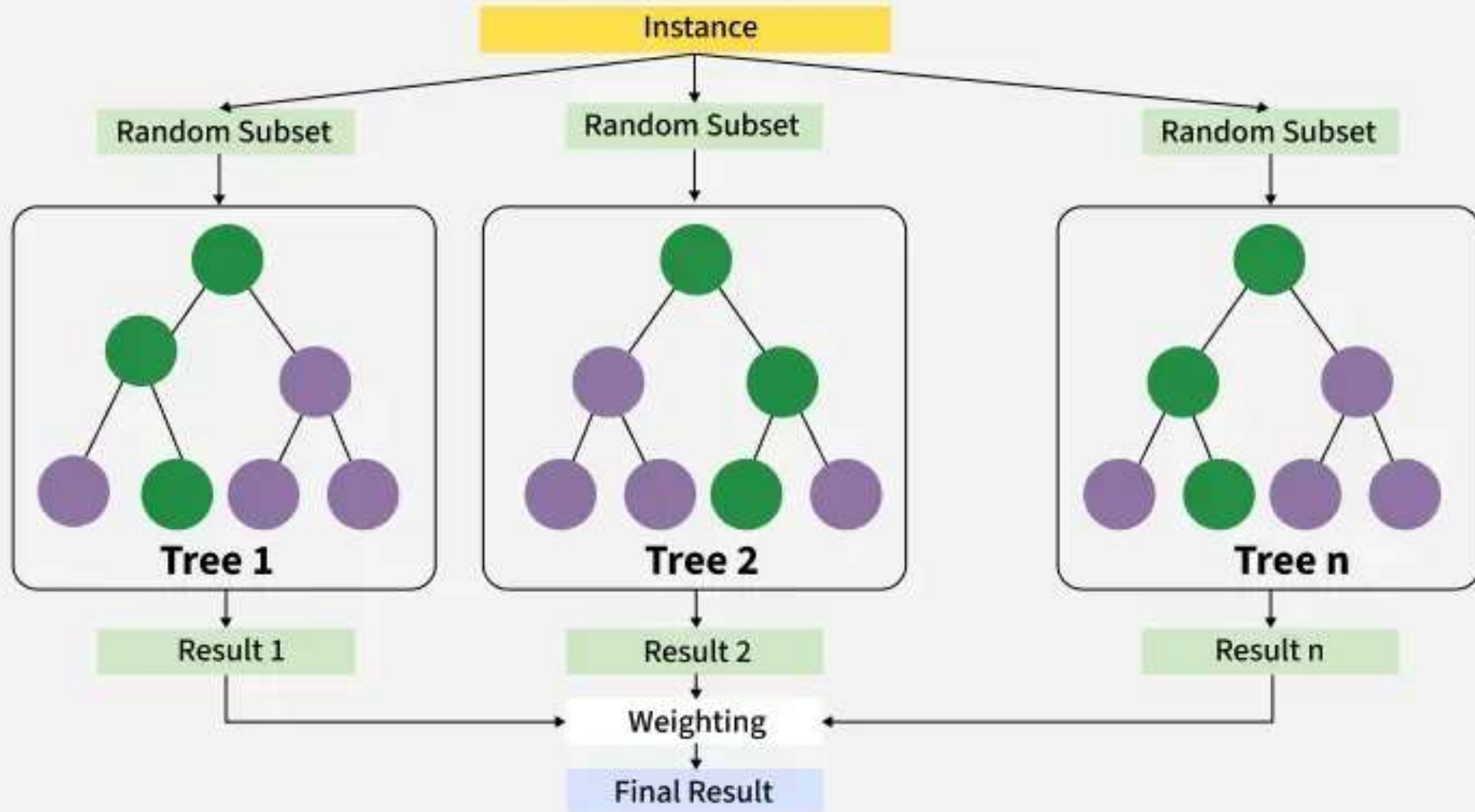


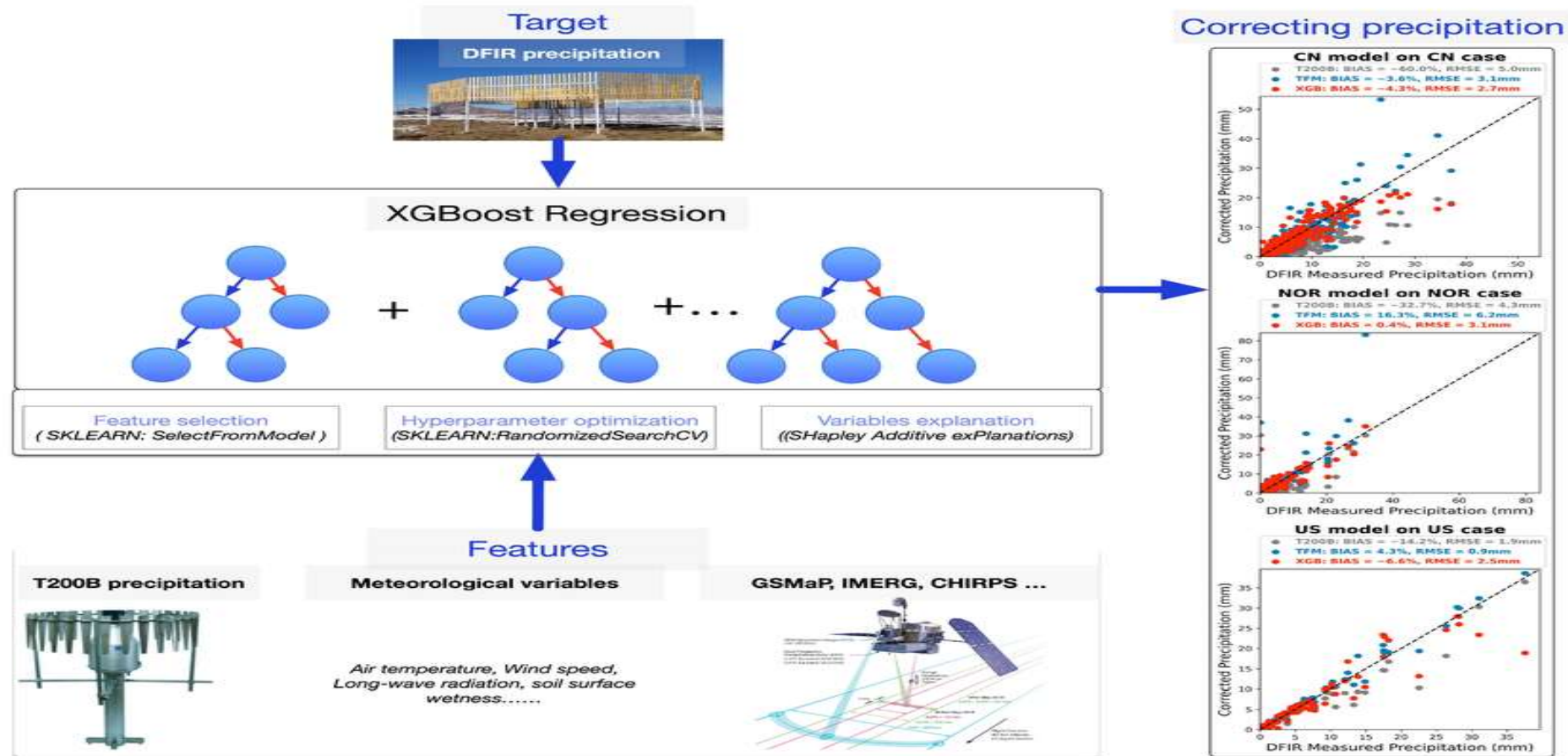
# XGBoost Algorithm in Machine Learning

- ❖ Regularization to prevent overfitting.
- ❖ Parallel processing for faster computation.
- ❖ Handles missing data efficiently.
- ❖ Combines weak learners (decision trees) to form a strong learner.
- ❖ Minimizes loss function iteratively.

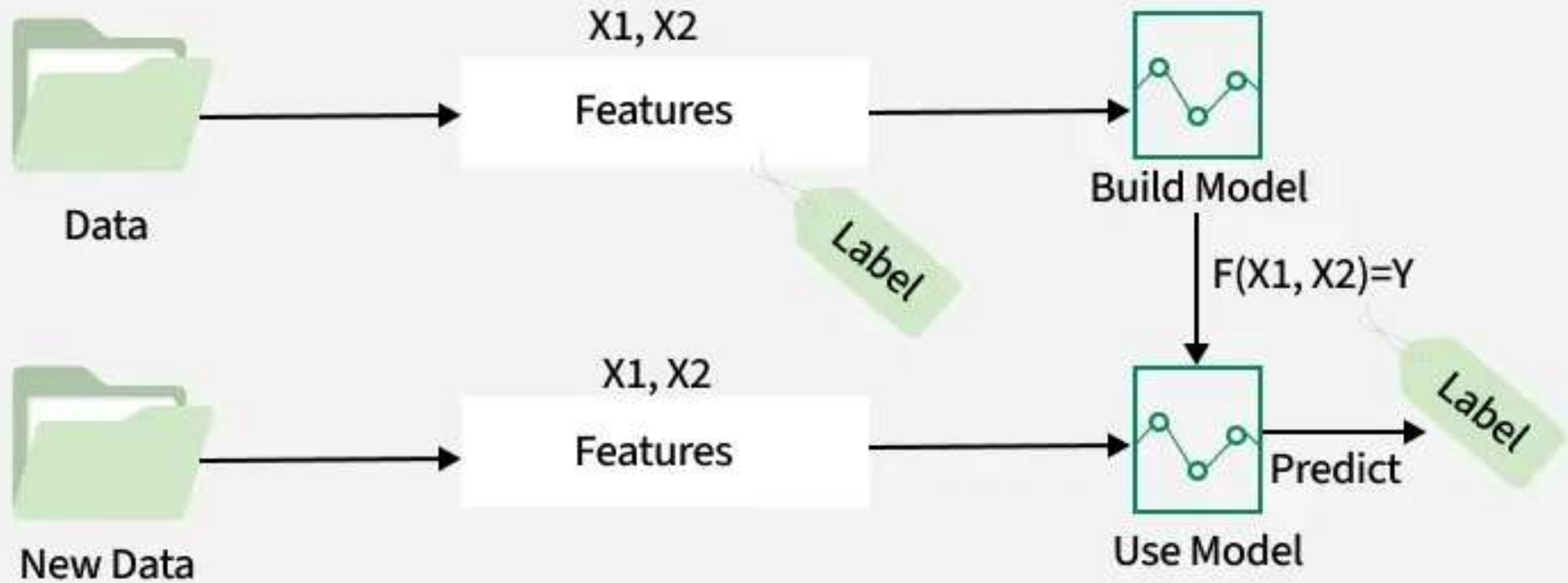
# XGBooster Regression



# XGBoost Algorithm for Regression in ML



# XGBoosting Algorithm Creating Model



# Objectives of XGBoosting Algorithm

- Weighted quantile sketch for handling sparse data.
- Tree pruning for optimal depth.
- Built-in cross-validation.
- Summarize the importance of XGBoost in modern machine learning.
- Highlight its scalability and performance