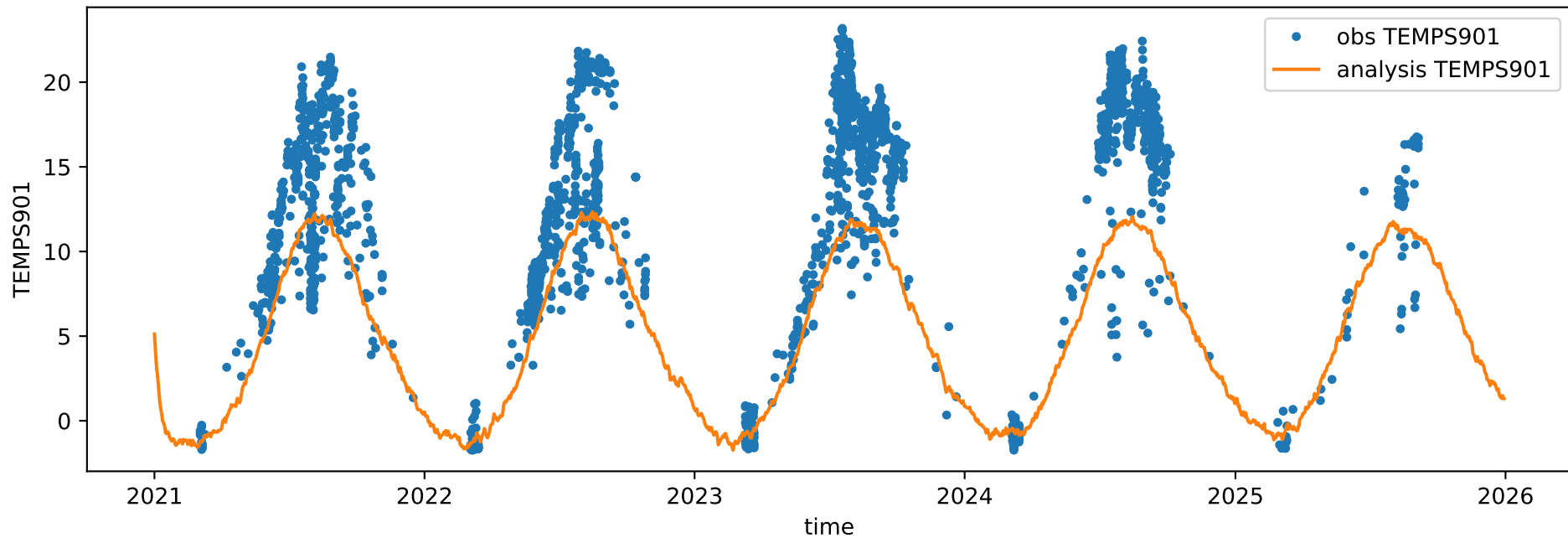
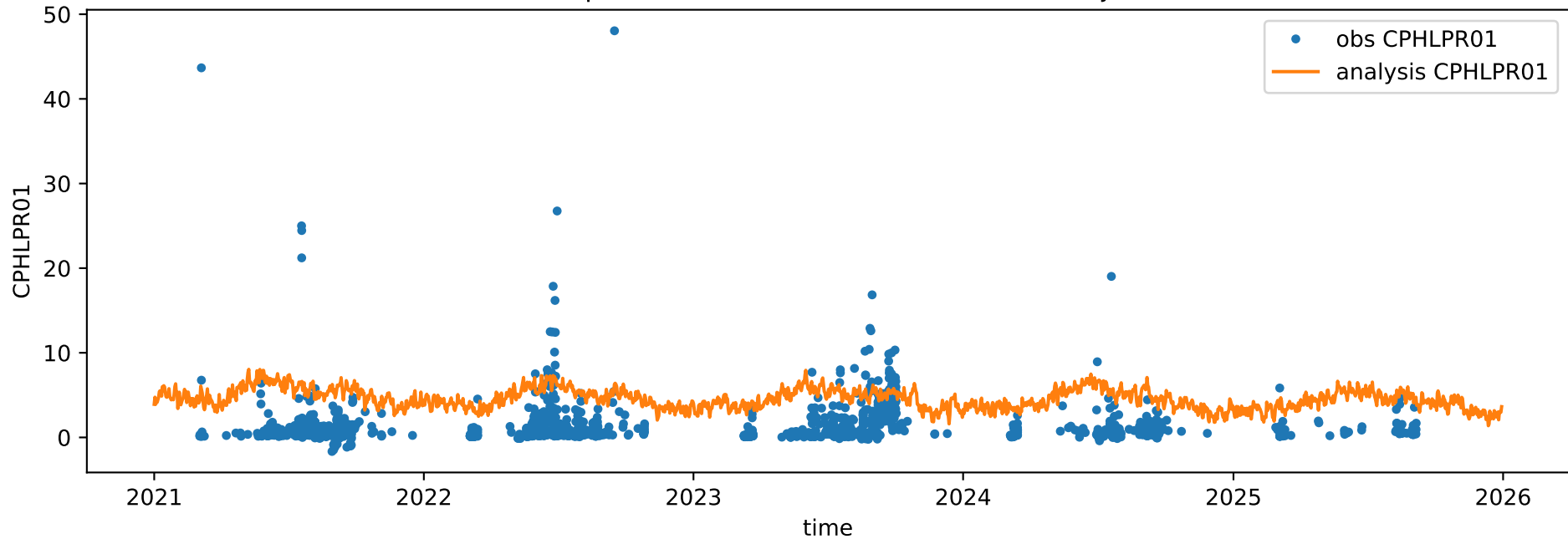


TEMPS901 (profondeur $\in [0.9, 1.1]$ m) — forecast journalier

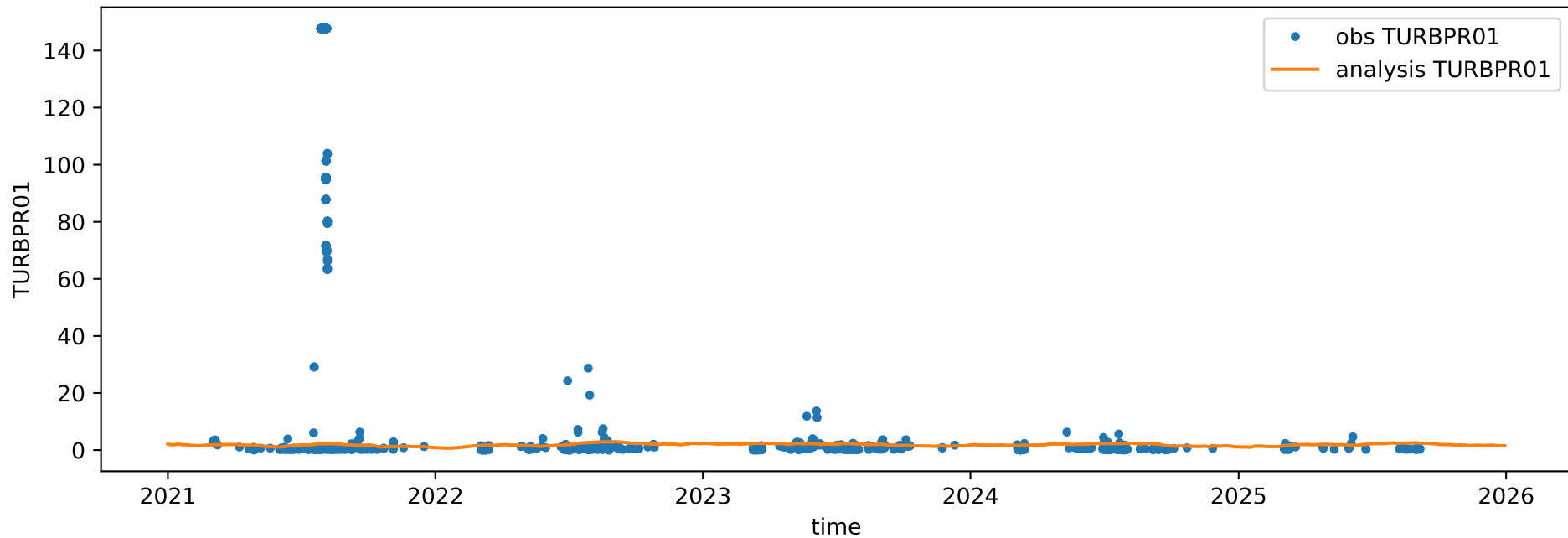


CPHLPR01 (profondeur $\in [0.9, 1.1]$ m) — forecast journalier

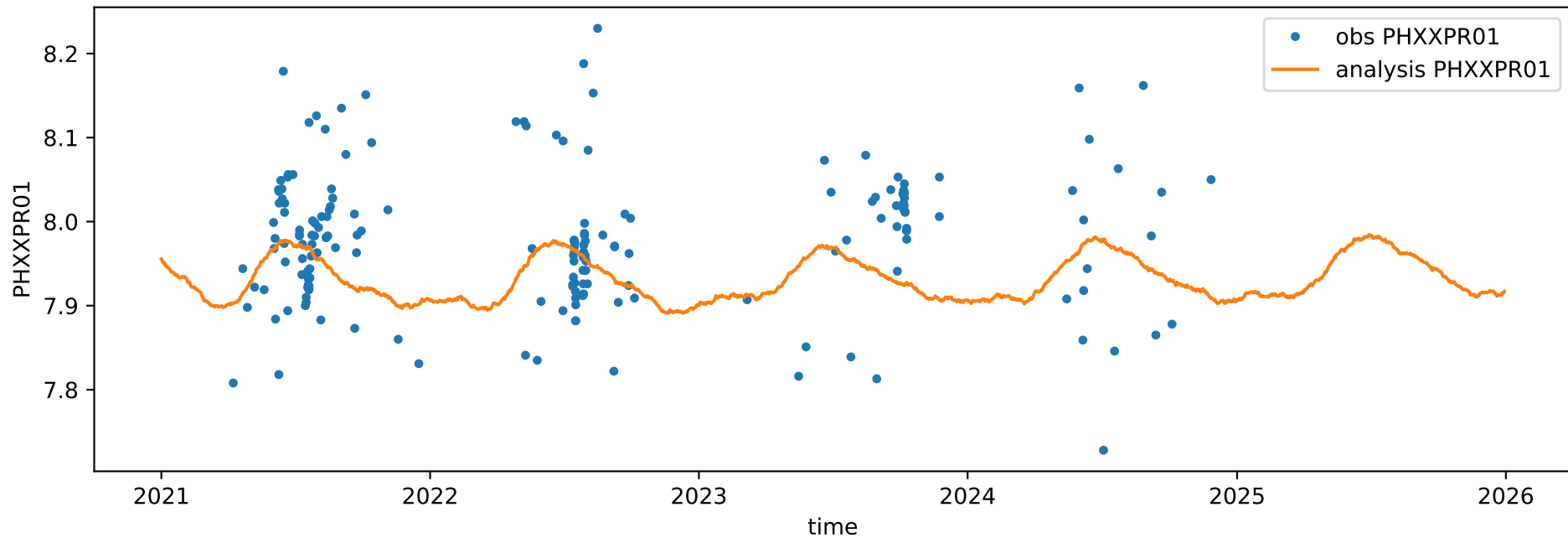


$R^2 = -3.184$ RMSE = 4.704

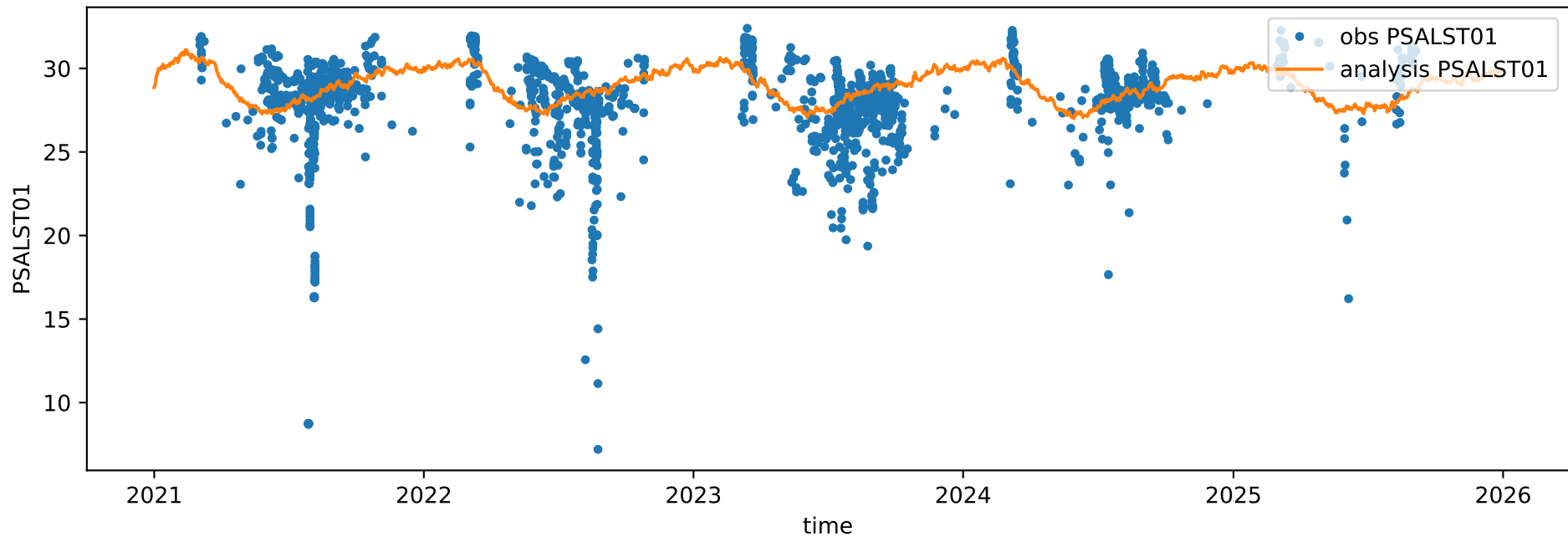
TURBPR01 (profondeur $\in [0.9, 1.1]$ m) — forecast journalier



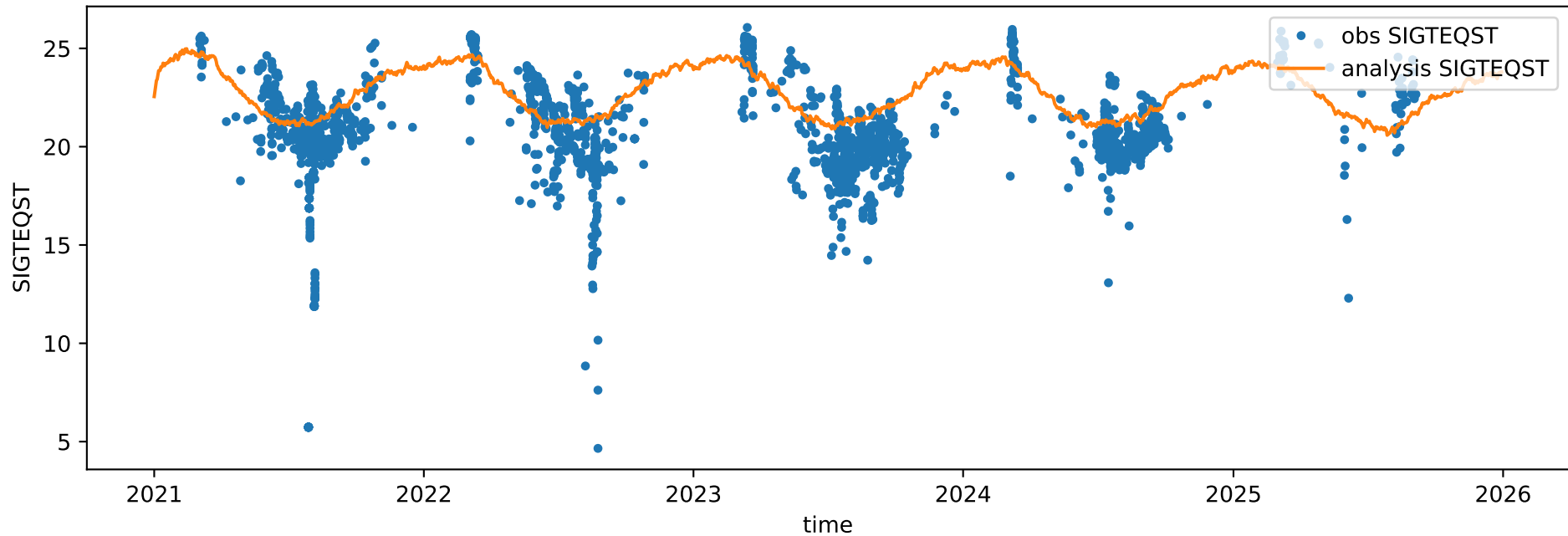
PHXXPR01 (profondeur $\in [0.9, 1.1]$ m) — forecast journalier



PSALST01 (profondeur $\in [0.9, 1.1]$ m) — forecast journalier

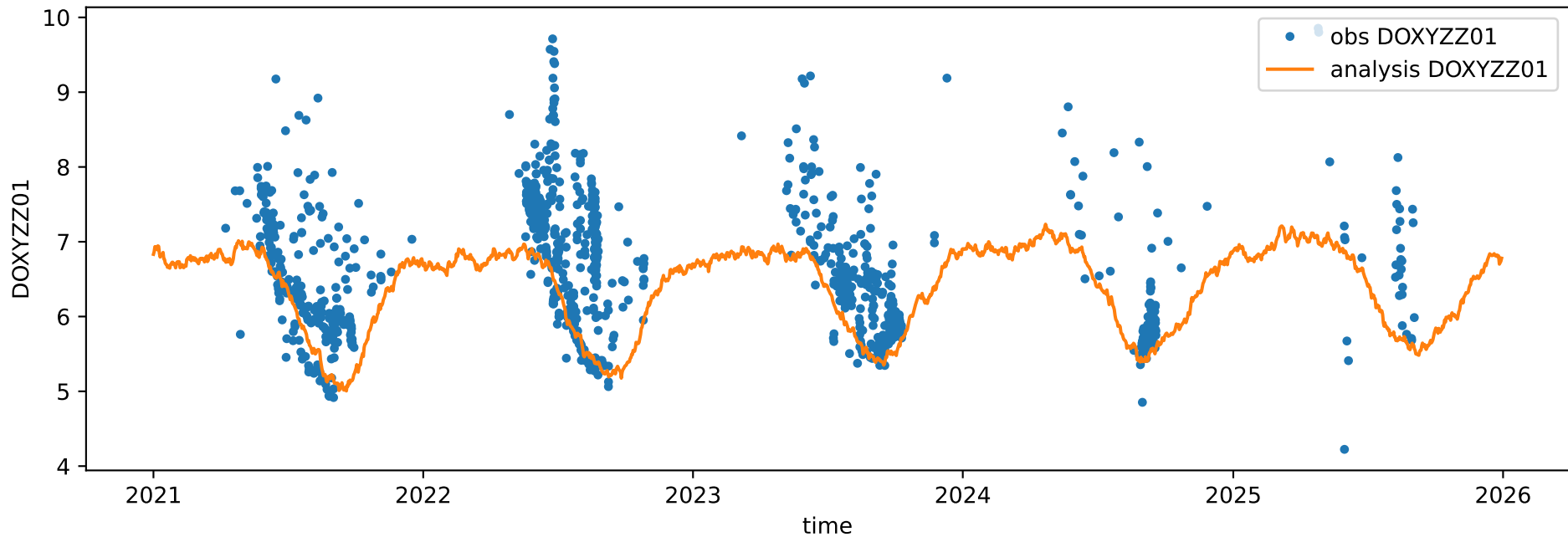


SIGTEQST (profondeur $\in [0.9, 1.1]$ m) — forecast journalier



$R^2 = 0.08108$ RMSE = 2.508

DOXZZ01 (profondeur ∈ [0.9, 1.1] m) — forecast journalier



$R^2 = -0.1704$ RMSE = 0.943

Résumé des metrics par variable (données filtrées par profondeur)

	rmse	r2
TEMPS901	5.218334	0.272259
CPHLPR01	4.704195	-3.183536
TURBPR01	71.468553	-0.535893
PHXXPR01	0.088689	-0.219324
PSALST01	3.099518	0.0081
SIGTEQST	2.508371	0.08108
DOXYZZ01	0.943008	-0.170404

Hyper-paramètres :

Paramètres et diagnostics (Q, R, valeurs propres de A)

ENS_SIZE: 100
RESAMPLE_DAILY: True
USE_SEASONAL: True
N_HARMONICS: 3
USE_INTERCEPT: True
ASSIMILATE: False
Q_scale: 1.0
R_scale: 1.0
Ridge_alpha: 1.0
SEED: 42
TRAIN_PERIOD: 2000-01-01 -> 2020-12-31
TEST_PERIOD: 2021-01-01 -> 2025-12-30
DEPTH_TARGET: 1
DEPTH_TOL: 0.1

Extrait diag(Q) (premières valeurs) :

1.47192, 27.252782, 0.199692, 0.000118, 0.937012, 0.576819, 0.103137, 0.0, 0.0, 1e-06, 0.0, 2e-06, 1e-06, 0.0

Extrait R_diag (premières valeurs) :

1.471726, 27.249191, 0.199665, 0.000118, 0.936888, 0.576743, 0.103123, 0.0, 0.0, 1e-06, 0.0, 2e-06, 1e-06, 0.0

Valeurs propres de A (extrait) :

0.5547+0.0000j, 0.8236+0.0000j, 0.8576+0.0000j, 0.9103+0.0000j, 0.9405+0.0000j, 0.9976+0.0515j, 0.9976-0.0515j, 0.9701-

$\max |\text{eig}(A)| = 1.0000$

Correspondance variables (premières 14):

TEMPS901, CPHLPR01, TURBPR01, PHXXPR01, PSALST01, SIGTEQST, DOXYZZ01, sin_1, cos_1, sin_2, cos_2, sin_3, cos_3, days_since_start

NB: diag(Q) et R_diag sont les variances de bruit de processus / observation.
Ajuste Q_scale et R_scale pour affiner l'assimilation/forecast.