

# Time series analysis and forecasting

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[github.com/kek7777/Data\\_Analysis.git](https://github.com/kek7777/Data_Analysis.git)

# Problem Definition

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**Predict the daily behavior of the time series for 3 months**

## Steps

**01**

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Exploratory  
Data Analysis

**02**

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Model Training

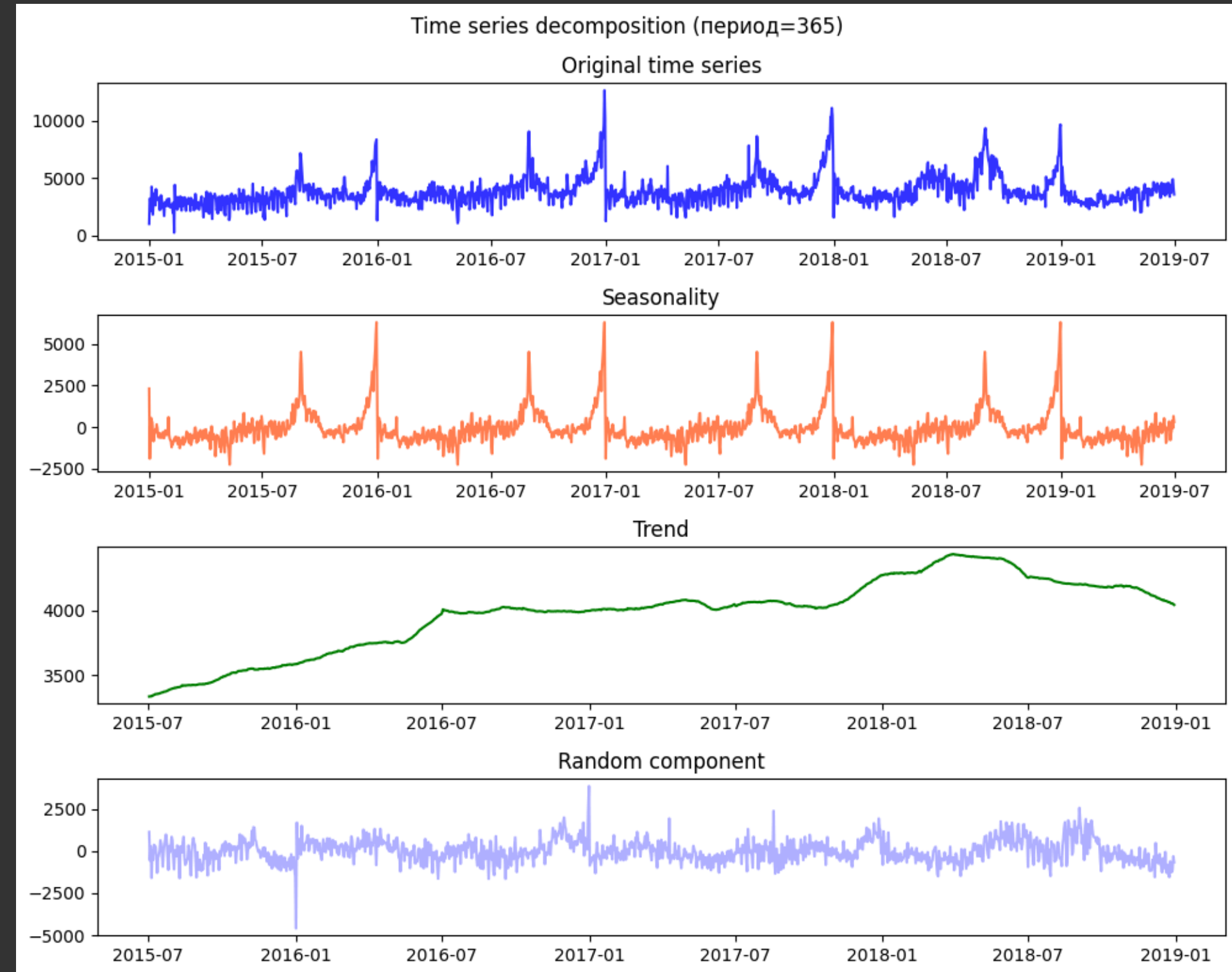
**03**

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Forecasting

# Exploratory Data Analysis

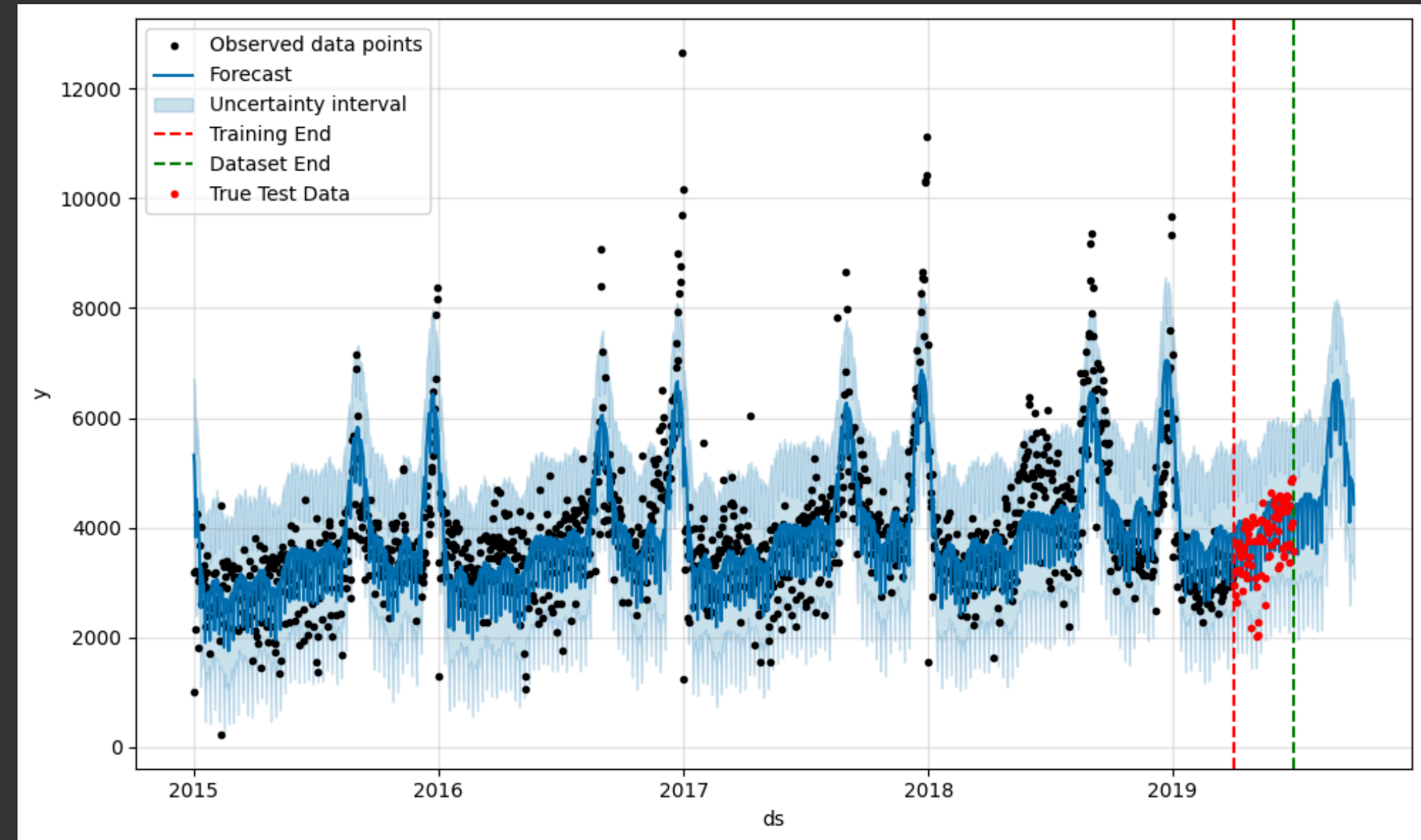
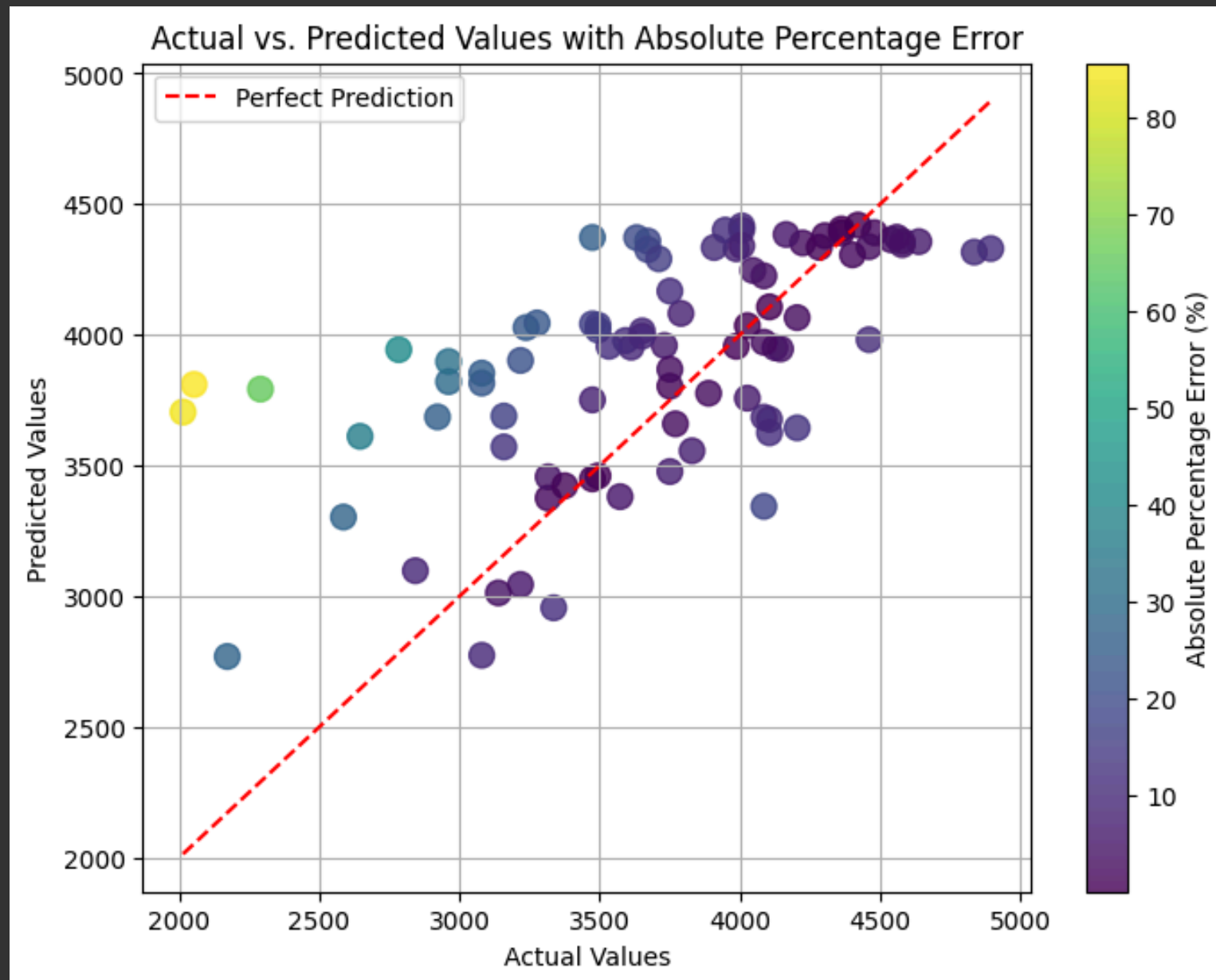
- **Period data :** 4 years 5 months 28 days
- **Trend :** positive upward
- **Seasonality :** yearly
- **Stationarity :** weak



# Model training

**Model :** Prophet

**Test Dataset:** 90



**Metrics :** MAPE - 13%  
RMSE - 535.44

# Forecasting

**Period data :** 90 days (01.07-28.09.2019)

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

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

