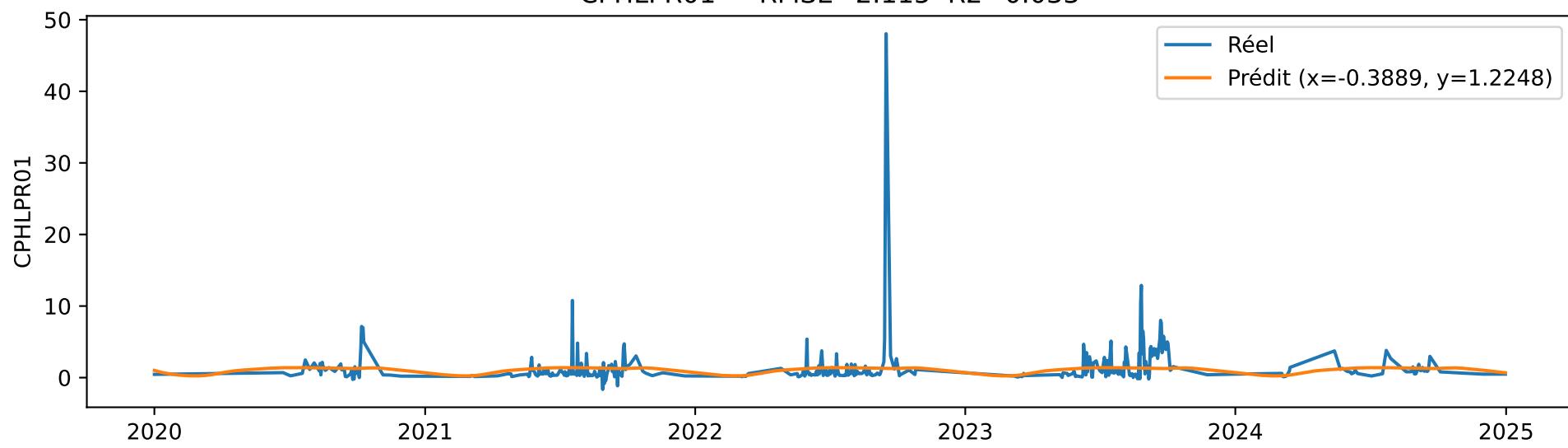
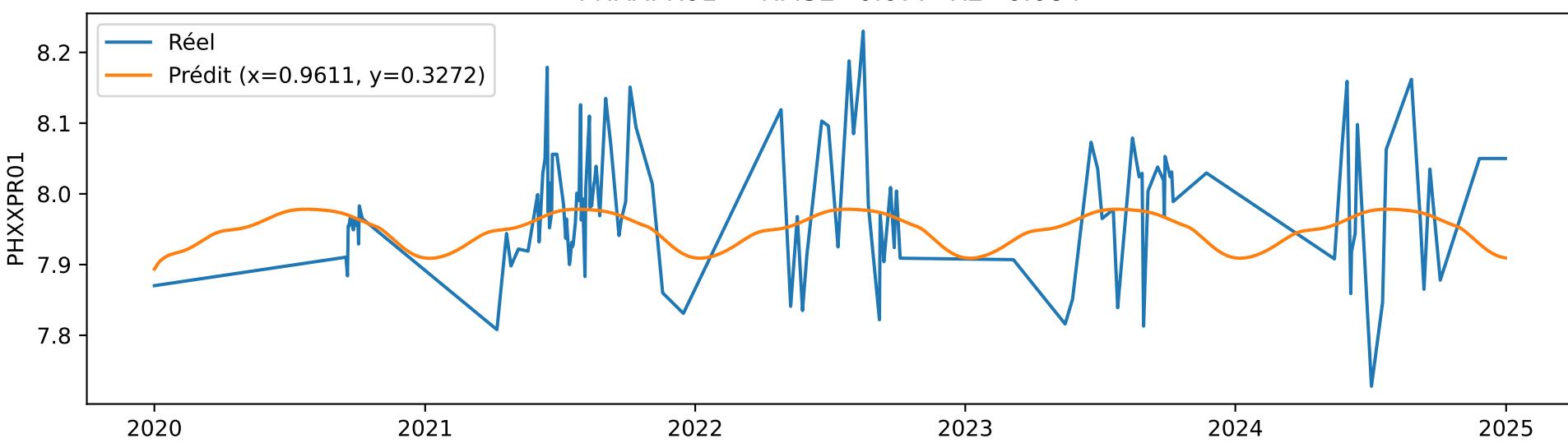


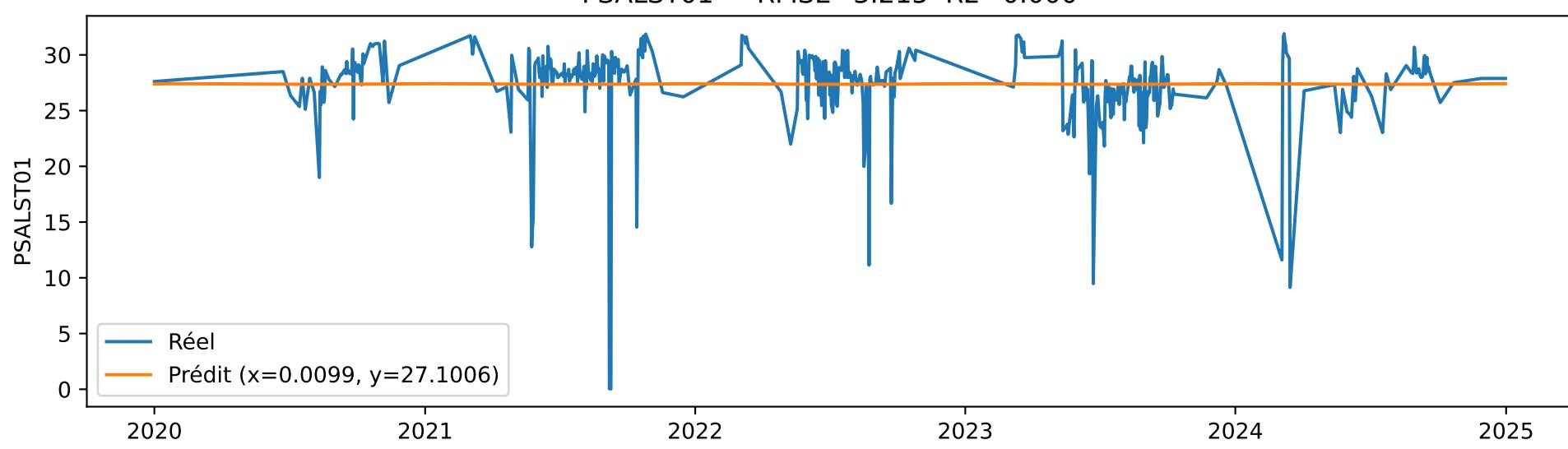
CPHLPR01 — RMSE=2.115 R2=0.033



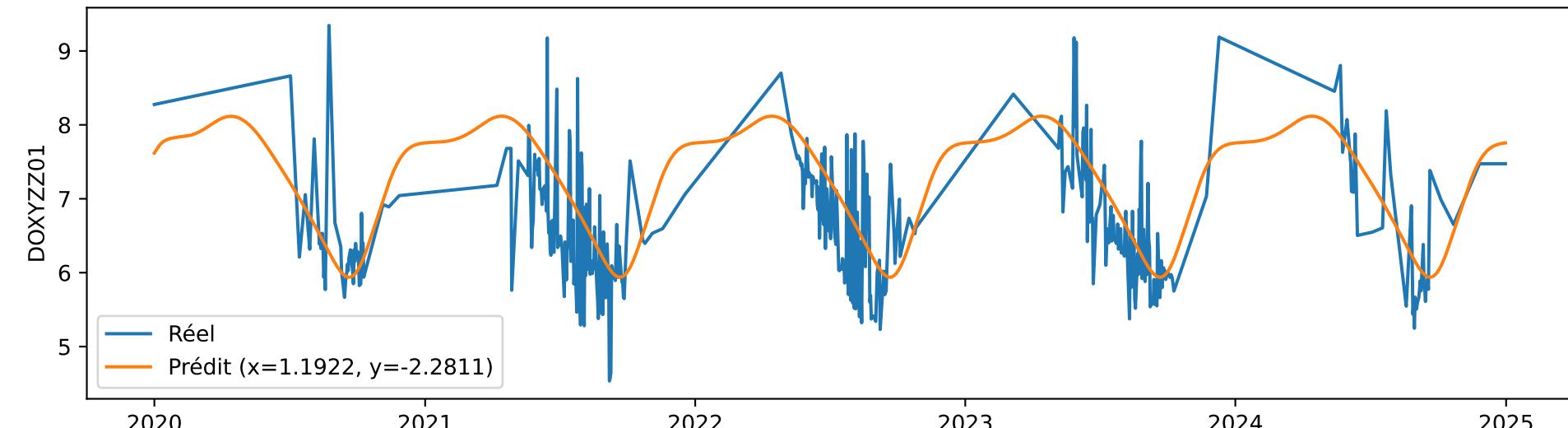
PHXXPR01 — RMSE=0.077 R2=0.084



PSALST01 — RMSE=3.215 R2=0.000



DOXYZZ01 — RMSE=0.640 R2=0.540



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=2.1155, R2=0.0333 ($x=-0.388893$, $y=1.224809$, $R2_{opt}=0.033306$)
- PHXXPR01: RMSE=0.0765, R2=0.0841 ($x=0.961088$, $y=0.327155$, $R2_{opt}=0.084067$)
- PSALST01: RMSE=3.2151, R2=0.0000 ($x=0.009906$, $y=27.100583$, $R2_{opt}=0.000043$)
- DOXYZZ01: RMSE=0.6404, R2=0.5400 ($x=1.192220$, $y=-2.281052$, $R2_{opt}=0.540016$)