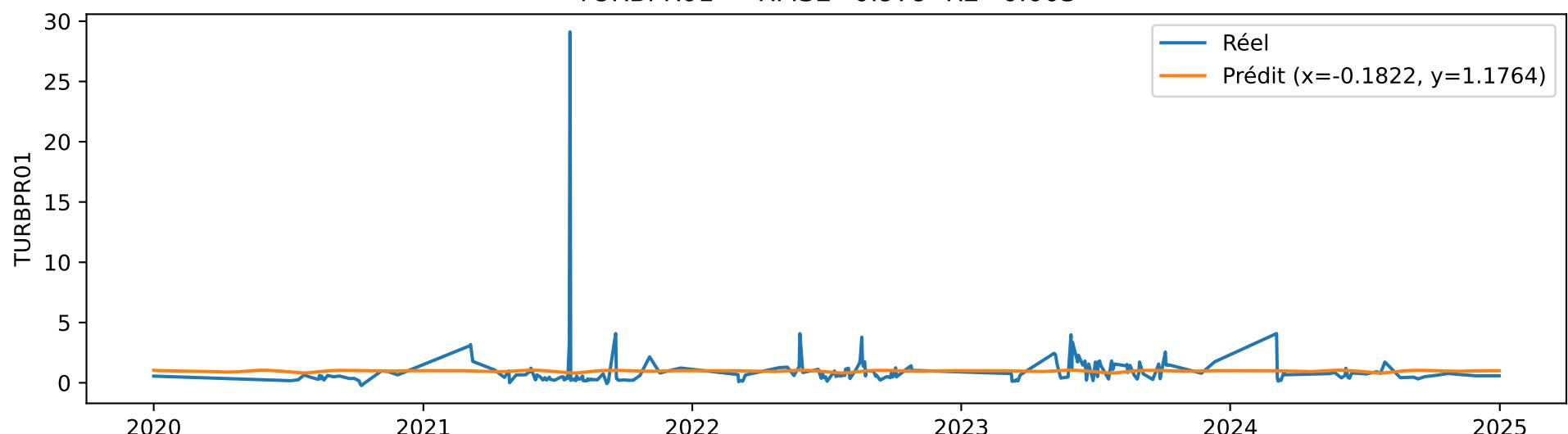
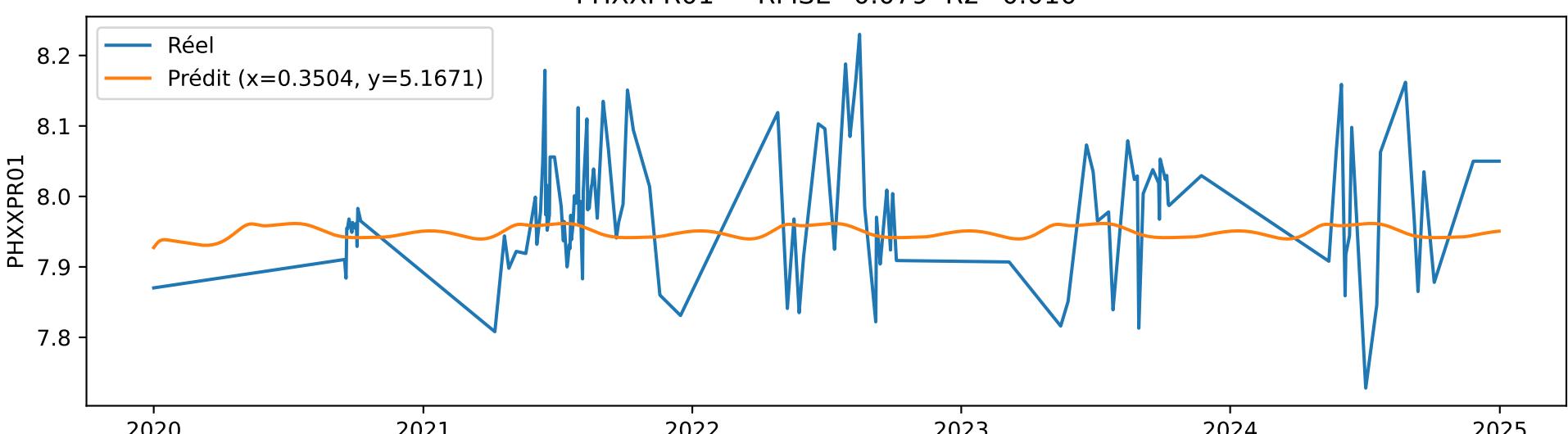


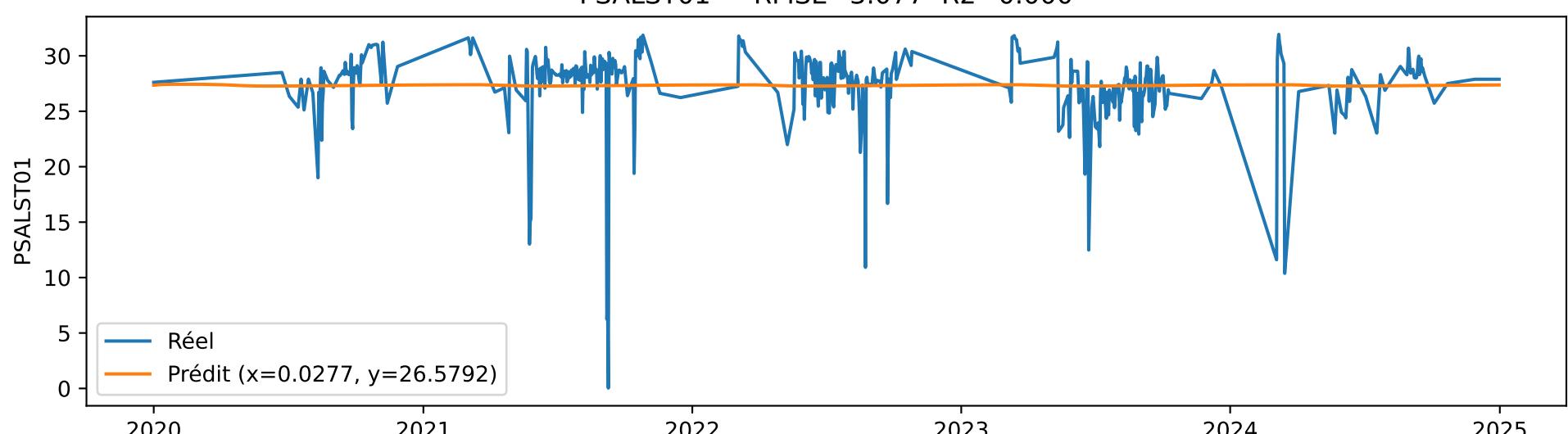
TURBPR01 — RMSE=0.979 R2=0.003



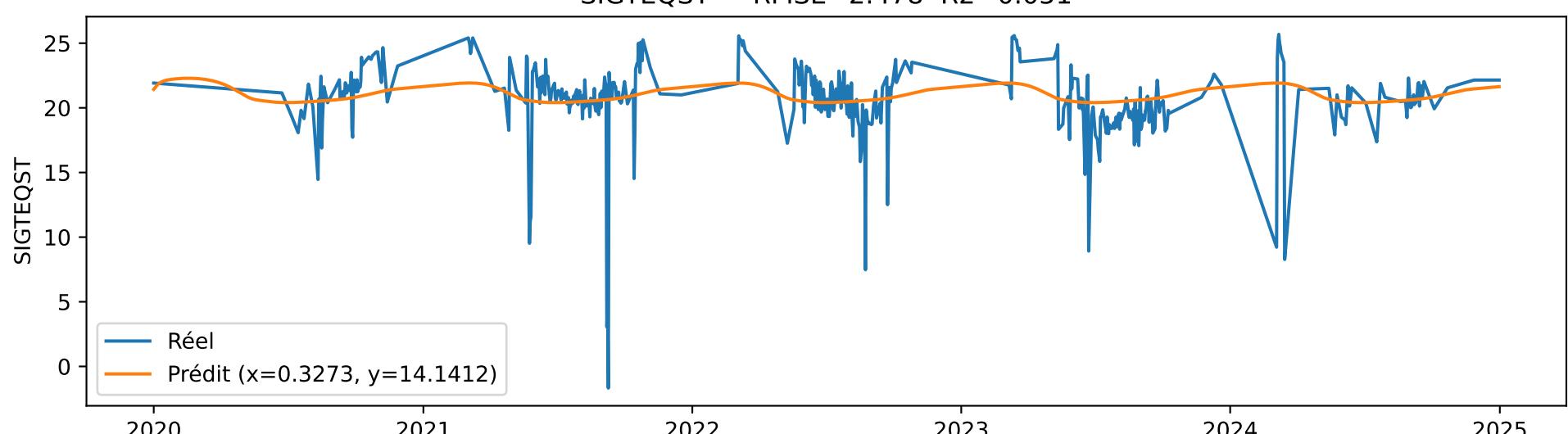
PHXXPR01 — RMSE=0.079 R2=0.010



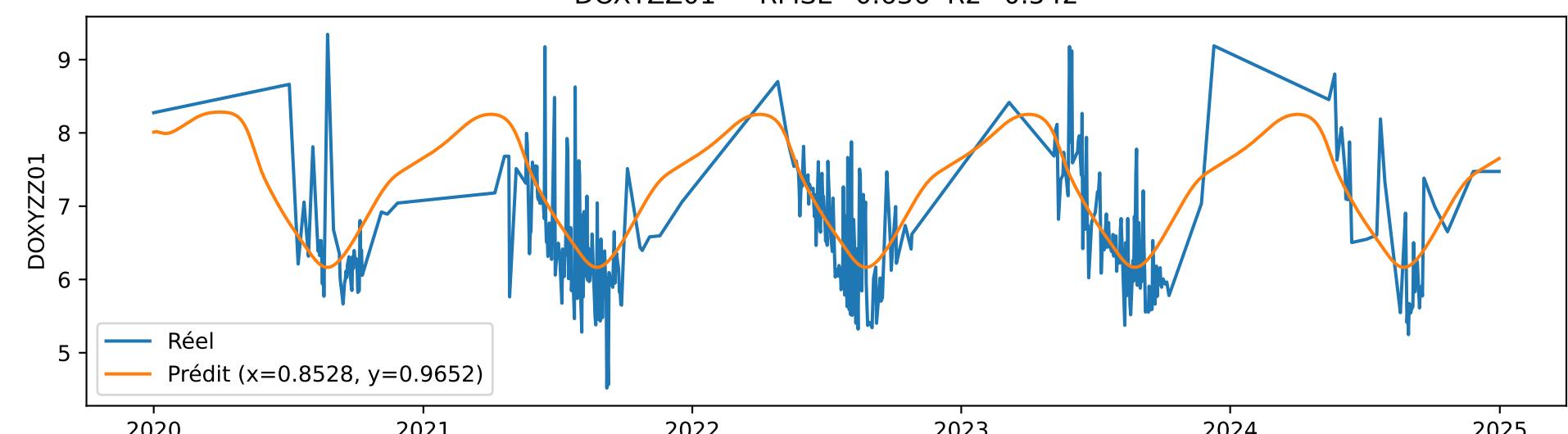
PSALST01 — RMSE=3.077 R2=0.000



SIGTEQST — RMSE=2.478 R2=0.051



DOXYZZ01 — RMSE=0.636 R2=0.542



## 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) :

- TURBPR01: RMSE=0.9791, R2=0.0033 ( $x=-0.182209$ ,  $y=1.176437$ ,  $R2_{opt}=0.003274$ )
- PHXXPR01: RMSE=0.0795, R2=0.0100 ( $x=0.350440$ ,  $y=5.167094$ ,  $R2_{opt}=0.010037$ )
- PSALST01: RMSE=3.0768, R2=0.0002 ( $x=0.027738$ ,  $y=26.579212$ ,  $R2_{opt}=0.000215$ )
- SIGTEQST: RMSE=2.4783, R2=0.0509 ( $x=0.327272$ ,  $y=14.141199$ ,  $R2_{opt}=0.050941$ )
- DOXYZZ01: RMSE=0.6361, R2=0.5419 ( $x=0.852833$ ,  $y=0.965188$ ,  $R2_{opt}=0.541931$ )