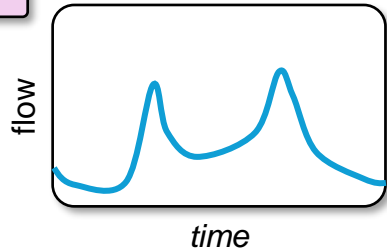
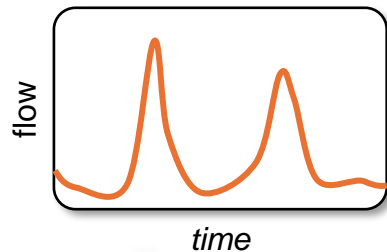


1

## Data observation



## NWM (NHM) prediction



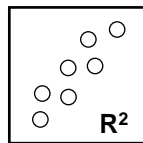
3

## RF model evaluation

**Target**

KGE

target



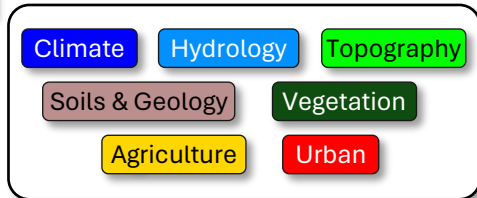
prediction

**Prediction**

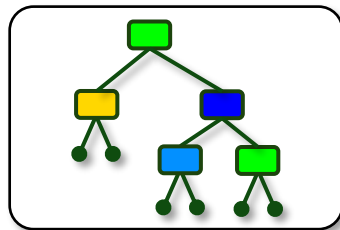
KGE

2

## Catchment attributes



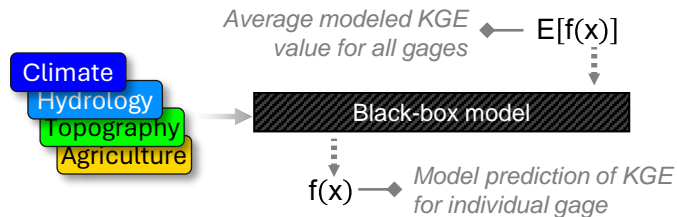
## Random forest (RF)



4

## Interpretable machine learning

Black-box models obfuscate predictor influence



**Shapley values** explain marginal contributions of catchment attributes to modeled KGE at a site

