Before COVID-19 Observed 8.0 One-step ahead Forecast 0.6 Sentiment Score 0.4 0.0 -0.2-0.4Jul Jul Jul

(a) Pharmaceutical Companies using ARIMA

Date

Jan

2018

Jan

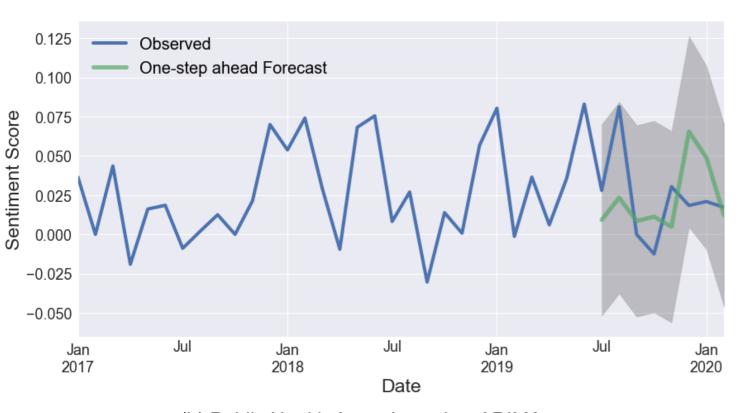
2017

Jan

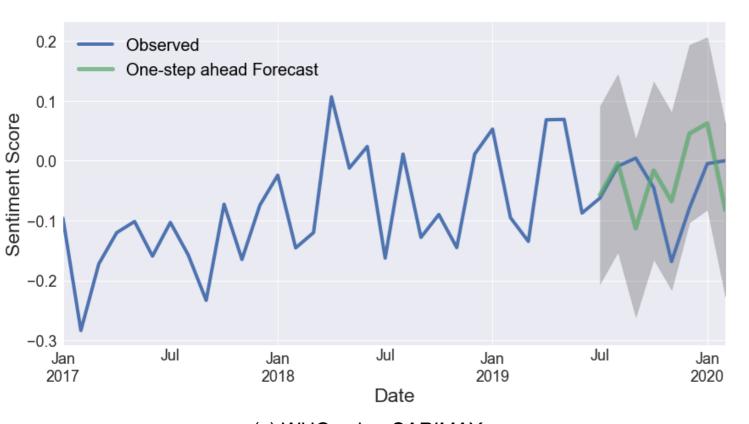
2019

Jan

2020

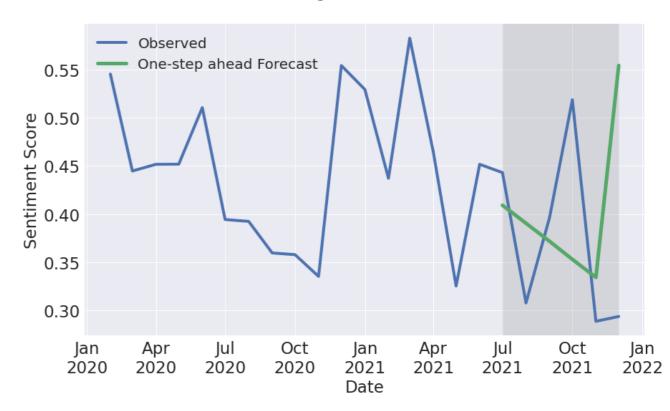


(b) Public Health Agencies using ARIMA



(c) WHO using SARIMAX

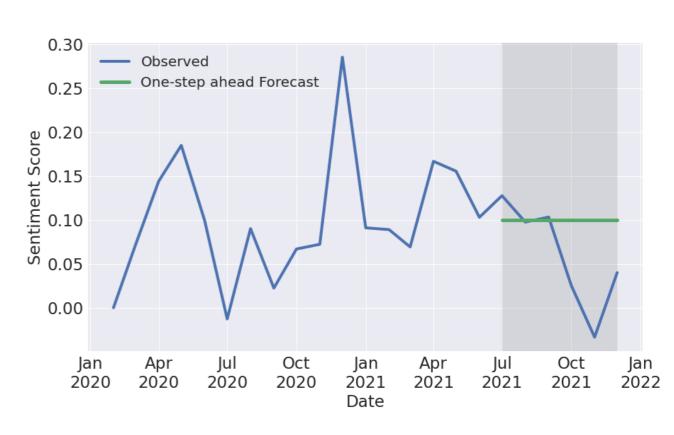
During COVID-19



(a) Pharmaceutical Companies using CatBoost Regressor



(b) Public Health Agencies using AdaBoost Regressor



(c) WHO using Elastic Net