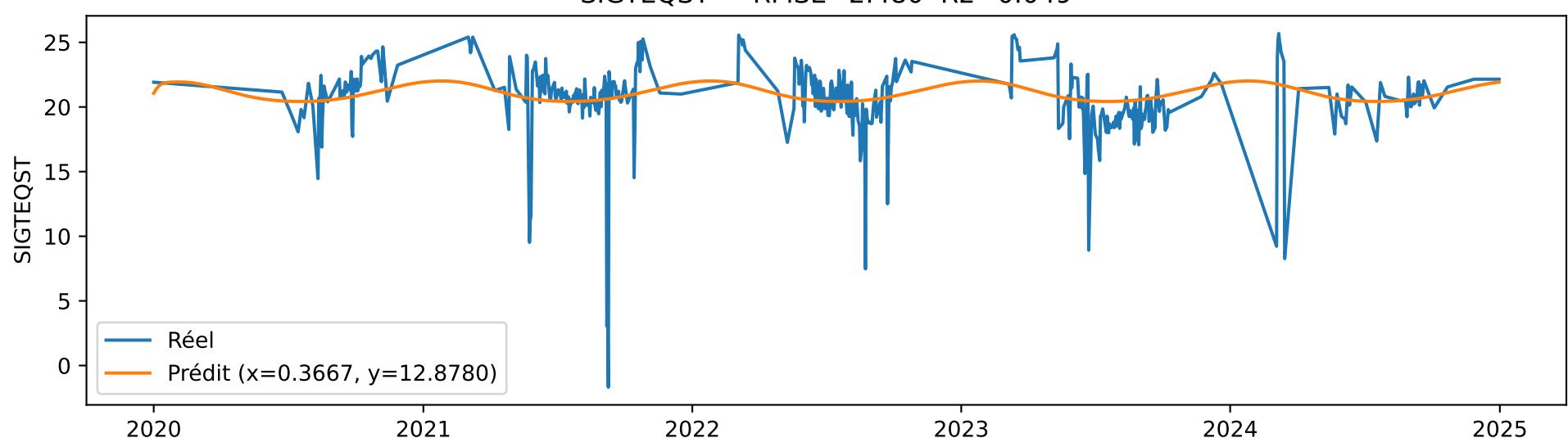
PHXXPR01 — RMSE=0.080 R2=0.000



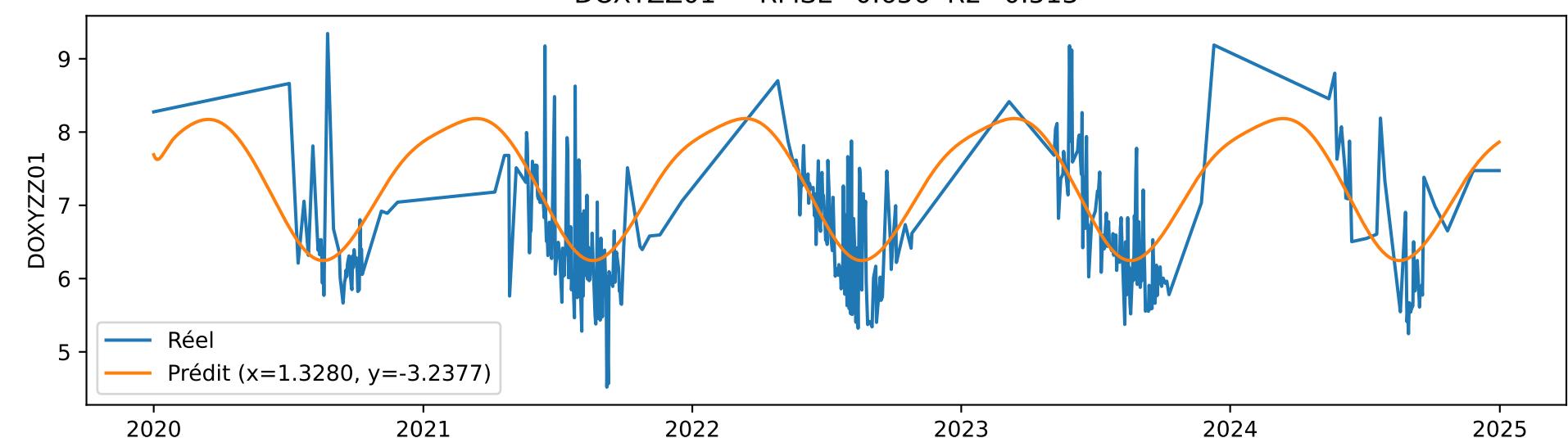
PSALST01 — RMSE=3.077 R2=0.000



SIGTEQST — RMSE=2.480 R2=0.049



DOXYZZ01 — RMSE=0.656 R2=0.513



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) :

- PHXXPR01: RMSE=0.0799, R2=0.0000 ($x=0.007285$, $y=7.891042$, $R2_{opt}=0.000004$)
- PSALST01: RMSE=3.0770, R2=0.0000 ($x=-0.013631$, $y=27.730622$, $R2_{opt}=0.000041$)
- SIGTEQST: RMSE=2.4804, R2=0.0493 ($x=0.366664$, $y=12.877965$, $R2_{opt}=0.049276$)
- DOXYZZ01: RMSE=0.6556, R2=0.5135 ($x=1.328031$, $y=-3.237737$, $R2_{opt}=0.513451$)