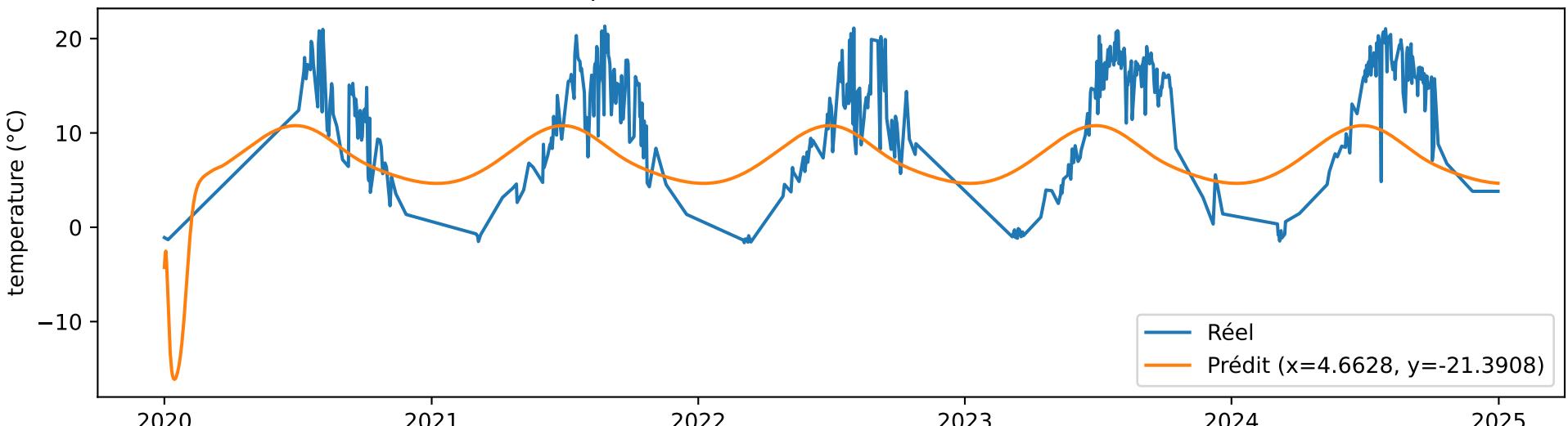
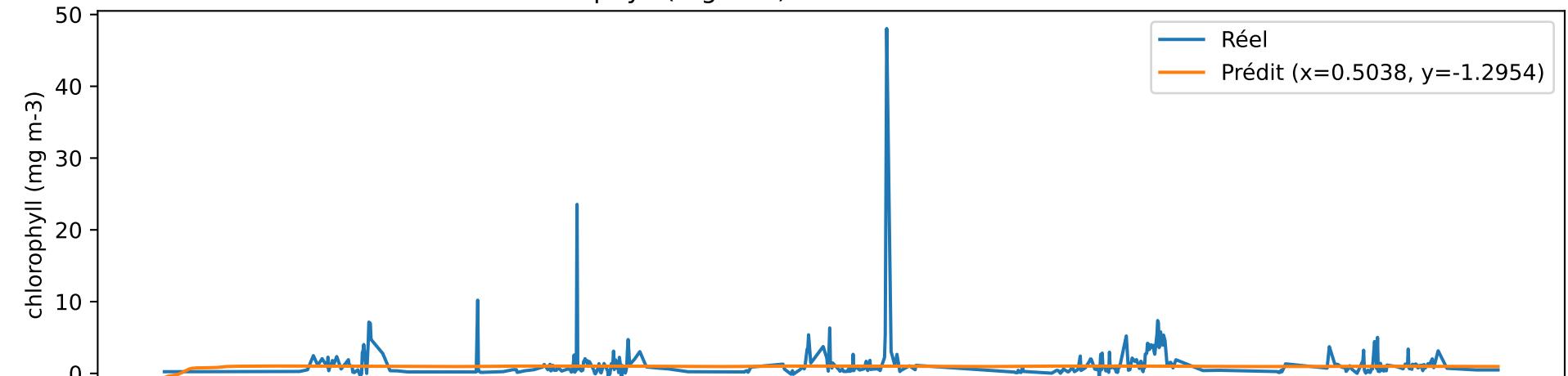
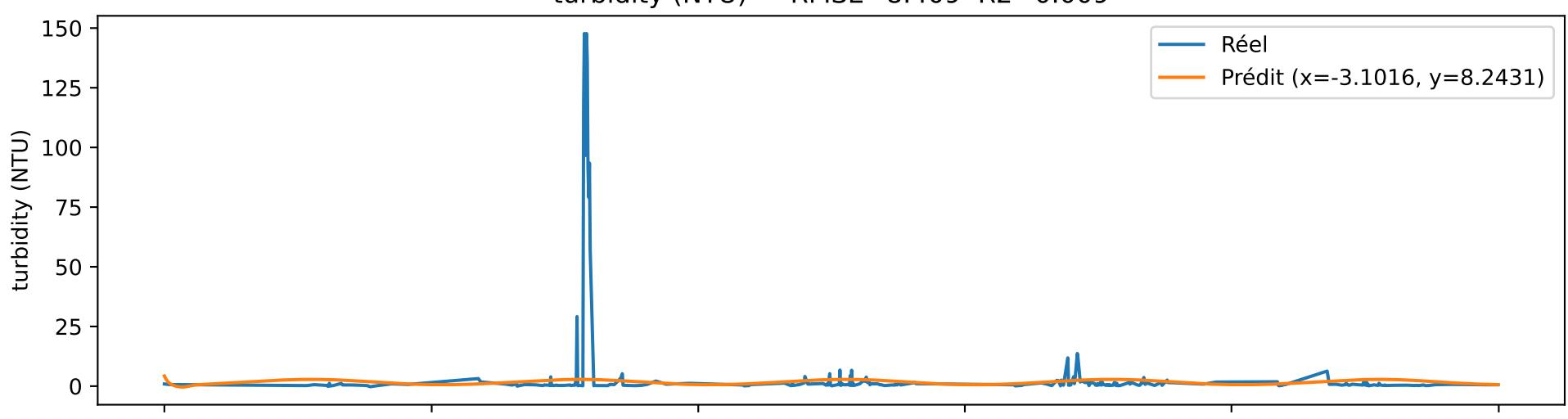
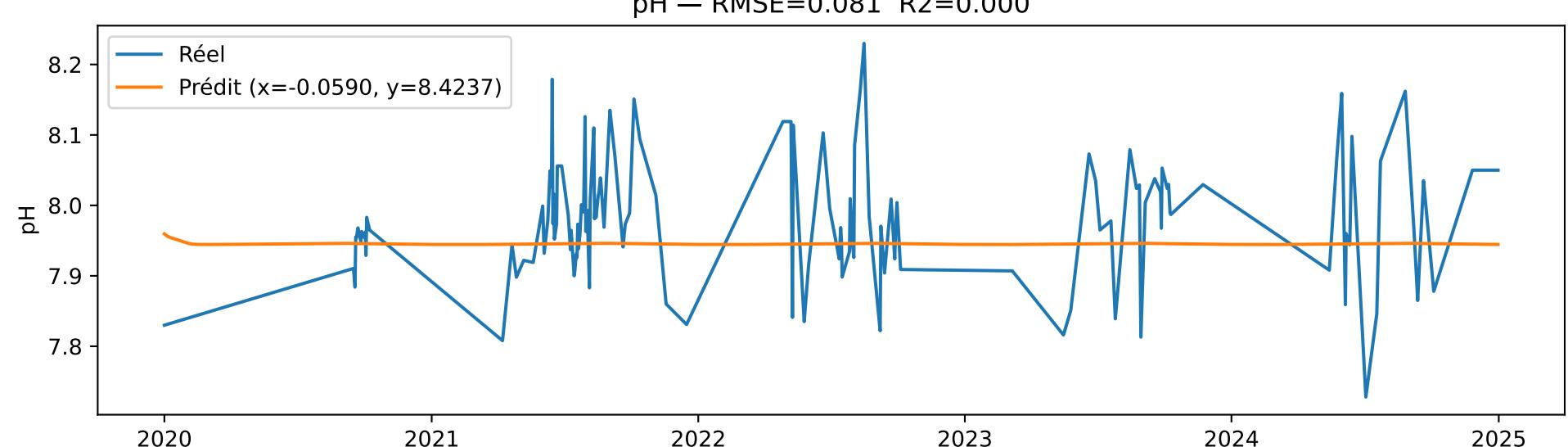


temperature ($^{\circ}\text{C}$) — RMSE=5.135 R2=0.296chlorophyll (mg m⁻³) — RMSE=2.177 R2=0.005

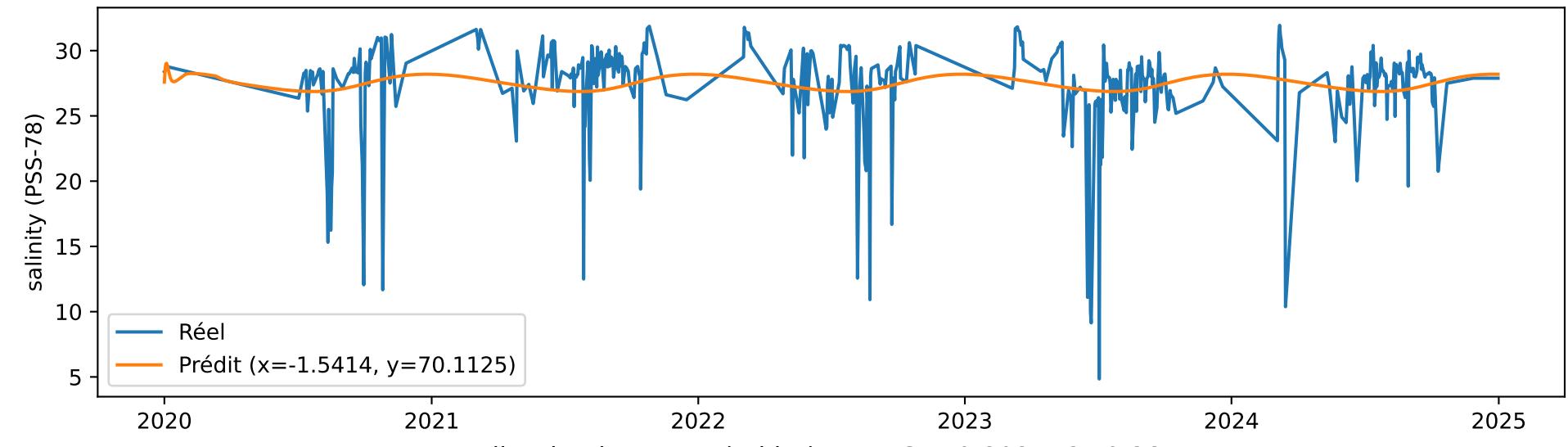
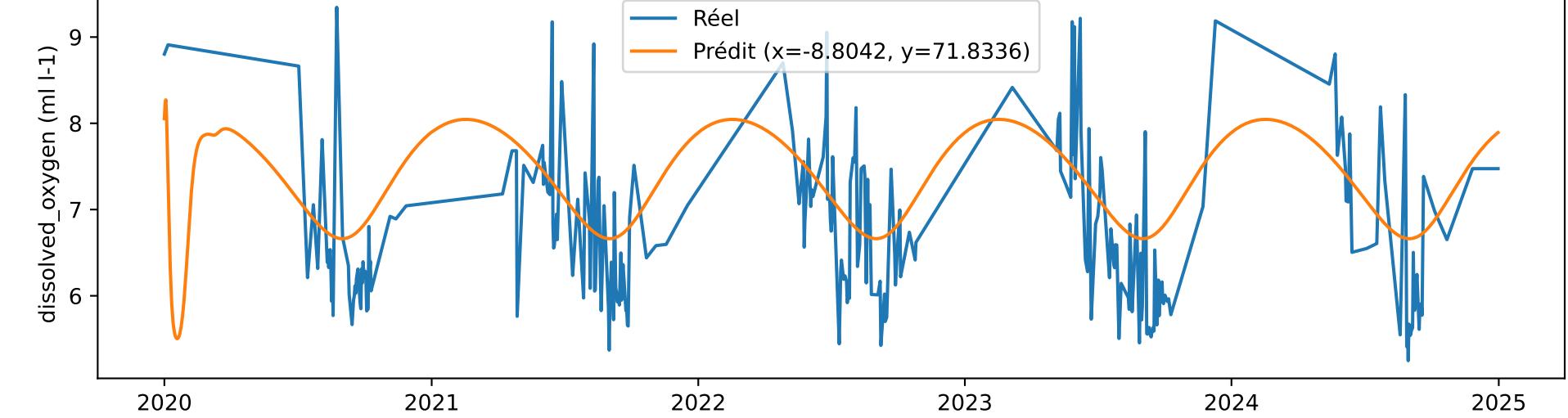
turbidity (NTU) — RMSE=8.409 R2=0.009



pH — RMSE=0.081 R2=0.000



salinity (PSS-78) — RMSE=2.612 R2=0.032

dissolved_oxygen (ml l⁻¹) — RMSE=0.802 R2=0.287

Résultats GRU multivarié (après OLS)

Valeur d'entrée uniquement :

['temperature (°C)', 'chlorophyll (mg m-3)', 'turbidity (NTU)', 'pH', 'salinity (PSS-78)']
['dissolved_oxygen (ml l-1)', 'temperature (°C)', 'chlorophyll (mg m-3)', 'salinity (PSS-78)', 'dissolved_oxygen (ml l-1)']

Valeur d'entrée et de sortie : ['temperature (°C)', 'chlorophyll (mg m-3)', 'turbidity (NTU)', 'pH', 'salinity (PSS-78)', 'dissolved_oxygen (ml l-1)']

Période entraînement : 2000-02-16 -> 2019-12-31

Période test : 2020-01-01 -> 2024-12-31

Metrics par variable (après transformation optimale) :

- temperature (°C): RMSE=5.1346, R2=0.2959 (x=4.662802, y=-21.390774, R2_opt=0.295914)
- chlorophyll (mg m-3): RMSE=2.1766, R2=0.0052 (x=0.503763, y=-1.295438, R2_opt=0.005230)
- turbidity (NTU): RMSE=8.4088, R2=0.0093 (x=-3.101639, y=8.243078, R2_opt=0.009337)
- pH: RMSE=0.0814, R2=0.0002 (x=-0.059048, y=8.423723, R2_opt=0.000214)
- salinity (PSS-78): RMSE=2.6123, R2=0.0321 (x=-1.541430, y=70.112503, R2_opt=0.032119)
- dissolved_oxygen (ml l-1): RMSE=0.8016, R2=0.2872 (x=-8.804225, y=71.833570, R2_opt=0.287155)