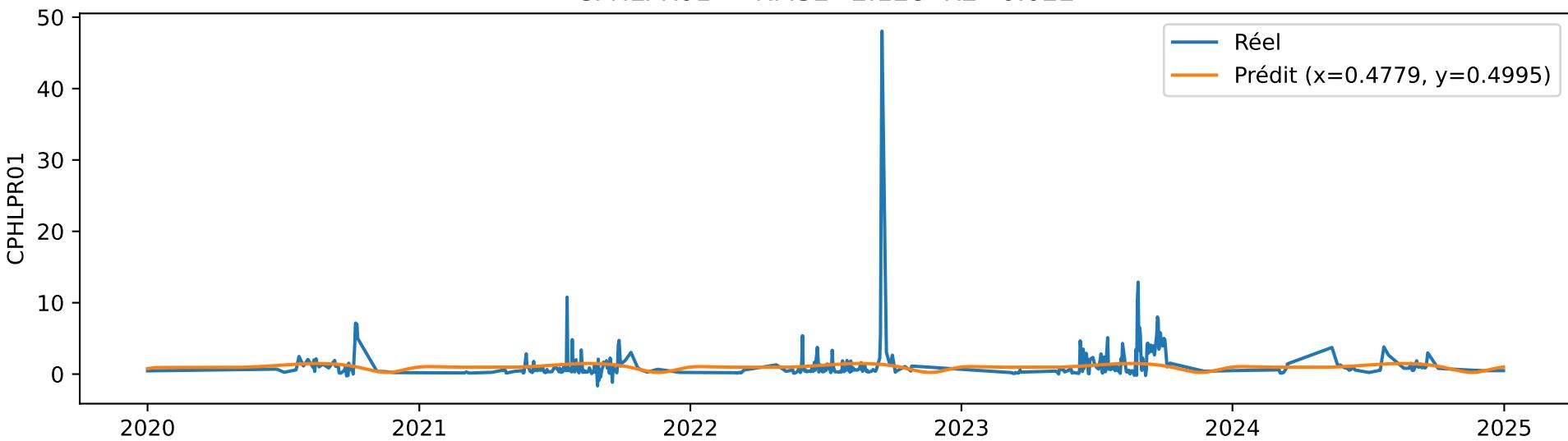
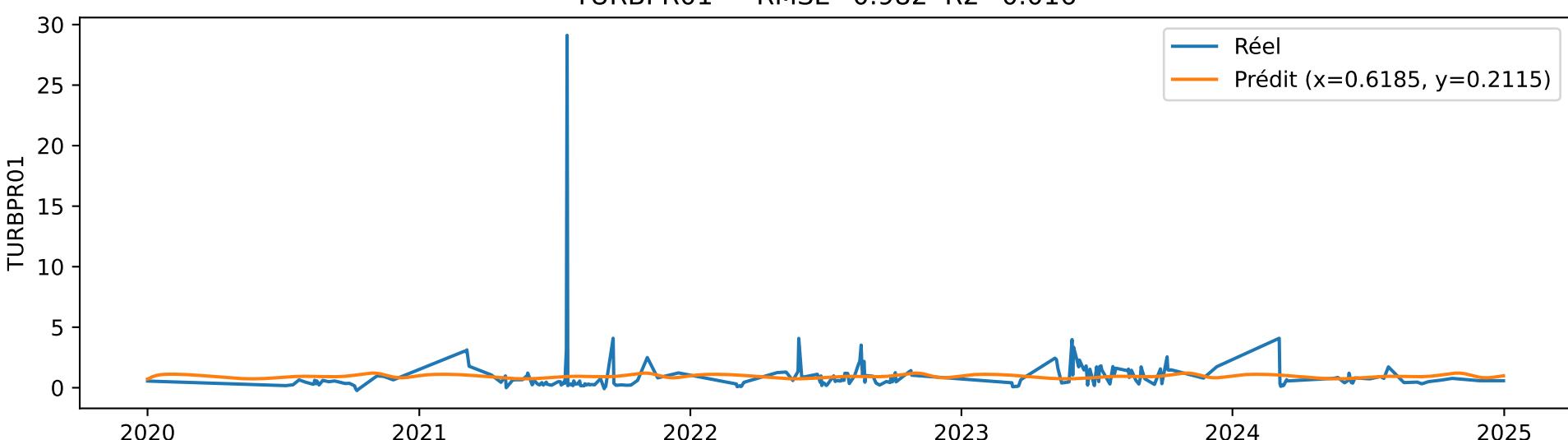


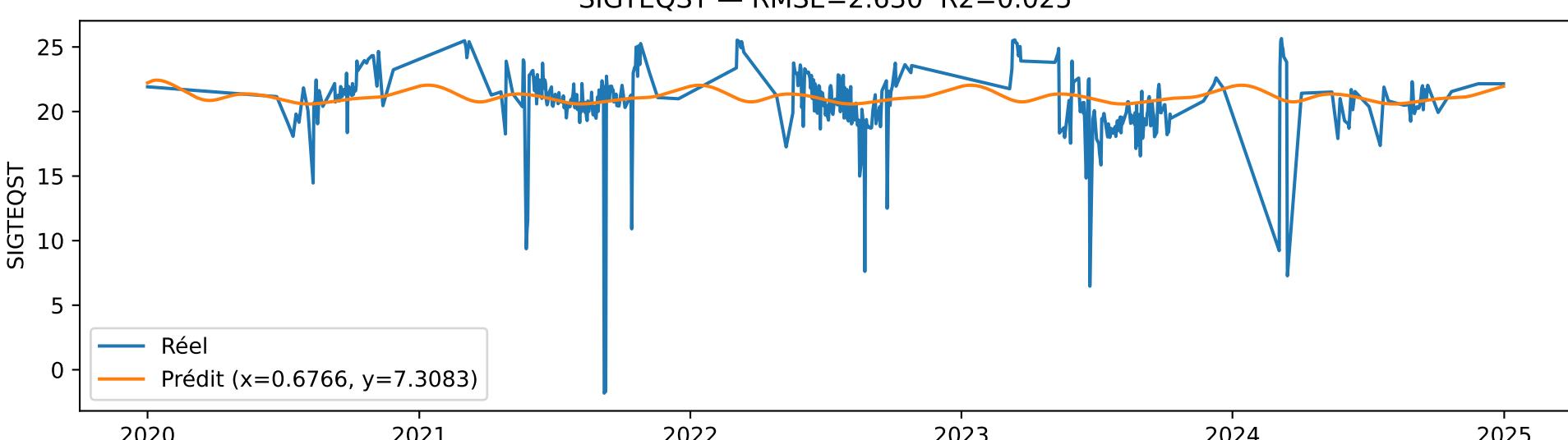
CPHLPR01 — RMSE=2.128 R2=0.022



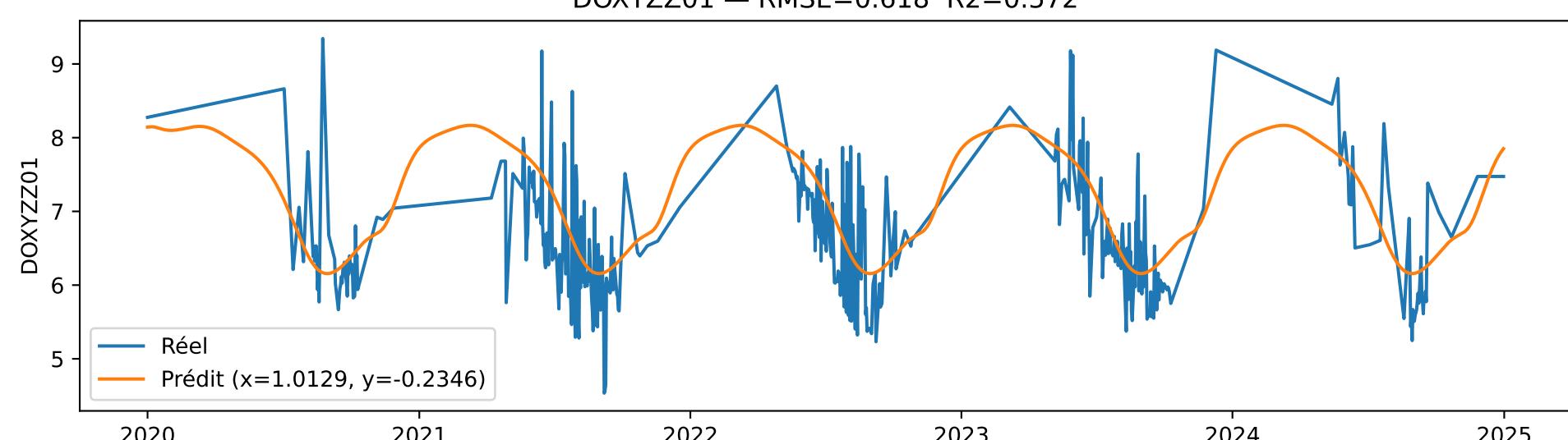
TURBPR01 — RMSE=0.982 R2=0.016



SIGTEQST — RMSE=2.630 R2=0.025



DOXYZZ01 — RMSE=0.618 R2=0.572



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=2.1279, R2=0.0219 ($x=0.477853$, $y=0.499533$, $R2_{opt}=0.021935$)
- TURBPR01: RMSE=0.9824, R2=0.0164 ($x=0.618530$, $y=0.211466$, $R2_{opt}=0.016404$)
- SIGTEQST: RMSE=2.6298, R2=0.0254 ($x=0.676551$, $y=7.308337$, $R2_{opt}=0.025430$)
- DOXYZZ01: RMSE=0.6177, R2=0.5721 ($x=1.012915$, $y=-0.234629$, $R2_{opt}=0.572061$)