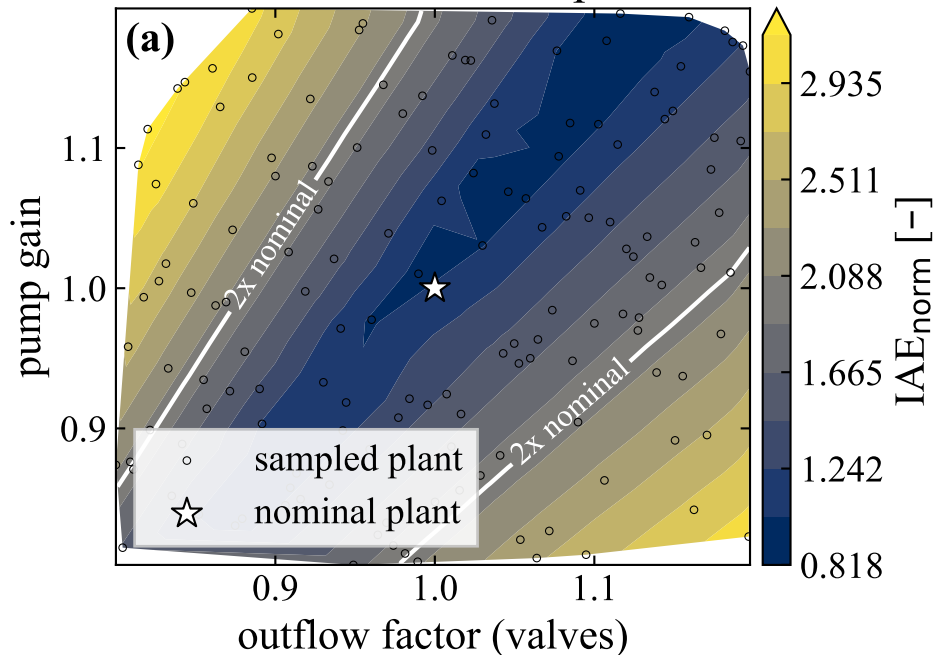
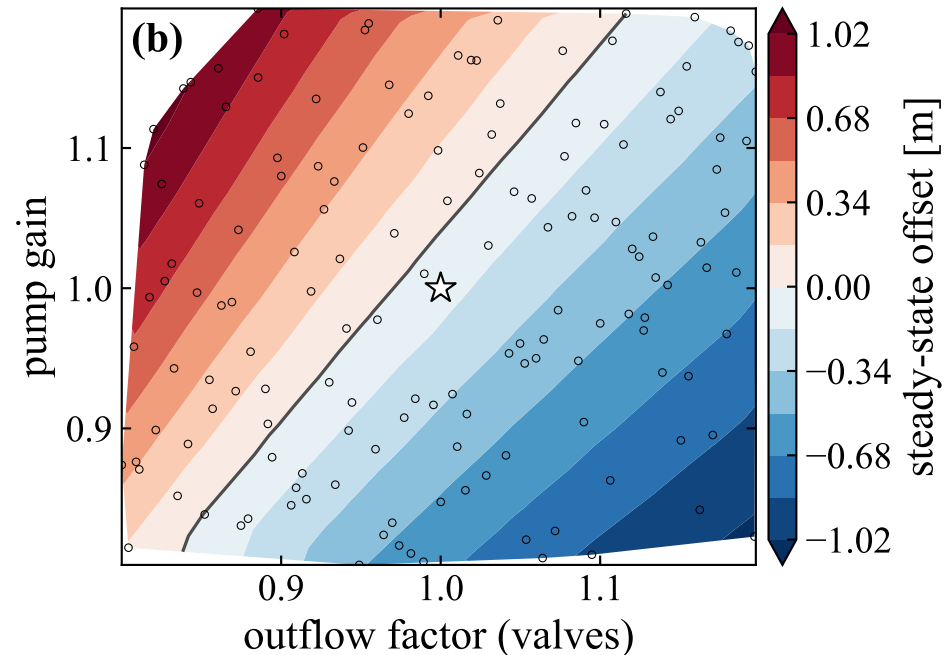


Mismatch envelope over the plant parameters

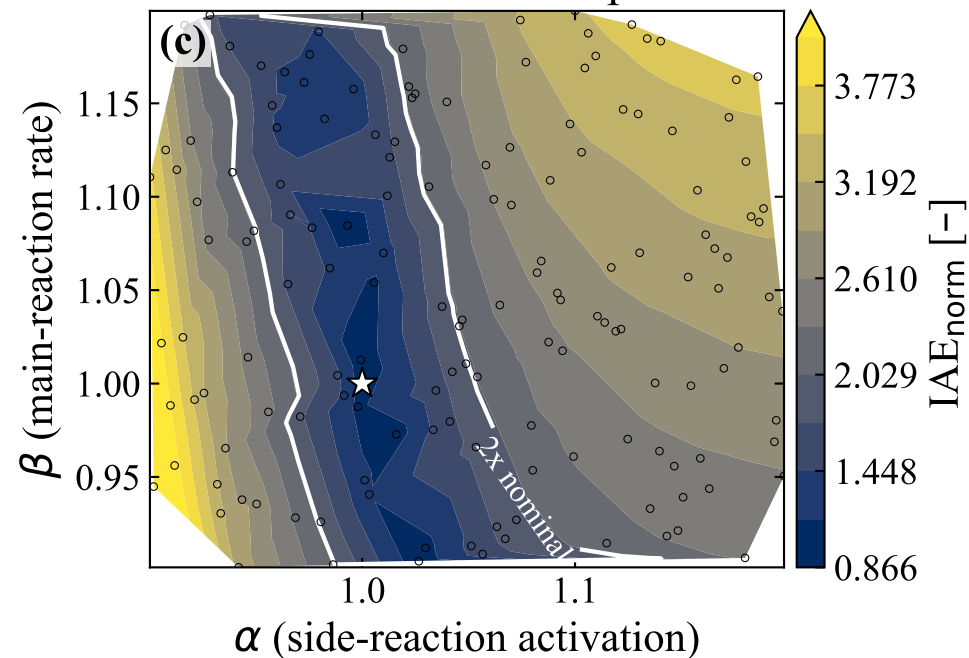
Cascaded two-tank:
mismatch envelope



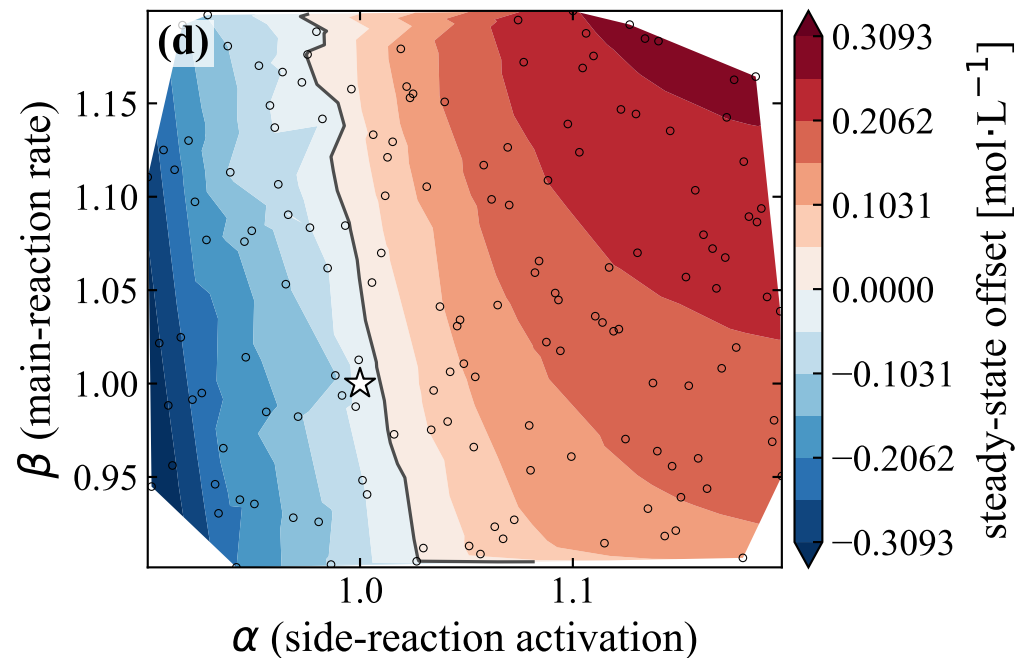
Cascaded two-tank:
residual offset under mismatch



CSTR:
mismatch envelope



CSTR:
residual offset under mismatch



Delaunay-interpolated from each benchmark's mismatch sample; dots are the sample and the star is the nominal plant. Left column: tracking cost, the white contour at twice nominal bounding how far the plant may drift before it needs retraining. Right column: signed steady-state offset, red above the setpoint and blue below, clipped at the 98th percentile of $|\text{offset}|$. (a, b) Cascaded two-tank, mismatch_factor over 0.80–1.20 and gain_mismatch over 0.80–1.20, 150 of 150 plants usable. (c, d) CSTR, alpha over 0.90–1.20 and beta over 0.90–1.20, 150 of 150 plants usable.