Tuning

The coarse tuning was performed using the "hyperparam_optimization" notebooks located under models/trad_ml. The results of each sweep are saved under sweep_results. This PDF file contains a summary of the hyperparameter values that proved effective during the coarse training and were subsequently used for the fine tuning. The fine-tuning process was again conducted in the "hyperparam_optimization" notebooks, and the results were also saved under sweep_results.

Logreg:

- Model:
    - max_iter: [10,20]
    - C: [0.001, 0.01,0.1]
    - Dif: False
    - class_weight: None
- Feature:
    - ma_alpha: [0.05, 0.1]
    - restart: False
    - min period: [1,5,10]
    - h2h_feature_cols: result_score
    - h2h_alpha: 0.1
    - pca_n_components: 0,925

XGB:

- Model
    - max_depth: [1, 3]
    - n_estimators: [100, 120]
    - learning_rate: [0.3,0.5]
    - dif: false
- Features
    - ma_alpha:0.05
    - ma_restart_each_season: False
    - ma_min_period: 1
    - h2h_alpha: 0.5
    - pca_n_components: 0.95
    - h2h_feature_cols: result_score

Random forest:

- Model
    - n_estimators: [150, 200]
    - max_depth: 10
    - min_samples_split: [5, 10]
    - dif: False

- Feature
    - ma_alpha: [0.05, 0.1]
    - ma_min_periods: [1, 3]
    - ma_restart_each_season: False
    - h2h_aplha:0.5
    - h2h_feature_cols: result_score
    - pca_n_components: 0.52