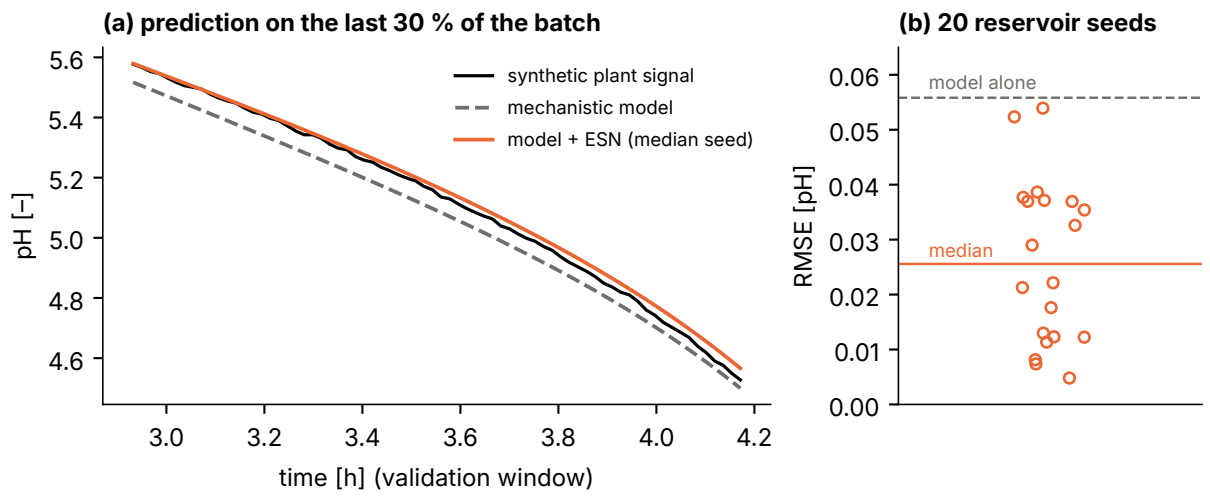

(a) prediction on the last 30 % of the batch
synthetic plant signal
mechanistic model
model + ESN (median seed)
pH [–]
5.6
5.4
5.2
5.0
4.8
4.6
3.0
3.2
3.4
3.6
3.8
4.0
4.2
time [h] (validation window)
(b) 20 reservoir seeds
model alone
median
RMSE [pH]
0.06
0.05
0.04
0.03
0.02
0.01
0.00