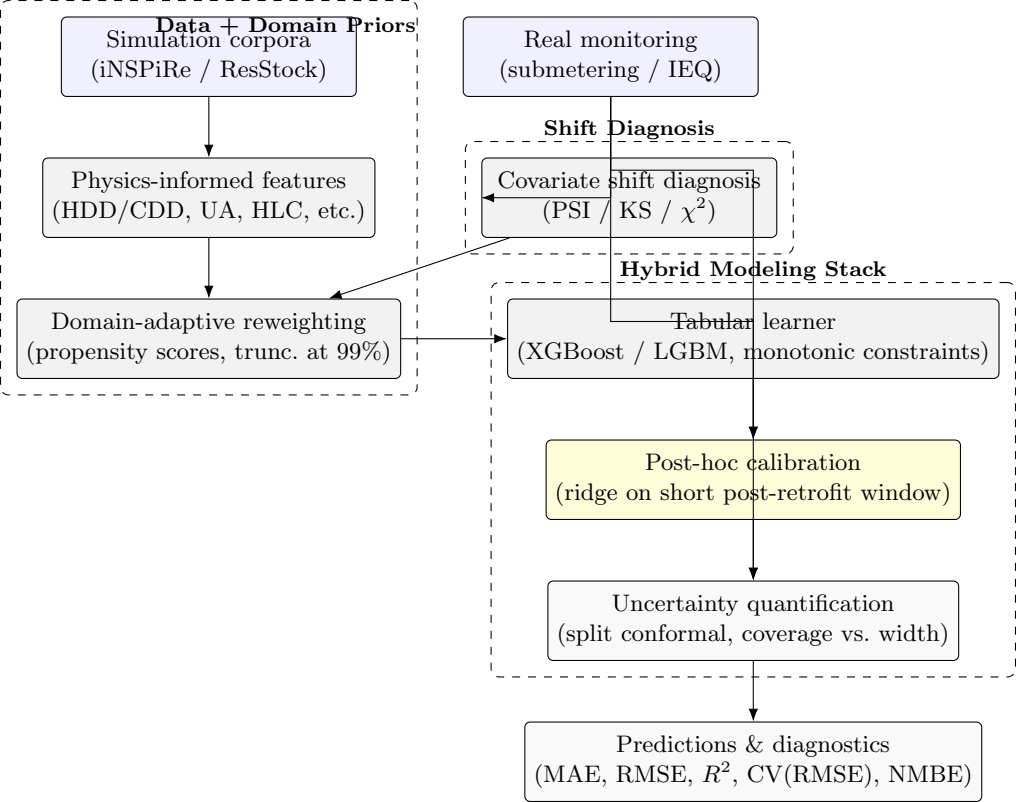
Data + Domain Priors
Simulation corpora
(iNSPiRe / ResStock)
Physics-informed features
(HDD/CDD, UA, HLC, etc.)
Domain-adaptive reweighting
(propensity scores, trunc. at 99%)
Real monitoring
(submetering / IEQ)
Shift Diagnosis
Covariate shift diagnosis
(PSI / KS / χ^2)
Hybrid Modeling Stack
Tabular learner
(XGBoost / LGBM, monotonic constraints)
Post-hoc calibration
(ridge on short post-retrofit window)
Uncertainty quantification
(split conformal, coverage vs. width)
Predictions & diagnostics
(MAE, RMSE, R^2, CV(RMSE), NMBE)