Time series analysis with forecasting

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Problem Definition

Predict the daily behavior of the time series for 3 months

Solved

01

Exploration & Data Analysis
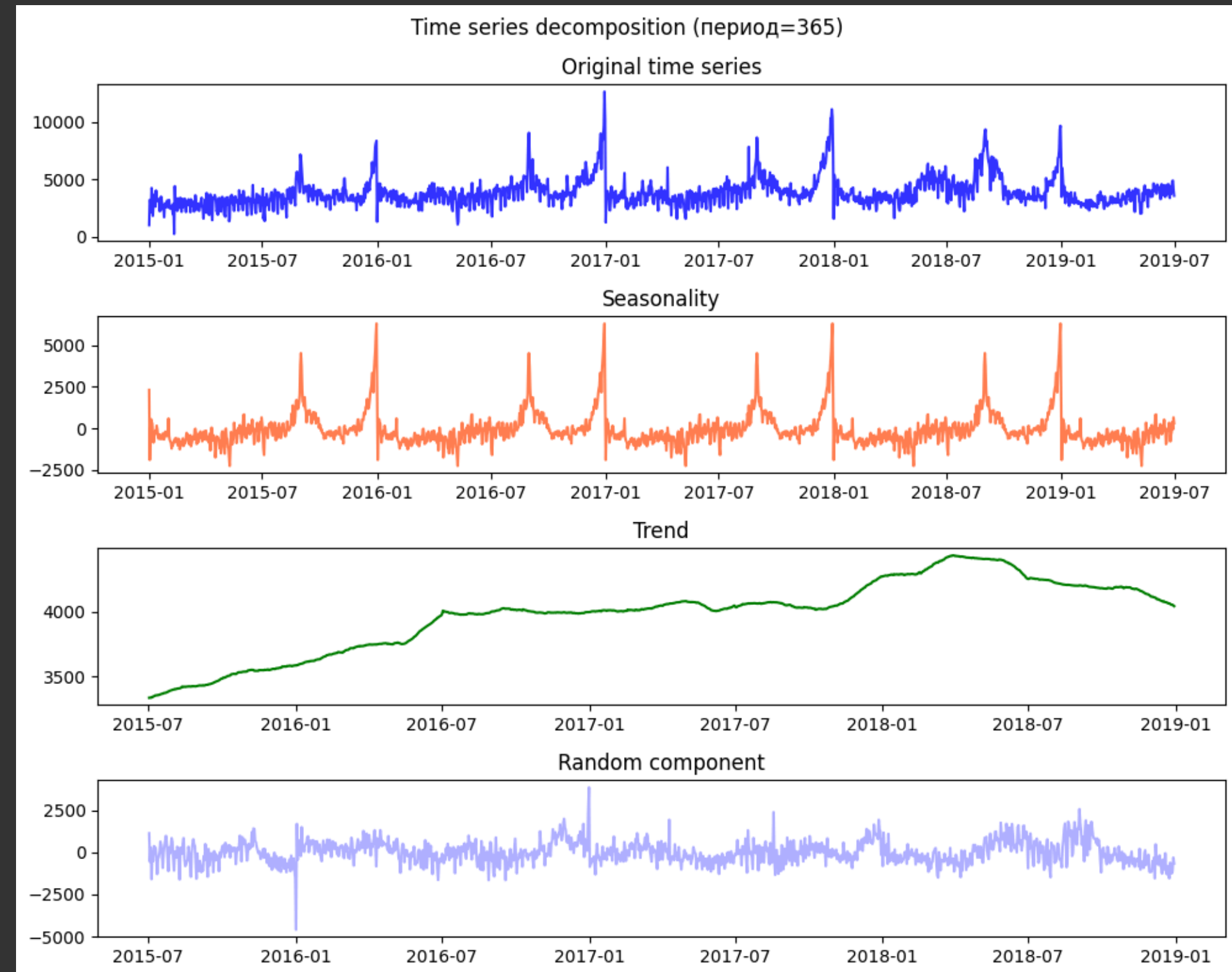
02

Parametric synthesis of forecasting model

03
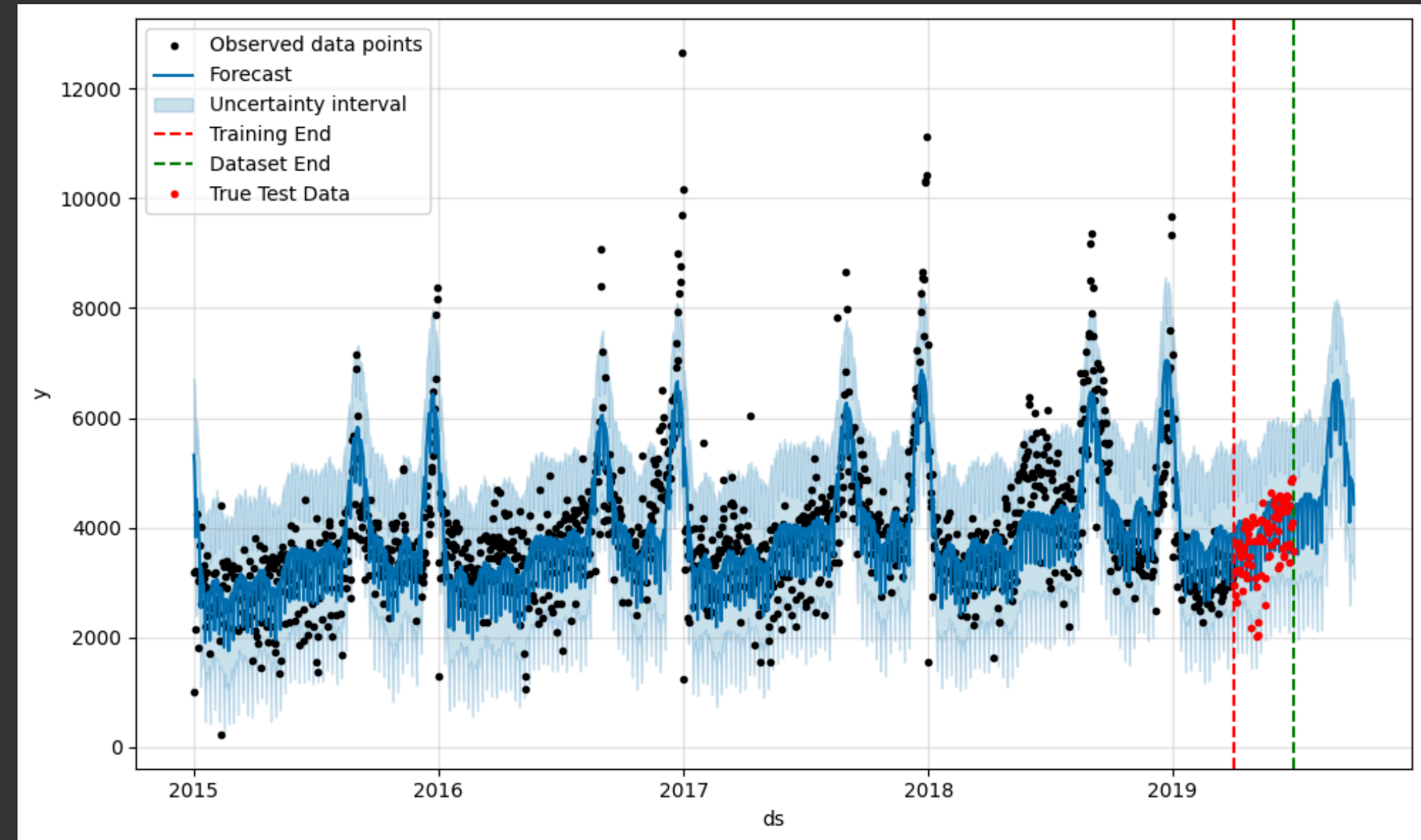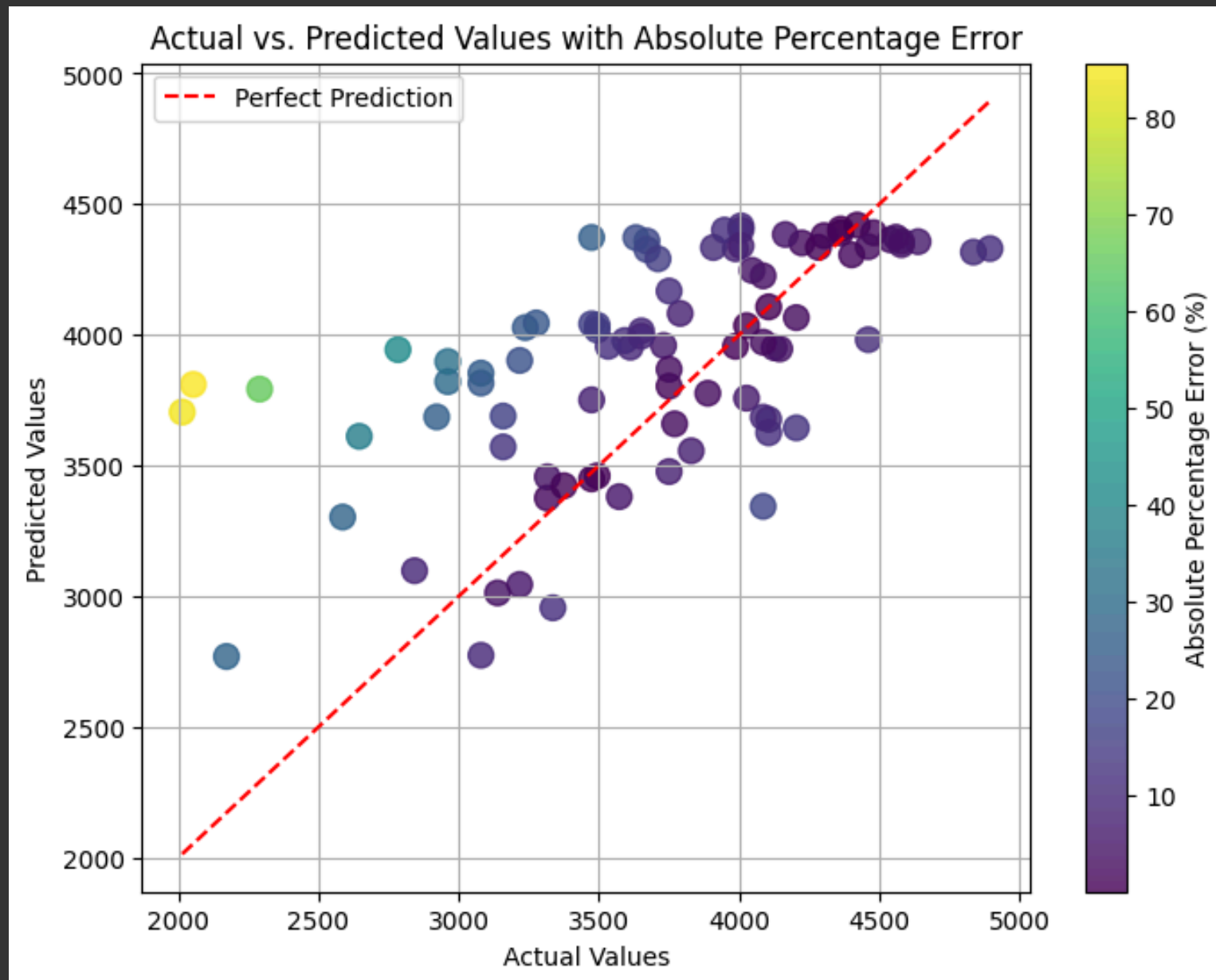
Predict & Visualization

Exploration & Data Analysis

- **Period data :** 4 years 5 months 28 days

- **Trend :** positive upward

- **Seasonality :** yearly

- **Stationarity :** weak

Time series decomposition (период=365)

Parametric synthesis of model

Model : Prophet

Test Dataset: 90

Metrics : MAPE - 13%

RMSE - 535.44

r2_score - 0.24

Predict & Visualization

Period data : 90 days (01.07-28.09.2019)

Trend : positive with a downward trend towards the end of the forecast period

Seasonality : mounth

Predicted values : max: 6564
min: 3400
mean: 4877