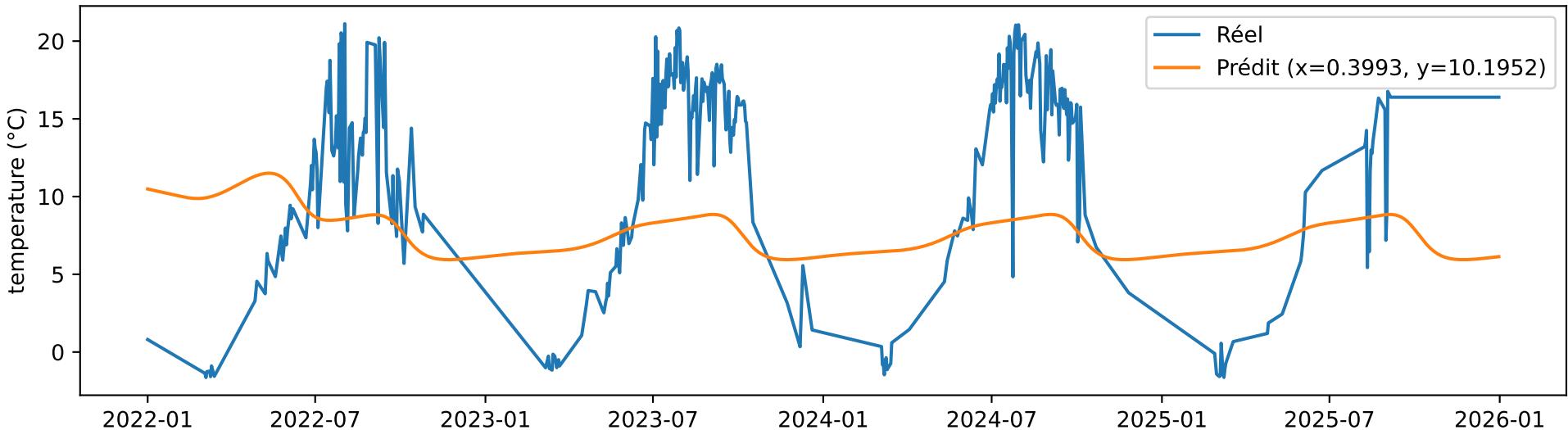
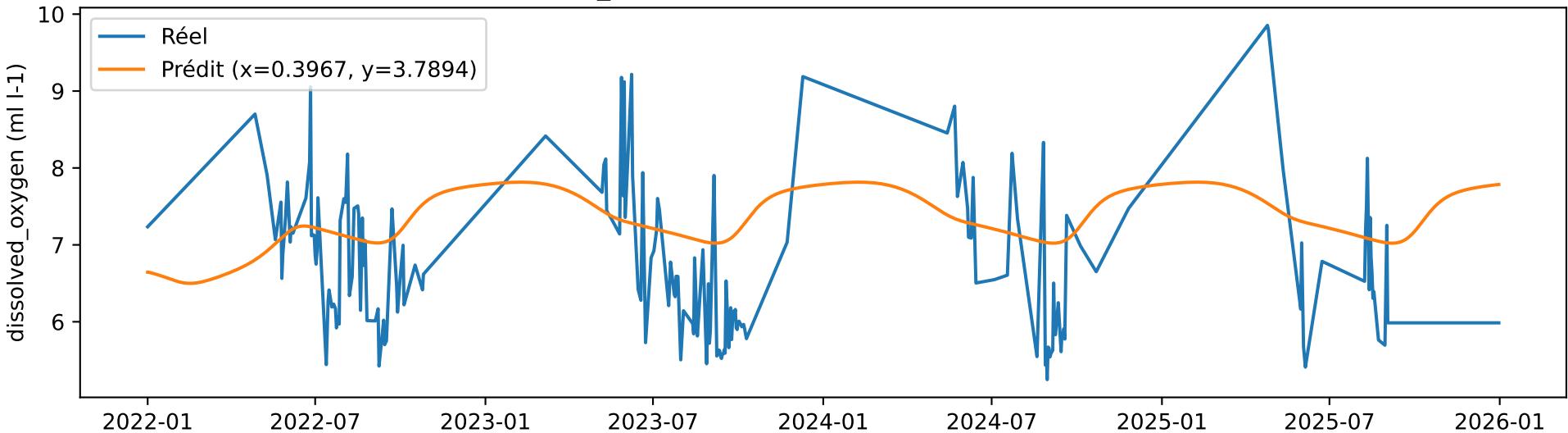


temperature (°C) — RMSE=6.384 R2=0.050



dissolved_oxygen (ml l⁻¹) — RMSE=1.016 R2=0.113



Résultats LSTM multivarié (après OLS)

Période entraînement : 2015-01-18 -> 2021-12-31

Période test : 2022-01-01 -> 2025-12-31

Metrics par variable (après transformation optimale) :

- temperature (°C): RMSE=6.3837, R2=0.0497 ($x=0.399297$, $y=10.195217$, $R2_{opt}=0.049687$)
- dissolved_oxygen (ml l⁻¹): RMSE=1.0162, R2=0.1132 ($x=0.396682$, $y=3.789390$, $R2_{opt}=0.113203$)