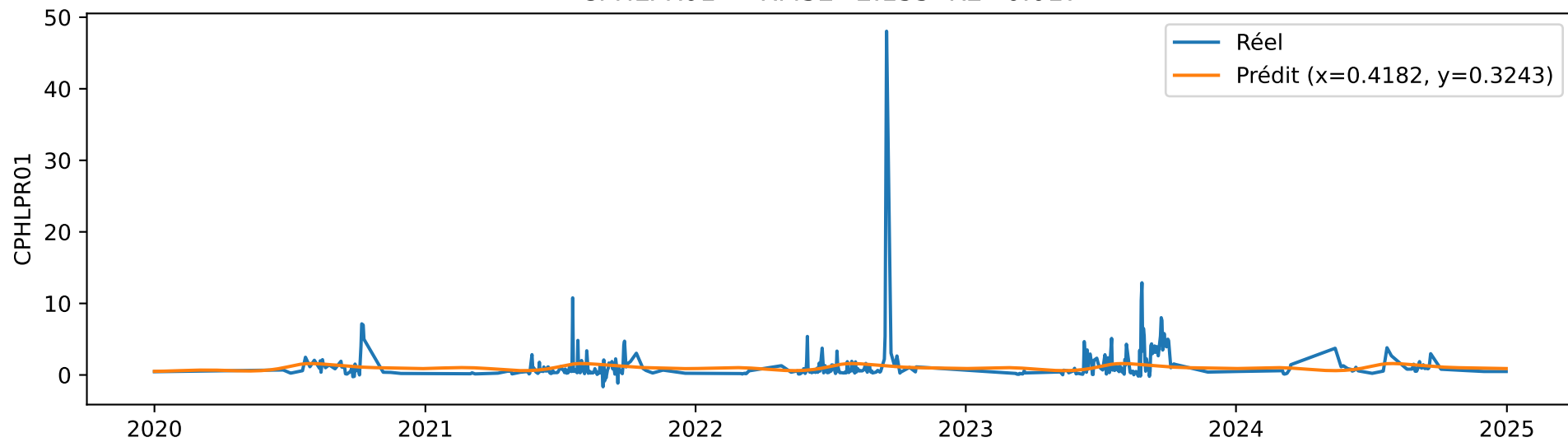
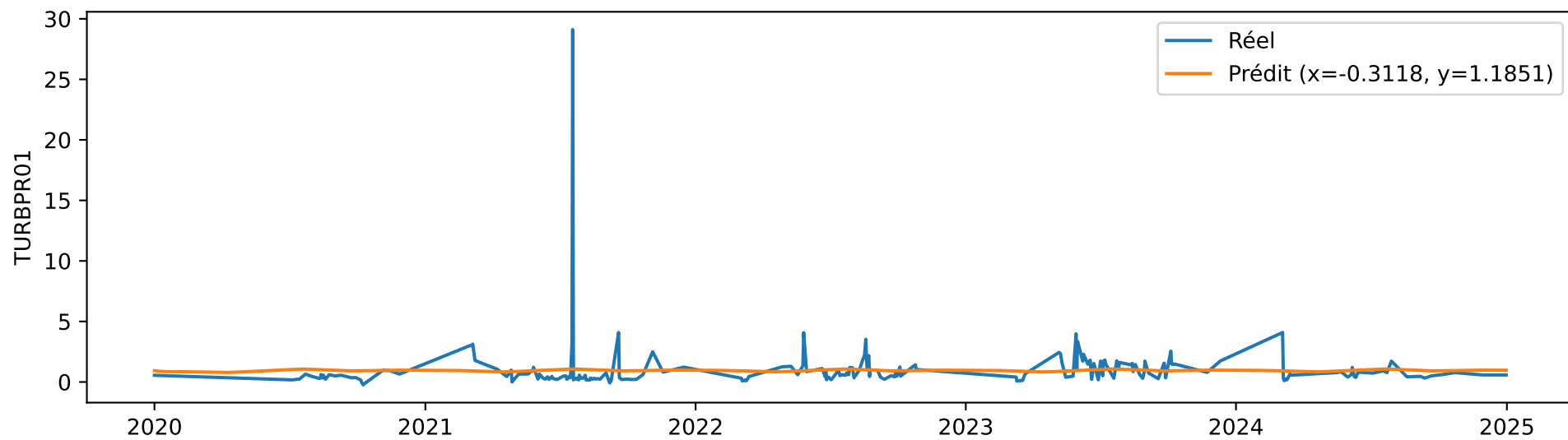


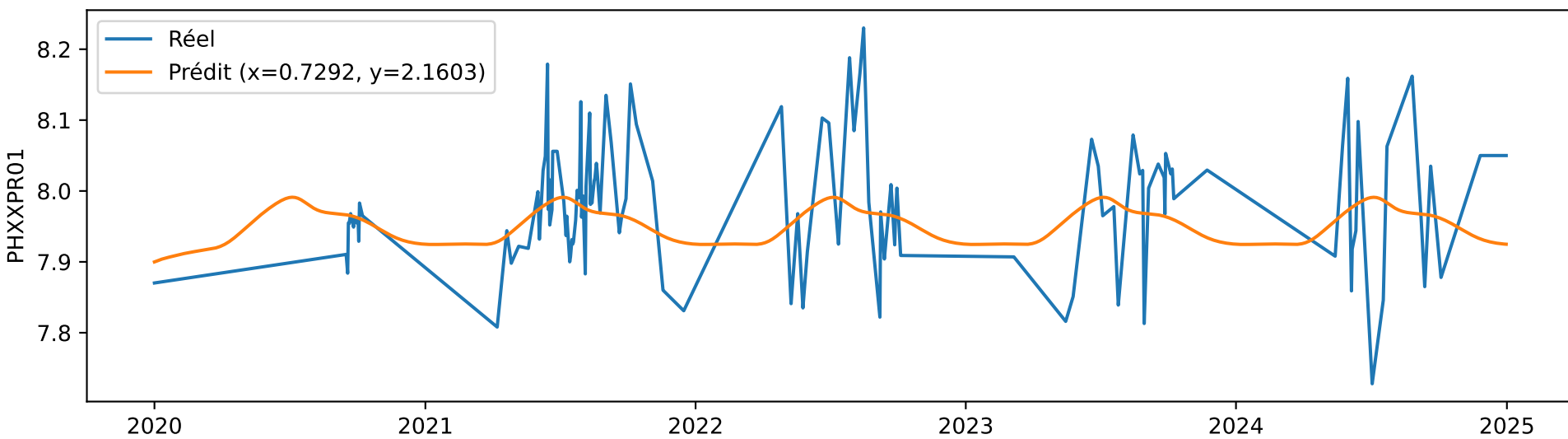
CPHLPR01 — RMSE=2.133 R2=0.017



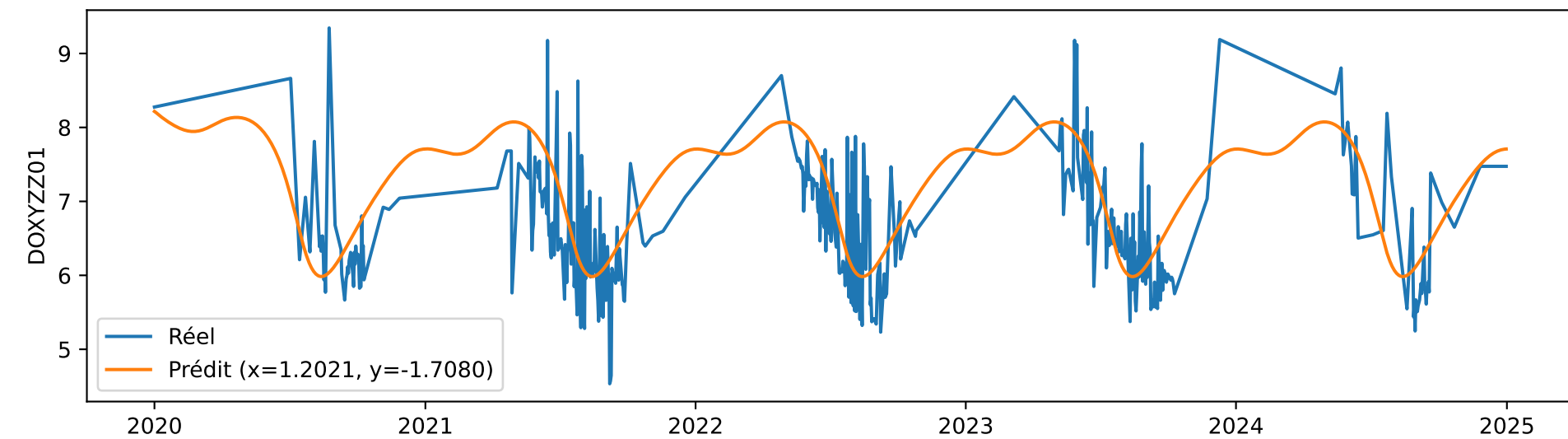
TURBPR01 — RMSE=0.988 R2=0.004



PHXXPR01 — RMSE=0.076 R2=0.088



DOXYZZ01 — RMSE=0.665 R2=0.505



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=2.1329, R2=0.0173 (x=0.418218, y=0.324349, R2\_opt=0.017321)
  - TURBPR01: RMSE=0.9884, R2=0.0042 (x=-0.311803, y=1.185108, R2\_opt=0.004248)
  - PHXXPR01: RMSE=0.0763, R2=0.0885 (x=0.729207, y=2.160287, R2\_opt=0.088499)
  - DOXYZZ01: RMSE=0.6646, R2=0.5046 (x=1.202075, y=-1.707957, R2\_opt=0.504557)