



Topic

How does the change in population mobility impact our society in various dimensions during the pandemic?

DataFest2020
Team Forest

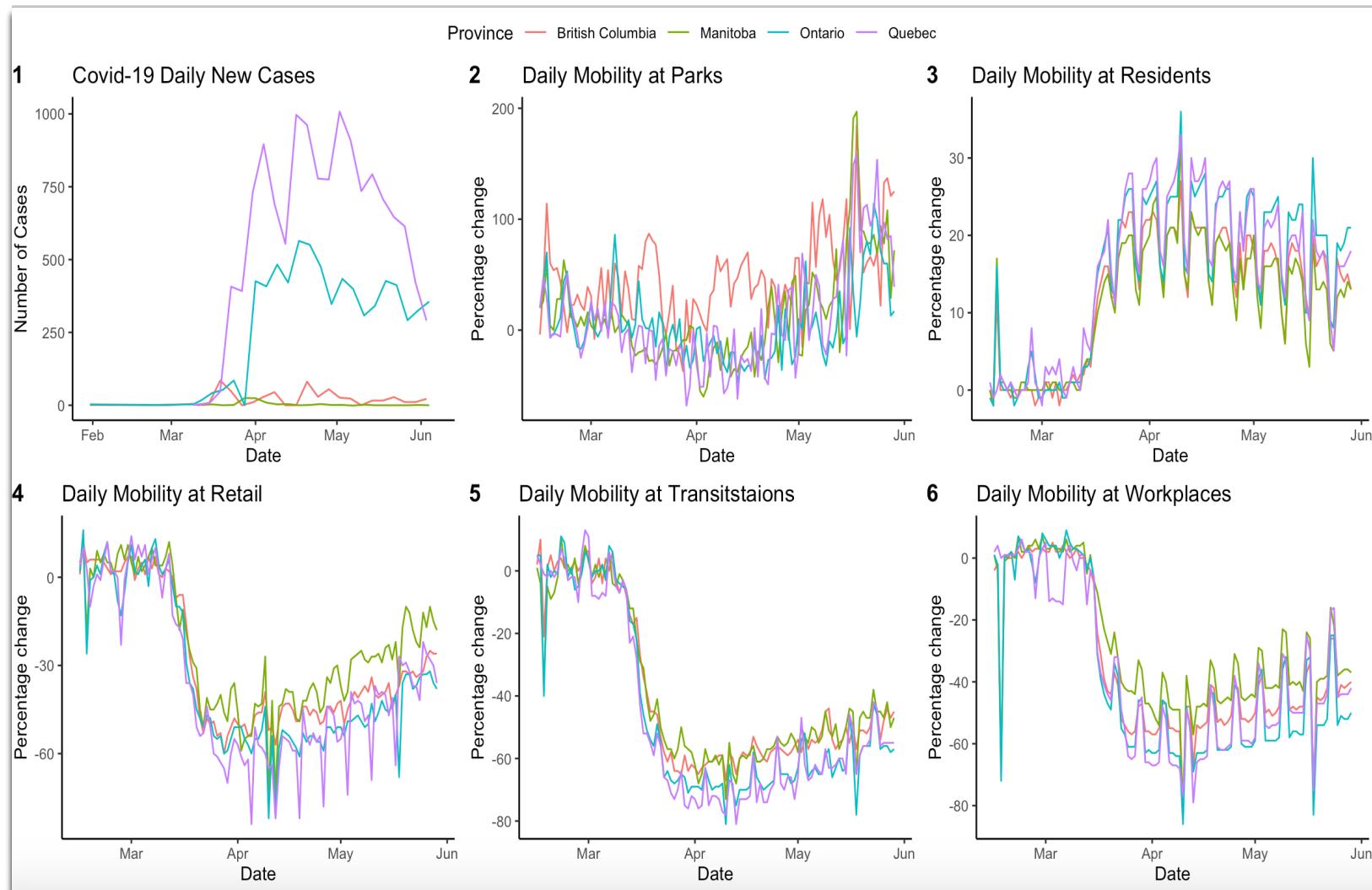
01/06-14/06

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Daily Mobility (percentage change)

At 5 main places for
human activities

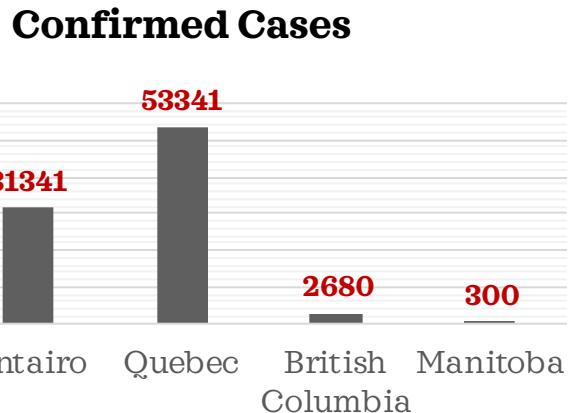
Across 4 representing
provinces in Canada



1. Cross-Analysis with daily Covid-19 confirmed cases and their time correlation

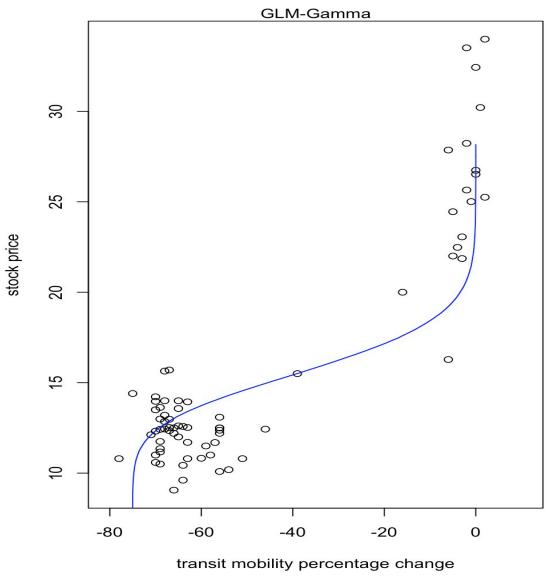
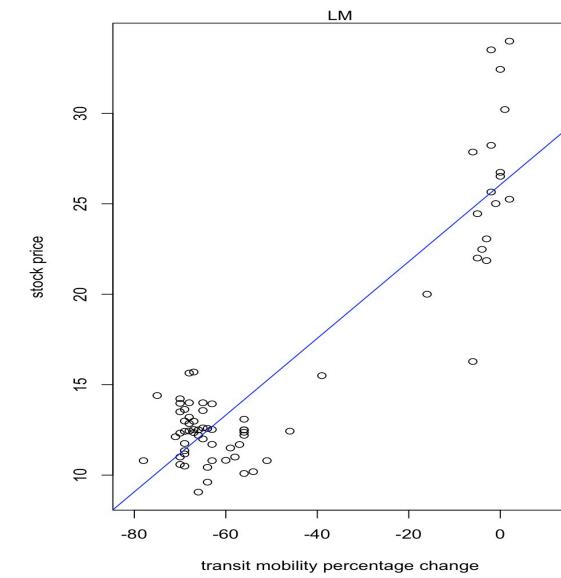
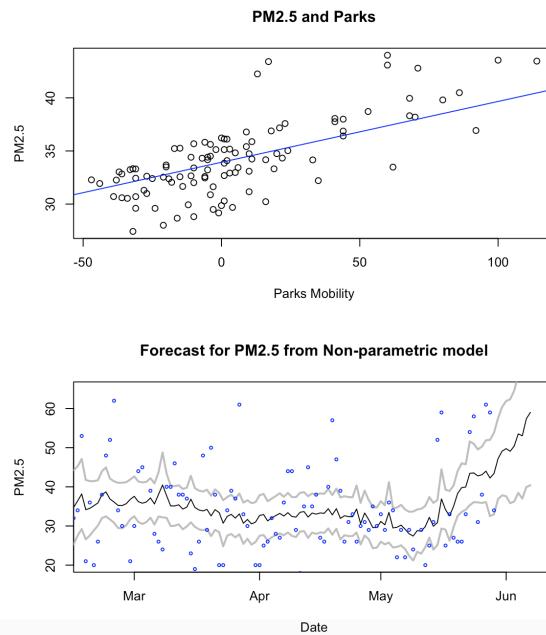
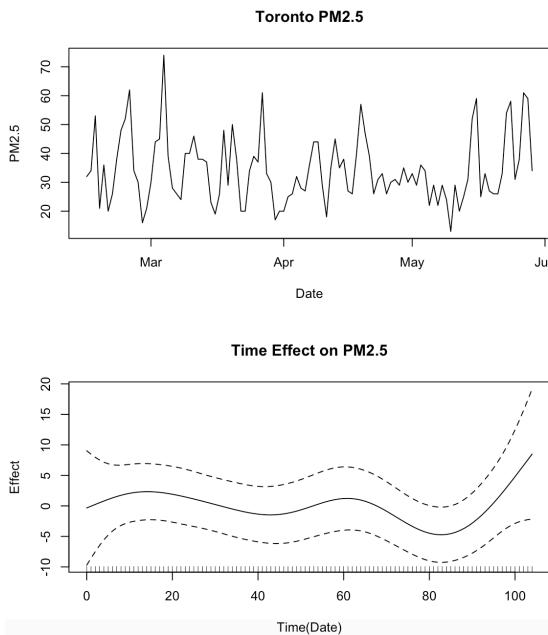
2. Why did people in these provinces perform different trends in human activities?

3. Some possible factors?



Connecting to other social aspects...

-- study their significances with population mobility



1. Relationship between parks and PM2.5 ?
2. Time Effect on PM2.5 and the prediction ?

3. Which model is better—LM? GLM?
4. Possible Correlation with mobility?

With Mobility—Parks PM2.5

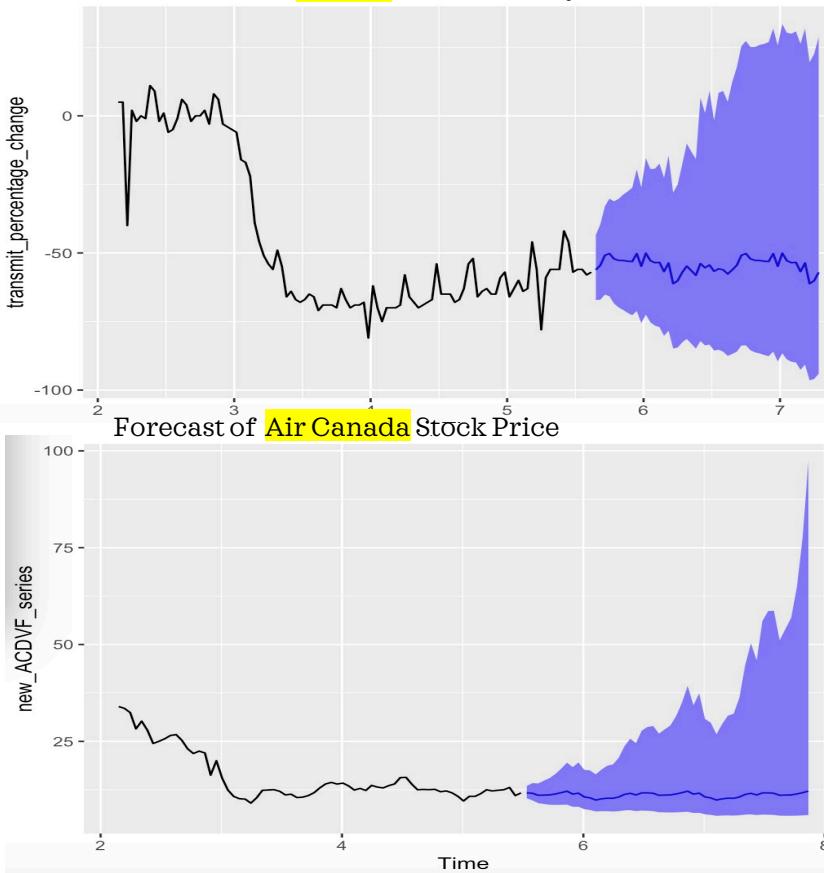
Air Pollution

Stock Price With Mobility--Transit

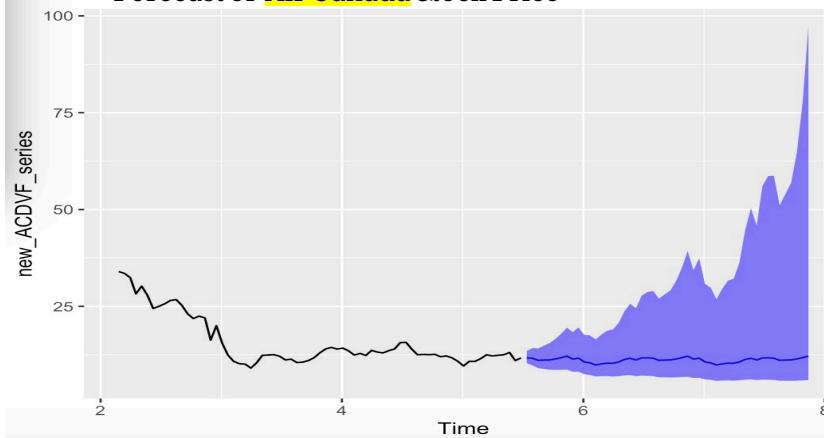
Forecasting future mobility...

--with significant factors

STL Forecast of Ontario Transit Mobility

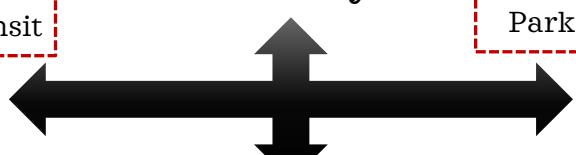


Forecast of Air Canada Stock Price



- Vertical Comparison over the same time interval
- Using Time Series to predict trends in the next 50 days (starting May 30th)

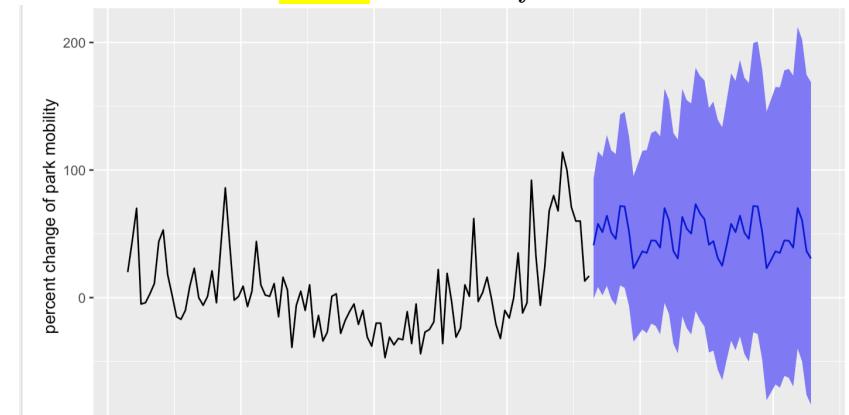
Mobility



Significant factors

- Does the forecasting trend match our previous model movement?
- If not, other possible factors?

STL Forecast of Ontario Park Mobility



Forecast of Toronto pm2.5 level

