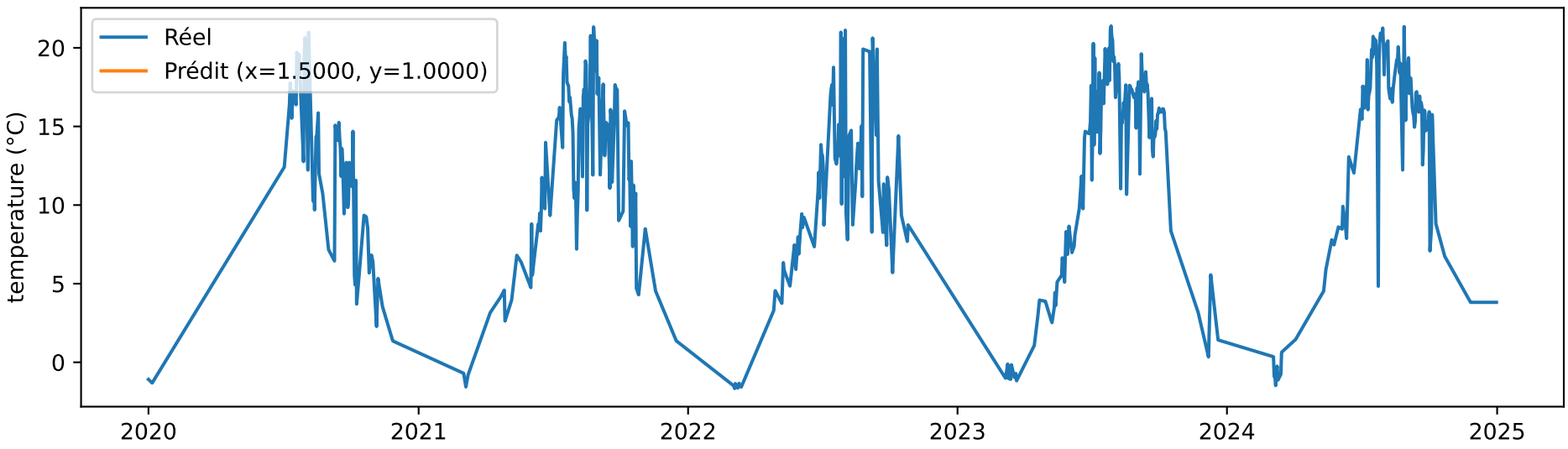
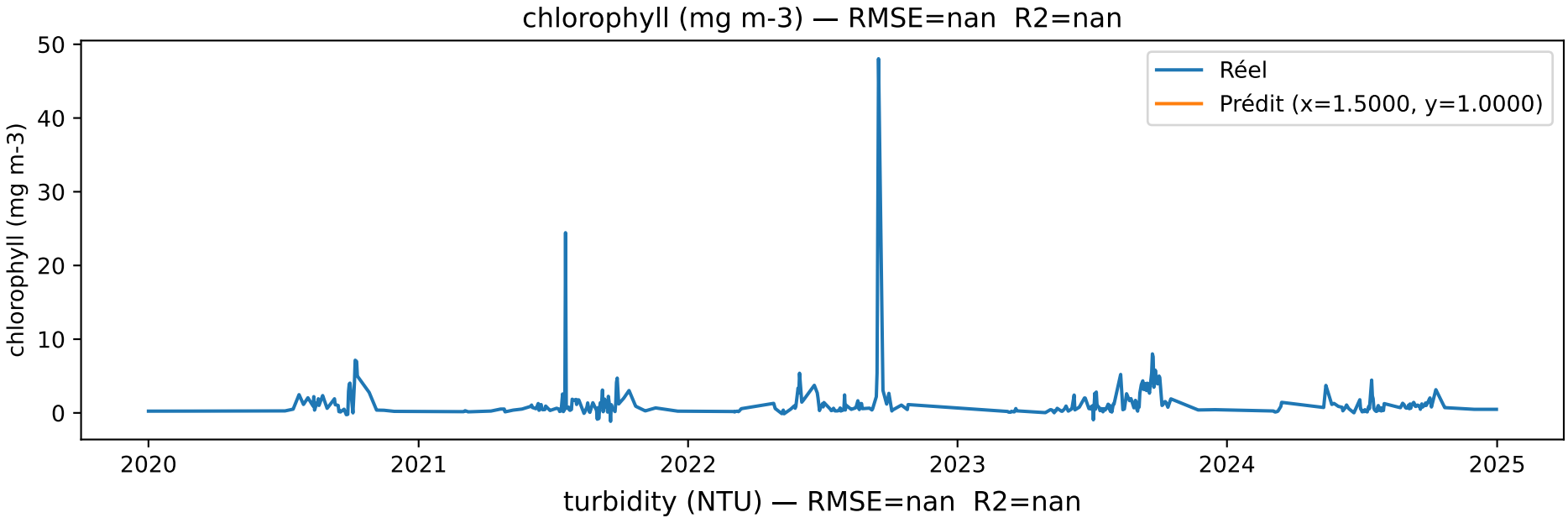
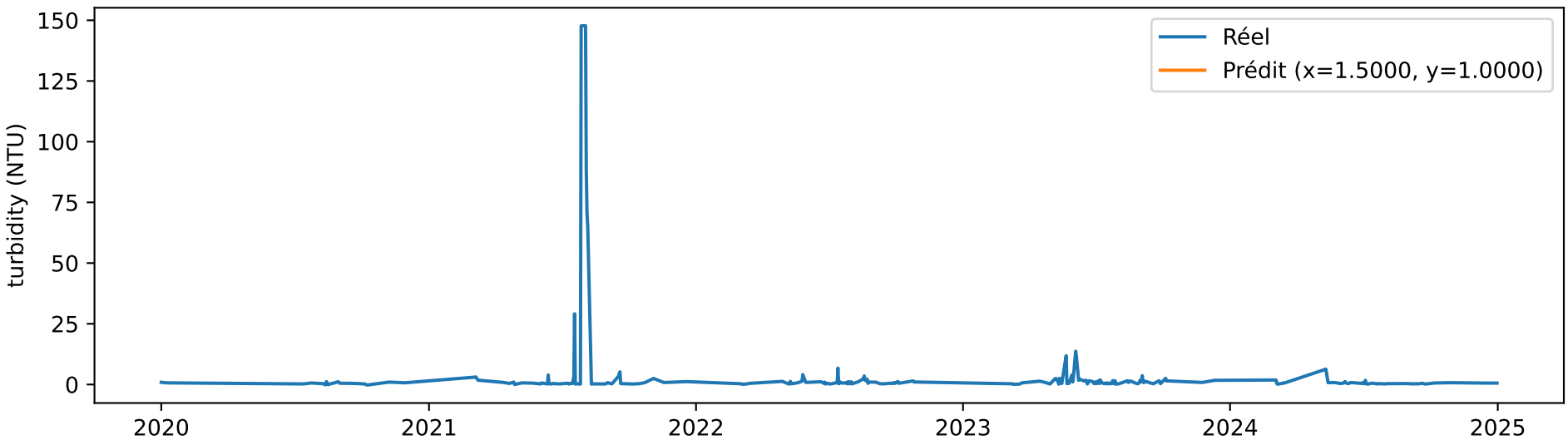
temperature (°C) — RMSE=nan  R2=nan



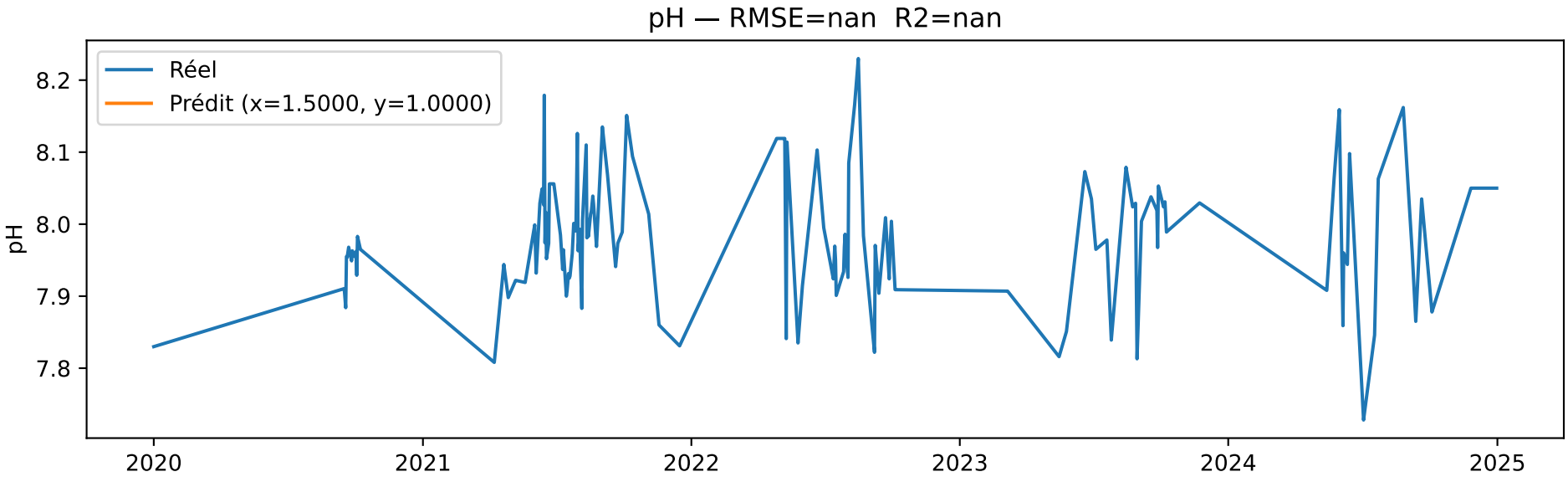

chlorophyll (mg m-3) — RMSE=nan  R2=nan



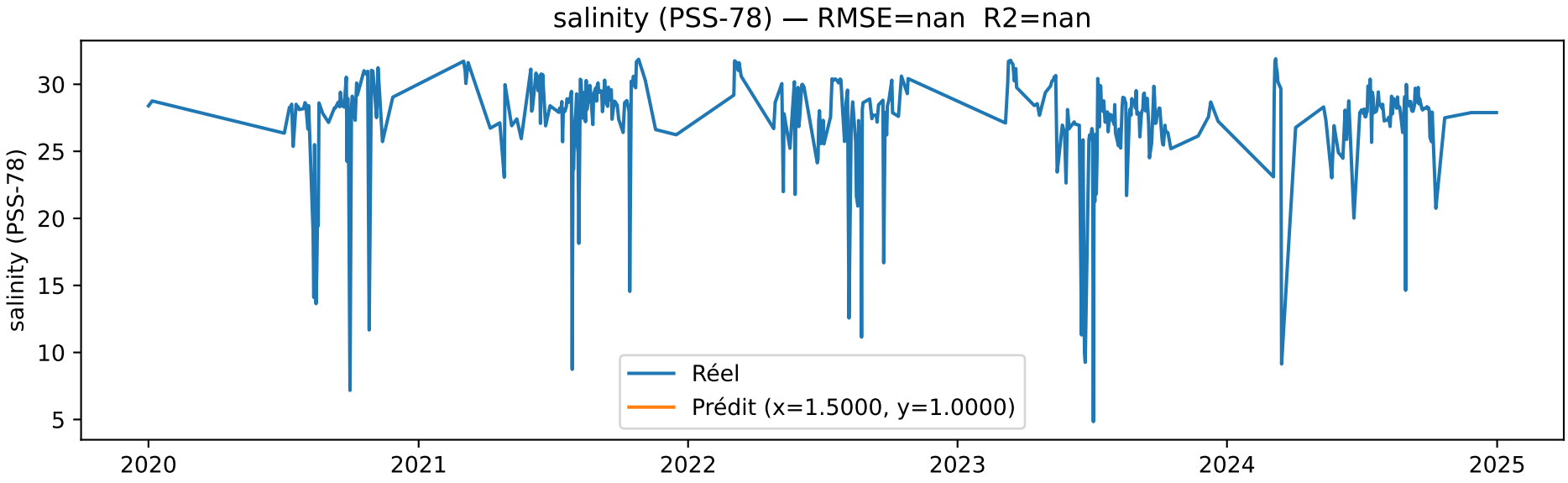

turbidity (NTU) — RMSE=nan  R2=nan



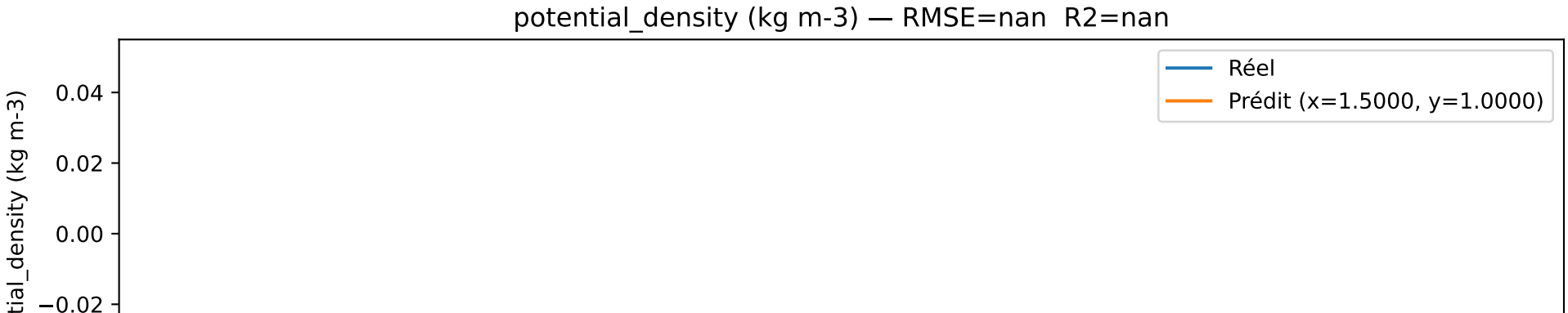

pH — RMSE=nan  R2=nan



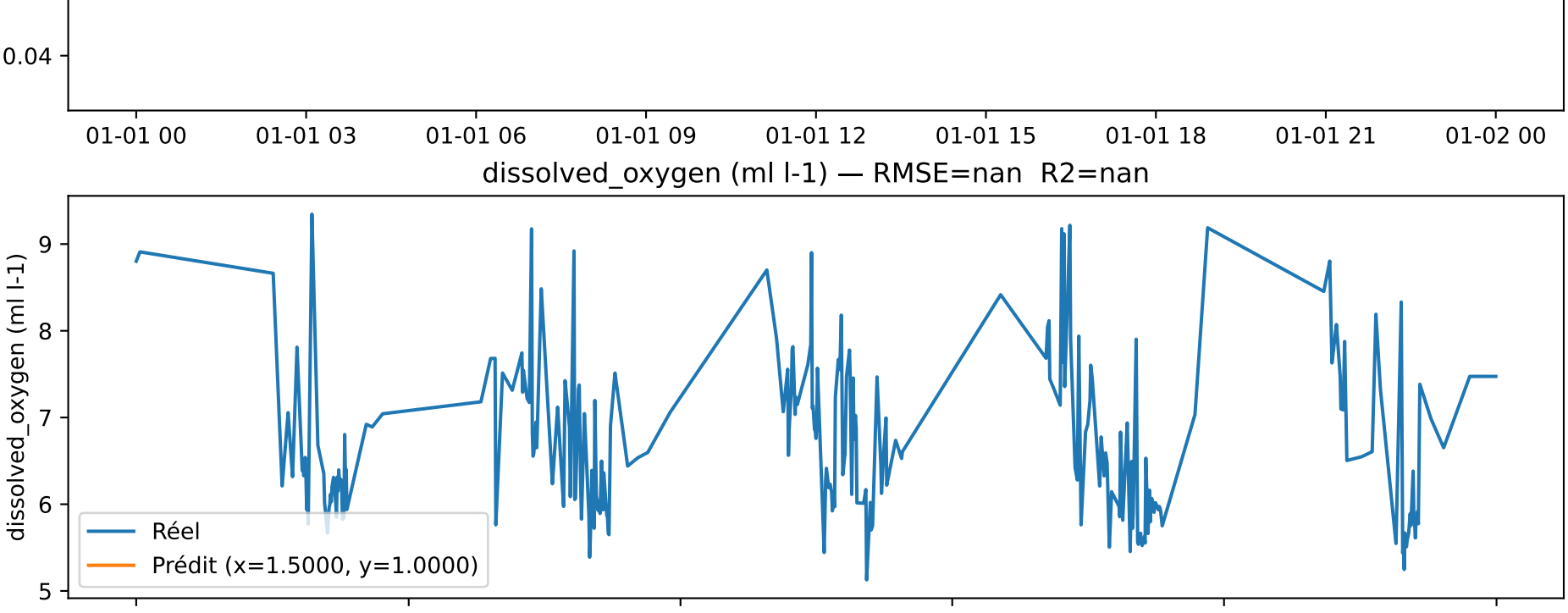

salinity (PSS-78) — RMSE=nan  R2=nan




potential_density (kg m-3) — RMSE=nan  R2=nan




dissolved_oxygen (ml l-1) — RMSE=nan  R2=nan



Résultats LSTM multivarié (après OLS)

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=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)
 - chlorophyll (mg m-3): RMSE=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)
 - turbidity (NTU): RMSE=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)
 - pH: RMSE=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)
 - salinity (PSS-78): RMSE=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)
 - potential_density (kg m-3): RMSE=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)
 - dissolved_oxygen (ml l-1): RMSE=nan, R2=nan  (x=1.500000, y=1.000000, R2_opt=nan)