

CatBoost training loss

Catboost validation loss

XGBoost training loss

XGBoost validation loss

LightGBM training loss

LightGBM validation loss

SMA CatBoost validation loss gradients

SMA XGBoost validation loss gradients

SMA LightGBM validation loss gradients

Loss Gradient, RMSE [log—i—]

0

2000

4000

Iterations

$10^{-1}$

$10^{-3}$

$10^{-5}$