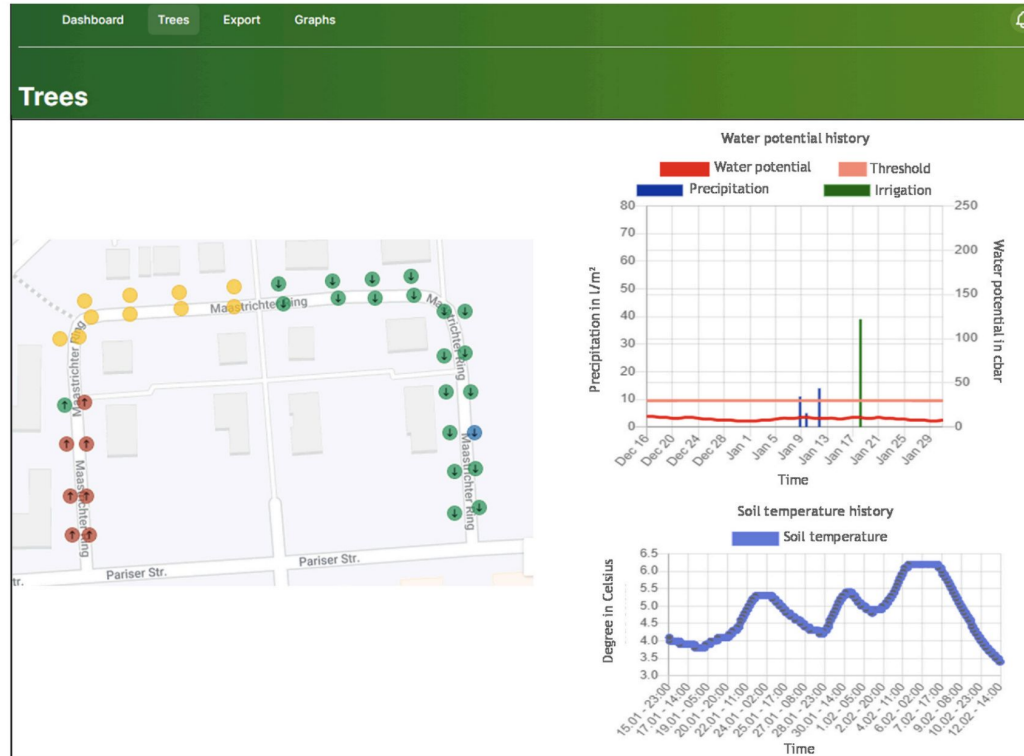


Team: Orange+

Forecast IT

Iustina Orange

Designing smart and sustainable irrigation: A case study.



Gimpel et al. "Designing smart and sustainable irrigation: A case study"

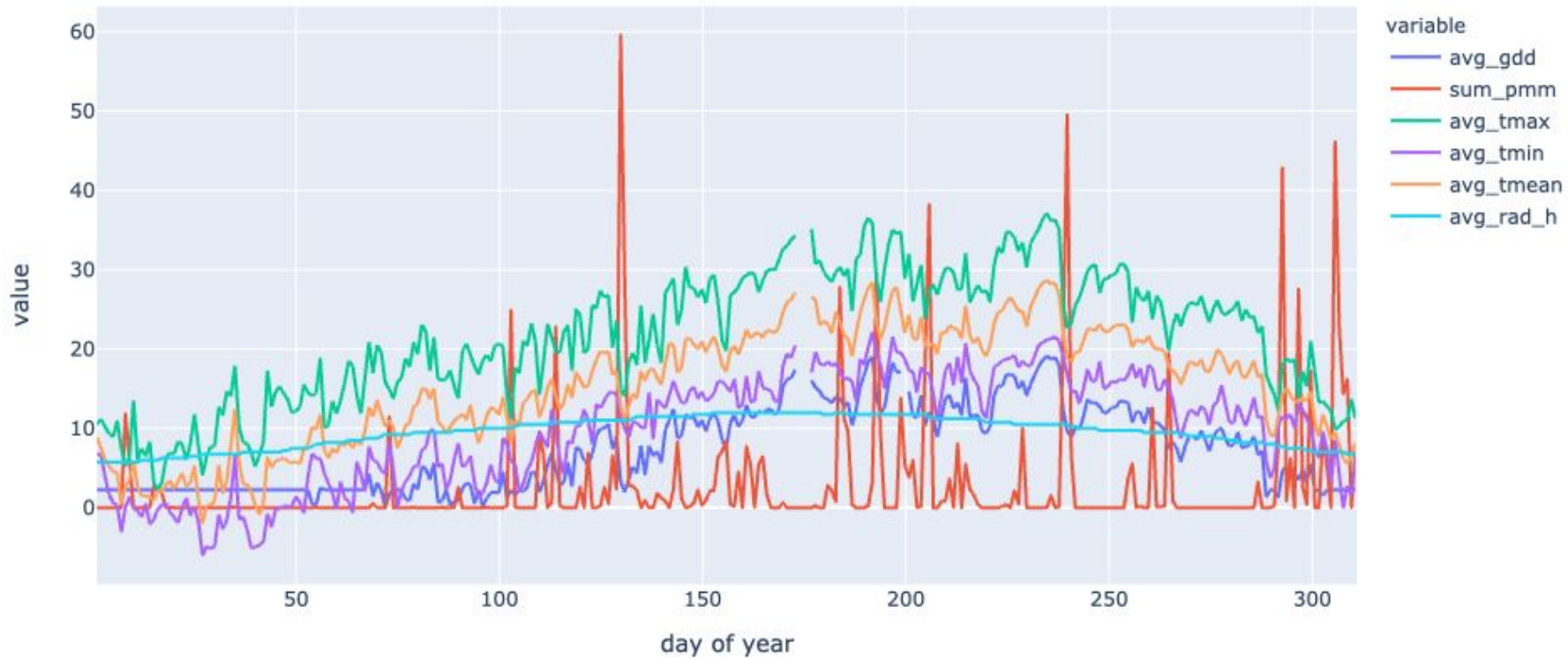
Growth-degree day (GDD)

GDD is a heuristic tool which calculates the date when the flower will bloom, or a crop will reach maturity.

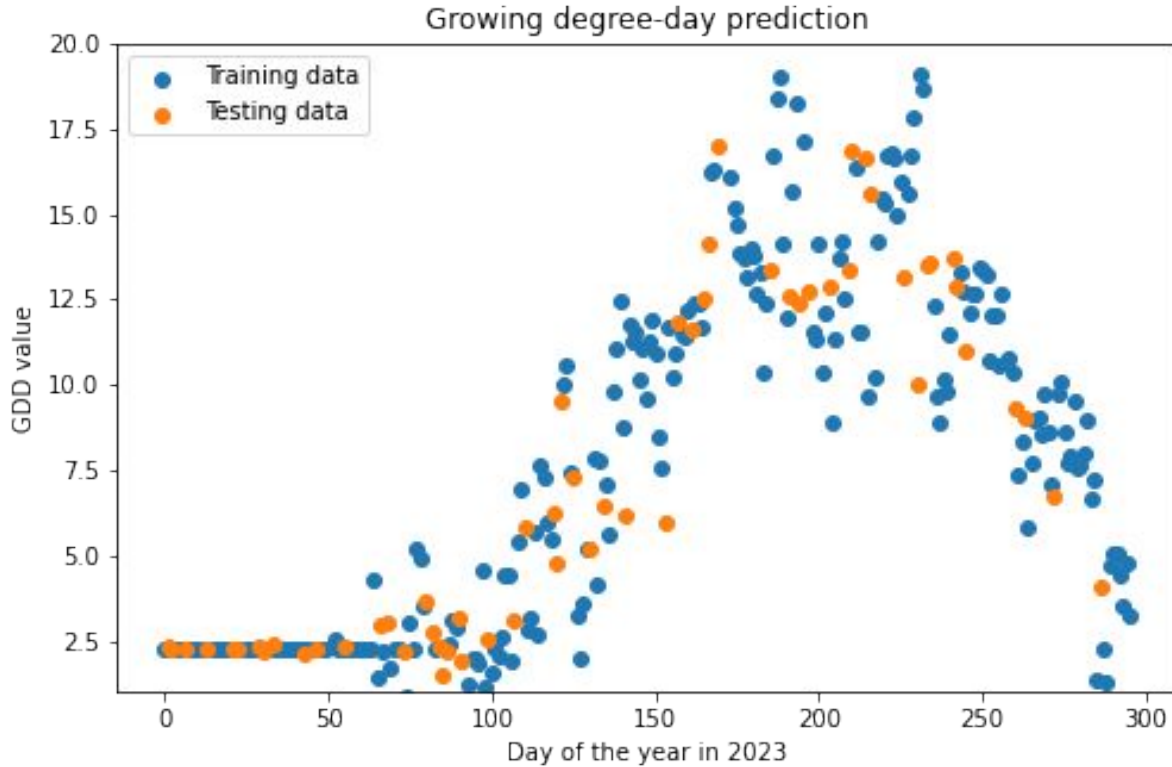
GDD are calculated by taking the integral of warmth above a base temperature, T_{base} (plant type dependant):

$$GDD = \int (T(t) - T_{\text{base}}) dt$$

Time-series for climate data for one year



Random Forest Regression Prediction

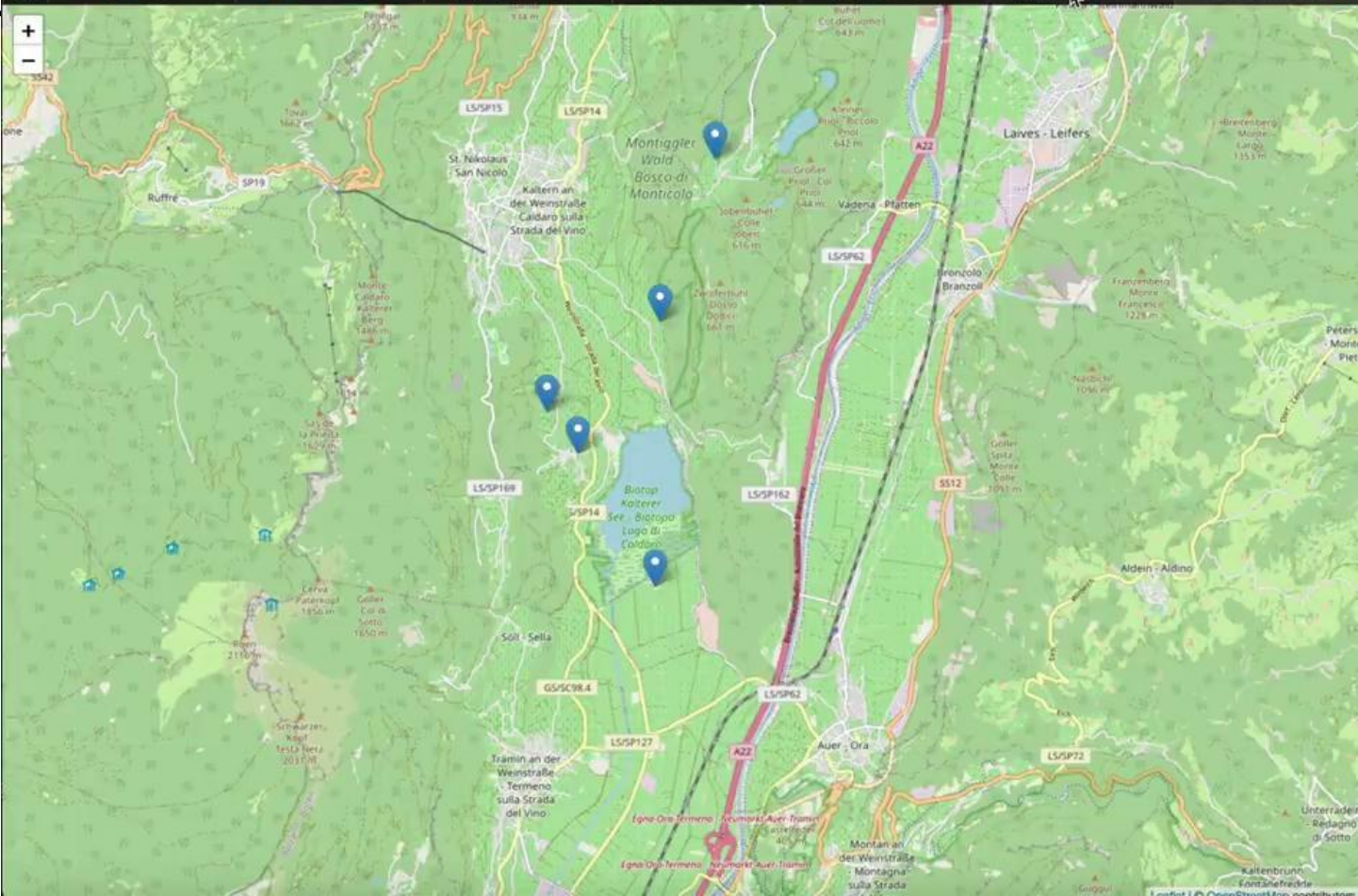


Cross-validated

RMSE value 2.197

RMSE % 11,5

Der



Feature importance

