

Bhuyan_Chuang_Martinez

Jessalyn Chuang, Mazhar Bhuyan, Sayra Martinez

2025-04-25

Github repository: https://github.com/jessalynlc/BhuyanChuangMartinez_ENV797_TSA_ForecastCompetition_S25

#Data Wrangling

#Data Import and Primary Cleaning

Converting to daily by taking averages

Merging the daily datasets to a full daily dataset

##Converting to time series object

Model 1: NNAR + Fourier (K = c(2,8)) on Train/Test Data

Model 2: NNAR + Fourier (K = c(2,12)) on Train/Test Data (Baseline)

Model 3: NNAR + Fourier on Train/Test Data

Model 4: NNAR + Fourier (K = c(3,18)) on Train/Test Data

Model 5: TBATS Model

Model Comparison: NNAR + Fourier + TBATS

Retraining and Forecasting on Full Data

Model 1: NNAR + Fourier (K = c(2,8))

Model 2: NNAR + Fourier (K = c(2,12))

Model 3: NNAR + Fourier

Model 4: NNAR + Fourier (K = c(3,18))

Model 5: TBATS

Exporting Dataset